

# ALIGNING TOTAL QUALITY MANAGEMENT, CONTINUOUS IMPROVEMENT FOR PROCESS PERFORMANCE: A REVIEW APPROACH

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**Abstrak.** The goal of this research is to explore the connection between total quality management, continuous improvement, and process performance. The study explored a review of the literature approach on total quality management alongside other variables using recent investigations. This study identified a framework that connects total quality management, continuous improvement, and process performance. This research contributed to developing a conceptual framework for performance, continuous process improvement, and total quality management. This study is an integrative evaluation of the prior research on the idea of overall quality management and its connection. Future researchers are urged to make use of descriptive surveys and empirical techniques to generalize their findings. To reflect comprehensive quality management, continuous improvement, and process performance, this study created a conceptual framework and model. The author created a summary table to display earlier research on the subject, including authors, topics, countries, methodologies, and findings. In light of the aforementioned, the researcher filled a knowledge gap.

**Keywords:** Total Quality Management, Process Performance, Continuous Improvement, Product Quality.

## INTRODUCTION

Total quality management has grown increasingly over time for enhancing a company's processing capabilities in order to maintain competitive advantages. It is integrated into all levels and functions of an organization (Ugwu, 2023). Many businesses around the world have adopted Deming's concept into their manufacturing facilities towards decreasing waste, and boosting productivity in their industry (Deming, 2012) (Bezuidenhout et al., 2021). In order to get the greatest outcomes and boost profitability, manufacturing enterprises around the globe have embraced Deming's management philosophy. Demings is best known for his

contributions to the expansion of the manufacturing industry and businesses more than any other Japanese person. He was honored for his management-related achievements with a prize from the National Academy of Science, which helped him gain notoriety in the United States of America. According to Deming (2012), he is credited with founding modern quality and management.

According to Quain (2019), the distinctiveness of the market and the competitive advantage of the company are essential factors for financial success due to a high-quality product. According to the authors, total quality management (TQM) is essential for business sustainability,

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customer satisfaction, and customer retention. No matter what a company does, if a customer's expectations are not met, they will look elsewhere for alternatives. Consumers are more likely to notice standardized products or services than inferior ones, according to studies (Al-Qahtani et al., 2015). Quality management is crucial if you want to significantly boost customer satisfaction and loyalty.

Previous research on this subject has produced mixed results. Basak and Henk research used a meta-revealed that businesses who use the ISO 9001 quality framework experience improvements in efficiency, productivity, cost control, sales, and market share, all of which have a direct beneficial effect on their ability to generate profits. Another study by Ali and Alolayyan 2013 found that the company's performance was impacted favorably by TQM using Jordan Hospital (Ali & Alolayyan, 2013). Positive and negative results were found in a comparable study conducted by Wahjudi, Singgih, Suwignjo, and Baihagi 2013 employing 151 manufacturing companies in Indonesia (Wahjudi, n.d.). According to the study, strategic planning had a large detrimental impact on business performance, whereas customer focus and people management had a significant beneficial effect.

A variety of industries were used in earlier research conducted in other parts of the world. None of the past studies researched TQM, continuous improvement, and process performance. According to a study by Miles 2017, a new taxonomy of research gaps can be developed on evidence, knowledge, methodological,

theoretical, and population gaps (Miles, 2017). The researcher has found a gap in terms of study population, geographic coverage, and empirical studies. This is the gap the present study seeks to fill.

This paper provides an overview of TQM and discusses its applications, continuous improvement, and process performance. The paper is divided into sections and sub-sections below.

## **MATERIALS AND METHODS**

Using a qualitative research design, this article explores university-industry collaboration for workforce planning and economic development challenges in Nigeria. It views the concept of university education as a private and social investment that has an unlimited rate of return for both individual recipients and society. He also discussed the relationship between economic development and workforce development planning and highlighted that economic development which is a deliberate process for the continuous improvement of the quality of the people requires proper planning, the center of which is manpower development planning.

## **RESULTS AND DISCUSSION**

This section provided empirical evidence of previous studies on total quality management done across the globe. Some of these papers were reviewed by several scholars around the globe and stated below.

Pambreni, Khatibi, Azam, and Tham 2019 looked into how overall quality management affected the organizational

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performance of small and medium-sized service businesses in Selangor, Malaysia. 350 managers or owners of the service sector in Selangor received copies of the questionnaire. The Statistical Package on Social Science (SPSS version 23) was used to test and analyze the study's hypothesis in order to provide results. The study's findings showed that total customer focus, continuous improvement, strategic base, and total employee involvement all have positive and significant effects on an organization's performance (Pambreni et al., 2019).

Indra, Murdifin, Baharuddin, and Amir 2018, carried out a study on a Structural Model of Total Quality Management, Kaizen, Operational Performance on Service Quality and Patient Satisfaction in Indonesia. A sample of 398 respondents was used to test the hypothesis using inferential statistics and structural equation modeling, and the results were obtained. Findings revealed that kaizen, operational performance, and comprehensive quality management all had a favorable impact on the level of patient satisfaction and service quality at four Makassar hospitals (Mahmud, 2018).

Walsh, Hughes, and Maddox (2002) examined the practices of total quality management philosophy within companies operating in Ireland. The study used a questionnaire as an instrument for data collection. Findings showed that the total quality management approach offers firms a platform for developing strategies that guarantee competitiveness and success.

Anh, Ha, Hao, and Yoshiki (2019) used international manufacturing plants in

12 different countries to assess the impact of total quality management (TQM) practices and just-in-time (JIT) production practices on flexibility performance. Between 2013 and 2015, regression and correlation analysis were used to investigate high-performance foreign enterprises from nations like China, Finland, Germany, Italy, Israel, Japan, Korea, Spain, Sweden, Taiwan, United Kingdom, and Vietnam. The outcome supported the notion that TQM, JIT production techniques, and flexibility performance are positively correlated.

Suhard, Rozak, and Mohd Saud 2019 examined Supply Chain Management and Total Quality Management in Textile Manufacturing Companies, in Bandung. Data from eight manufacturing businesses' representative sample of 104 employees were analyzed using the simple regression method. The findings showed that supply chain management and total quality management have a substantial favorable association (Suhardi et al., 2019).

Alolayyan, Mohd Ali, and Idris (2011) conducted research on the impact of operational flexibility on hospitals' performance using the Jordanian hospitality industry. Data was examined using the multiple regression method using 231 respondents from two different hospitality industries as the sample. The results showed that operational flexibility significantly improved hospitality performance.

Fening, Amaria, and Frempong 2013 explored the relationship between total quality management and organizational survival in Ghanaian

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manufacturing companies. Face-to-face interviews were used to gather primary data from a sample of 250 manufacturing companies in Kumasi city. To test the hypothesis and examine the relationship between the variables, structural equation modeling, and correlational methods were used. The results demonstrated a considerable positive association between total quality management and company performance (Fening et al., 2013).

Saadia 2018 looked into the performance of commercial banks in Kenya's Garissa County in terms of total quality management practices. The study used a questionnaire and survey design as its primary data collection tools. A total of 104 bank employees served as the primary source of data. The distribution of the questionnaire used a stratified random sample technique. To produce the outcome, data were examined using tables, graphs, frequency, charts, and multiple regression. The results demonstrated a substantial positive association between operational success and the entire quality management variables (such as customer focus, top management commitment, continuous improvement, and employee involvement) (Salah, 2018).

Sadikoglu and Olcay 2014 examined the impact of Total Quality Management Practices on Performance in Turkey. 242 respondents made up the study's population from which primary data were collected. To evaluate the link between the variables, data were analyzed using exploratory factor analysis and multiple regression methods. The results showed that quality management methods have a considerable impact on the

performance of firms (Sadikoglu & Olcay, 2014).

Chauke, Edoun, and Mbohwa (2019) investigated the effectiveness of Total Quality Management and Operational Performance in South Africa. 110 workers from Pretoria-based bakeries provided the primary data. Data were analyzed using mean values, standard deviation, correlational, and regression approaches to look into the relationship between the two variables. The results showed that leadership, knowledge management, supplier management, customer focus, employee involvement, and process management all had a negative effect on staff opinions of total quality management characteristics. Results also showed a positive effect of whole quality management on operational performance (Chauke et al., 2019).

Mohammed, Brahma, and Aderaw (2019) investigated the effect of Total Quality Management on the Operational Performance of Ethiopian Manufacturing Firms. The study's target population included 12 pharmaceutical companies in Ethiopia. 65 respondents made up the sample from which the primary data were drawn. Only 57 of the 65 questionnaires that were sent to the participants were returned and used for the study while the other 8 were not. The link between the two variables was examined statistically using the correlation and regression method. The results demonstrated a significant association between operational success and the whole quality management variables (such as customer focus, process management, product design, and people management).

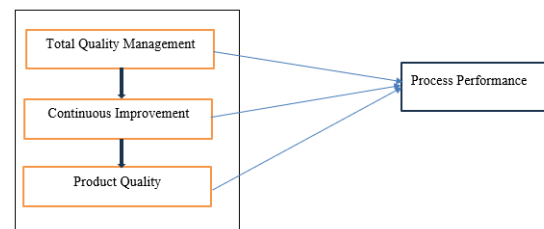
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Shaheen (2022) conducted research to determine the impact of quality management on organizational performance in Pakistan's textile industry. A quantitative research strategy was applied after a deductive approach. 131 workers from various garment companies in Karachi provided with survey questionnaires on a five-point Likert scale were used to gather the data. With the help of IBM SPSS version 22, the regression method was used to test the hypothesis at a 5% level of significance. According to the research, quality management has a considerable and advantageous impact on operational performance (Shaheen, 2022).

Senarath, Gunarathne, and Fernando (2020) explore the impact of Total Quality Management (TQM) practices on operational performance using a sample of 279 employees of Sri Lankan large-scale manufacturing organizations. Two hypotheses were tested using structural equation modeling. The study showed that TQM practices have a positive impact on operational performance (Senarath et al., 2020).

Jbeily (2022) examined the effect of quality management on the competitive priority of Lebanese industries. To accomplish the research goal, cause-and-effect and descriptive approaches were both applied. A questionnaire was used to collect primary information from enterprises in Lebanon. More than 200 managers and supervisors were sent the survey, and 184 of them responded appropriately while the remaining 16 respondents did not respond during the survey. The hypotheses were analyzed

using multiple regressions to establish a correlation between the variables. The results show that TQM and competitive priority factors are heavily utilized by Lebanese businesses, and there is a high association between these two variables. The commitment of the top management, staff development, engagement, and continual improvement also have an impact on the competitive objectives of Lebanese businesses (Jbeily, 2022).



**Figure 1: A Model Representing Total Quality Management, Continuous Improvement, and Process Performance**  
Source: (Author Own Creation)

The researcher created Figure 1 to illustrate the relationship between total quality management, continuous improvement, and process performance.

## CONCLUSIONS

The study on total quality management, continuous improvement, and process performance was reviewed holistically. By creating a conceptual framework and model of comprehensive quality management, continuous improvement, and process performance, this study fills the gap. Below are study recommendations that were made based on the conclusion.

## REFERENCES

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- Al-Qahtani, N. D., Alshehri, S. S., & Aziz, A. A. (2015). The impact of Total Quality Management on organizational performance. *European Journal of Business and Management*, 7(36), 119–127.
- Ali, K. A. M., & Alolayyan, M. N. (2013). The impact of total quality management (TQM) on the hospital's performance: an empirical research. *International Journal of Services and Operations Management*, 15(4), 482–506.
- Bezuidenhout, C. N., Passos de Oliveira, D., Black, A., Murrell, T., Dela Cruz, C., Vaghela, B., Kirk, L. P., Kathara, R. D., & Sun, N. (2021). *A Scholarly Review of Supply Chain Integration within the New Zealand Wool Industry*. Operations and Engineering Innovation, Massey University, Manawatu Campus
- Chauke, S. S., Edoun, E. I., & Mbohwa, C. (2019). The Effectiveness of Total Quality Management and Operations Performance at a Bakery Firm in The City of Tshwane, Pretoria South Africa. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2896–2907.
- Deming, E. W. (2012). *The Essential Deming: Leadership Principles from the Father of Quality*/ed. by Orsini J. Cahill DD New York.
- Fening, F. A., Amaria, P., & Frempong, E. O. (2013). Linkages between total quality management and organizational survival in manufacturing companies in Ghana. *International Journal of Business and Social Science*, 4(10).
- Jbeily, A. H. (2022). Impact of Total Quality Management (TQM) on the Competitive Priorities of Lebanese Industries. *European Journal of Business and Management Research*, 7(4), 313–320.
- Mahmud, A. (2018). A structural model of total quality management, kaizen, operational performance on service quality and patient satisfaction. *Archives of Business Research*, 6(11).
- Miles, D. A. (2017). A taxonomy of research gaps: Identifying and defining the seven research gaps. *Doctoral Student Workshop: Finding Research Gaps-Research Methods and Strategies*, Dallas, Texas, 1–15.
- Pambreni, Y., Khatibi, A., Azam, S., & Tham, J. (2019). The influence of total quality management toward organization performance. *Management Science Letters*, 9(9), 1397–1406.
- Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Advances in Decision Sciences*, 2014, 1–17.
- Salah, S. A. (2018). Total quality management practices and performance of commercial banks in Garissa County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(1), 52–67.
- Senarath, B., Gunarathne, G. C. I., & Fernando, T. S. S. (2020). Impact of Total Quality Management on Operational Performance. *Peradeniya Management Review*, 2(1), 98.
-

Shaheen, S. (2022). Quality Management and Operational Performance: A Case Study from Pakistan: Quality Management and Operational Performance. *South Asian Journal of Operations and Logistics (ISSN: 2958-2504)*, 1(1), 1–13.

Suhardi, A. R., Rozak, A., Saudi, M. H. M., & Sinaga, O. (2019). *Supply chain management and total quality management in textile manufacturing companies, Bandung*.

Ugwu, K. (2023). Aligning Total Quality Management, Continuous Improvement for Process Performance: An Empirical Review. *Journal Research of Social Science, Economics, and Management*, 3(02), 352–369.

Wahjudi, D. (n.d.). *The Impact of Total Quality Management on Indonesian Manufacturing Firm Performance: An Empirical Study* Didik Wahjudi, Moses L. Singgih, Patdono Suwignjo, and Imam Baihaqi Sepuluh Nopember Institute of Technology.



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