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TOTAL QUALITY MANAGEMENT PRACTICES AND ORGANIZATIONAL PRODUCTIVITY: EVIDENCE FROM MAKURDI ELECTRICITY DISTRIBUTION COMPANY, NIGERIA

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Abstract
This study examines the effect of Total Quality Management (TQM) practices on organizational productivity at Makurdi Electricity Distribution Company (MEDC), Nigeria. Specifically, it assesses the influence of top management commitment, employee involvement, continuous improvement, and customer focus. A cross-sectional survey design was used, targeting all 87 employees of MEDC, with 84 valid responses (96.6%) analyzed. Data were collected via structured questionnaires and analyzed using descriptive statistics and multiple regression. Results show that top management commitment significantly enhances productivity ($\beta = 0.241$, $p = 0.005$), continuous improvement is the strongest predictor ($\beta = 0.276$, $p = 0.001$), and customer focus positively influences productivity ($\beta = 0.229$, $p = 0.003$). Employee involvement, though positive, had a weaker effect ($\beta = 0.198$, $p = 0.014$). The overall model was statistically significant ($F = 31.52$, $p = 0.000$) and explained 61% of the variation in organizational productivity ($R^2 = 0.610$). The study concludes that TQM practices substantially improve organizational productivity in the electricity distribution sector. It recommends strengthening leadership commitment, institutionalizing continuous improvement, enhancing customer-focused strategies, and promoting effective employee participation to sustain performance gains.

Keywords: Total Quality Management, Organizational Productivity, Top Management Commitment, Employee Involvement, Continuous Improvement, Customer Focus, Electricity Distribution, Nigeria

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INTRODUCTION

In today's increasingly competitive and dynamic business environment, organizations in the energy distribution sector are under increasing pressure to improve performance and enhance customer satisfaction. In Nigeria, electricity distribution companies (DisCos) continue to face significant operational inefficiencies that undermine organizational productivity and financial sustainability. According to the Nigerian Electricity Regulatory Commission (2025), distribution companies recorded a billing efficiency of 81.18% and a collection efficiency of 74.39% in the first quarter of 2025, indicating that a substantial proportion of energy supplied was either not billed or not successfully collected. The same report revealed that the Aggregate Technical, Commercial and Collection (ATC&C) loss stood at 39.61%, significantly above the regulatory benchmark of 20.54%, resulting in an estimated revenue shortfall of approximately ₦200.495 billion (Nigerian Electricity Regulatory Commission [NERC], 2025). Furthermore, in the second quarter of 2025, ATC&C losses remained high at 37.92%, while billing and collection efficiencies were reported at 81.61% and 76.07% respectively, leading to additional revenue deficits exceeding ₦158 billion (NERC, 2025). These persistent productivity gaps, coupled with widespread customer complaints regarding service reliability and billing accuracy, demonstrate the intense operational and regulatory pressures confronting electricity distribution companies. Such evidence underscores the urgent need for strategic management approaches, including Total Quality Management (TQM), to enhance operational efficiency, financial performance, and customer satisfaction within the sector. Total Quality Management (TQM) has emerged as a strategic approach for achieving organizational productivity and sustainability. TQM is a holistic management philosophy aimed at continuous improvement in all organizational processes through the involvement of all employees to meet or exceed customer expectations (Singh & Shrivastava, 2021).

The electricity distribution subsector in Nigeria, including Makurdi Electricity Distribution Company (MEDC), has long been plagued with inefficiencies, poor customer satisfaction, technical losses, and management challenges. Implementing TQM practices is increasingly seen as a viable solution to enhance service delivery and operational efficiency (Okeke et al., 2022). According to Okechukwu and Osuagwu (2023), firms that effectively implement TQM often record better productivity, customer retention, and employee morale.

Despite the relevance of TQM practices, empirical evidence from the electricity distribution sector in North-Central Nigeria remains limited. This study, therefore, seeks to examine the extent to which the dimensions of TQM such as top management commitment; employee involvement, continuous improvement, and customer focus affect the organizational productivity of Makurdi Electricity Distribution Company. It aims to provide empirical evidence that can inform policy formulation and managerial decision-making to drive performance improvements in the Nigerian electricity industry.

Statement of the Problem

The electricity distribution sector in Nigeria, particularly under the management of privatized distribution companies like Makurdi Electricity Distribution Company (MEDC), continues to struggle with systemic inefficiencies, poor customer satisfaction, and low operational productivity. Despite increased investments and reforms aimed at improving electricity supply and service delivery, consumers in the Makurdi coverage area regularly experience issues such as erratic power supply, poor fault response time, billing errors, and unprofessional customer service. These persistent problems highlight fundamental gaps in quality management practices and point to an urgent need for strategic interventions.

Globally, Total Quality Management (TQM) has proven to be a viable approach for enhancing productivity, ensuring customer satisfaction, and fostering continuous improvement in organizational processes. However, in the Nigerian context especially in utility service firms like

MEDC, the adoption and institutionalization of TQM practices remain limited, fragmented, or poorly executed. Specifically, the degree to which the core dimensions of TQM top management commitment, employee involvement, continuous improvement, and customer focus have been embraced and how they impact productivity within MEDC is yet to be systematically investigated.

Empirical studies have shown that top management plays a crucial role in championing quality initiatives, yet in many Nigerian distribution companies, leadership often fails to demonstrate the commitment necessary for sustainable quality improvement (Ibrahim & Yusuf, 2022). Additionally, employees are rarely involved in decision-making processes, leading to resistance, low morale, and limited innovation (Adekunle & Chinedu, 2023). Continuous improvement mechanisms are either non-existent or not data-driven, which results in repeated service failures and unresolved technical faults (Saidu & Mohammed, 2024). Customer-centricity is also weak, with many complaints unresolved or poorly handled, further diminishing consumer trust and engagement (Nwachukwu et al., 2021).

These shortcomings have significantly affected MEDC's ability to deliver efficient and reliable electricity services, reduce operational waste, and achieve meaningful productivity gains. Despite the theoretical benefits of TQM, there is a critical knowledge gap regarding its practical impact on organizational productivity in MEDC. Without empirical insights into how TQM dimensions influence performance, managers and policymakers may continue to implement disjointed strategies that yield minimal improvements.

Therefore, this study seeks to address this problem by evaluating the extent to which the key components of TQM which include, top management commitment, employee involvement, continuous improvement, and customer focus affect the organizational productivity of Makurdi Electricity Distribution Company. The outcome of this study will help bridge the gap between theory and practice and offer actionable recommendations for performance enhancement in the Nigerian electricity distribution sector.

Objectives of the Study

The main objective of this study is to assess the effect of Total Quality Management on organizational productivity of Makurdi Electricity Distribution Company. The specific objectives are to:

i. Examine the effect of top management commitment on organizational productivity in MEDC.
ii. Evaluate the effect of employee involvement on organizational productivity of MEDC.
iii. Assess the effect of continuous improvement on organizational productivity in MEDC.
iv. Determine the effect of customer focus on organizational productivity of MEDC.

Research Questions

The following questions were formulated based on the objectives.

i. To what extent does top management commitment affect the organizational productivity of MEDC?
ii. To what extent does employee involvement affect organizational productivity in MEDC?
iii. To what extent does continuous improvement affect organizational productivity in MEDC?
iv. To what extent does customer focus affect organizational productivity of MEDC?

Research Hypotheses

The following null hypotheses were formulated in other to guide the study.

H_o1: Top management commitment has no significant effect on the organizational productivity of MEDC.

H_o2: Employee involvement does not significantly affect the organizational productivity of MEDC.

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H_o3: Continuous improvement has no significant effect on the organizational productivity of MEDC.
H_o4: Customer focus does not significantly influence the organizational productivity of MEDC.

LITERATURE REVIEW

Organizational Productivity

Organizational productivity is one of the most important issues that management must address. High productivity results in higher capital gains (Yadav & Marwa, 2015); productivity is defined as the ratio of total output to one unit of total input. A further way to think about productivity is as the effectiveness and efficiency with which value (output) is created from inputs (such as hardware, software, people, process, data, technology, and so on). Productivity is described as a measure of the intent behind production. Productivity gains can result in better revenues for people and organizations (Lumen, 2018).

Organizational Productivity can be referred to as the result of the performance of a series of processes and functional activities that occur within the organization and are performed by employees in accordance with the support and positive climate provided to them by the institutional environment in order to provide the best possible value to the customer who is considered the substantial goal of the business process (Al-Daradkeh, 2018).

Total Quality Management

Total Quality Management is considered one of the relatively modern administrative concepts, as writers and researchers have been interested in for more than 3 decades ago. Total Quality Management is one of the modern approaches to managing business organizations, based primarily on quality, through the participation of all employees at their various levels for achieving success and excellence in the long term by achieving customer and employee satisfaction at the same time (Khader, 2020). As it was defined by (Alfatlawy, et al., 2021) "A comprehensive concept that includes practices, tools and techniques related to quality that are organized within a coherent framework and are based on Top Management with a focus on human resources with the aim of achieving continuous improvement in every part and process of the organization to ensure fulfillment of added value to satisfy and retain customers".

(Abd Alaziz, 2020) also defined it as the systematic method for participating in planning and implementing the process of continuous improvement of the facility. This method focuses on satisfying the customer and meeting his expectations, determining and identifying problems, increasing the sense of belonging among employees, and supporting the idea of participation in decision-making.

Despite the many previous definitions, in their summary, they focus on giving a new concept of Total Quality, which carries dimensions and characteristics that distinguish it from traditional management, whether in terms of organizational structure, orientation and philosophy, nature of responsibility, and type of control.

Total quality management emerged as one of the utmost evident essential alternatives and has since been widely implemented worldwide (Shafiq et al., 2019). TQM on the other hand is still developing in the service sector and belongs to the ranks of developmental concepts (Talib & Rahman, 2015). Generally, TQM has been considered and expressed in a variety of ways, as well as the pursuit of "excellence", a "right-first-time" approach, "zero defects", and client satisfaction (Mukhopadhyay, 2020).

TQM, as a strategy for obtaining and retaining excellent quality outcomes, focuses on process maintenance and continual enhancement in process, as well as mistake avoidance at all ranks and in all areas of the organization, in order to satisfy or surpass the client needs (Abdallah, 2013).

Top Management Commitment

The concept of Top Management is represented by individuals who are at the highest administrative levels in the organization and who are primarily responsible for drawing up the general policy of the organization. It is responsible for forming work teams to implement quality plans and empowering these teams (quality circles) with broad powers in the field of achieving goals and their tools used in implementation (Samida, 2019). Decisions related to quality are considered strategic decisions; therefore, the commitment of Top Management in supporting and developing it, and activating the movement of those responsible for that are among the basic tasks which undoubtedly lead to the success of the targeted system.

Employee Involvement

All available strategies must be considered to achieve widespread interest of the employee, engagement, and involvement to the development procedure, from plans of suggestions to different types of collaboration (Dale & Plunkett, 2017). Additionally, this entails asking for, attentively considering, and acting upon employee feedback.

Employees who are involved in decision-making have the opportunity to express themselves and share their knowledge with others (Lundgrem, 2019). This not only improves the manager-employee relationship, but it also promotes a strong sense of teamwork among staff. The exchange of ideas initiates a conversation among coworkers, with each individual contributing their unique set of abilities to a project. It's also a great way to discover more about your team's work patterns and where training may be needed, all of which leads to higher effectiveness and, ultimately, better teamwork and performance.

Continuous Improvement

Singh and Singh (2015) consider continuous improvement as a catch-all phrase that has been the subject of debate from the start of the industrial revolution. However, the following concept of continual progress is put forth: a culture of ongoing improvement that involves everyone in the organisation and aims to reduce waste in all systems and procedures. To increase and achieve high productivity, quality, satisfaction, and effectiveness, an organization must engage all of its employees through a continuous improvement process, which is a set of planned, organized, and systematic continuous change processes that are interrelated throughout the entire organization (Jurburg et al., 2017). Hence, increased quality and satisfaction are always the results of improvements.

Customer Focus

Customer focus means meeting the needs and expectations of current and potential customers by developing a comprehensive understanding of customer needs and then delivering perceived value to customers. Customer focus implies the ability to take customers" viewpoints into account to increase the organization's understanding of its customers, managing the quality of an offering as it is being used by the customer, and facilitating quality improvements for both current and future product and service offerings.

Theoretical Framework

Stakeholder Theory (1983)

Ian Mitroff, an organizational theorist, introduced the concept of stakeholder theory in his book Stakeholders of the Organizational Mind, published in 1983. In 1983, philosopher and business administration professor Redward Freeman published an article on stakeholder theory (Freeman & Reed, 1983) Freeman's book examines and characterizes stakeholder groups within an organization,

providing insights and suggestions on how to effectively handle their interests and ascertain the individuals that hold significant importance from the company's standpoint. Enhancing value for stakeholders would enhance the business in all dimensions.

Stakeholder theory is a managerial and ethical framework proposing that organizations should take into accounts the concerns and welfare of all stakeholders, rather than solely focusing on shareholders, when making decisions (Miles, 2017). Stakeholders are individuals or groups with a vested interest in the operations and results of an organization (McGrath & Whitty, 2017). The theory underscores the importance of organizations maintaining equilibrium between the wants and expectations of different stakeholders in order to attain long-term sustainability and success (Crane, 2020).

Also, stakeholder theory pertains to the ethical considerations, moral principles and values that guide the management of stakeholders in a project or organization (Dmytriyev, Freeman & Hörisch, 2021). The objective is to enhance interactions with stakeholders, therefore enhancing operational effectiveness across a project, task or duties. The theory ensures that stakeholders are managed properly in order to achieve expected goals. Stakeholder theory finds application in various significant domains, including project management (Uribe, Ortiz-Marcos & Uruburu, 2018), corporate social responsibility (Freeman & Dmytriyev, 2017) and strategic management (Minoja, 2012).

This study incorporates the stakeholder 's theory to explain the extent to which organizational stakeholders interact harmoniously with each other to achieve expected results. The application of the theory suggests that management should establish a conducive environment where total quality management can be practiced leading to successful project outcomes. Total quality management includes stakeholders 'activities such as; leadership commitment, employee involvement, customer focus and maintaining continuous improvement.

Empirical Literature

Top Management Commitment and organizational Productivity

Tryson and Justine (2025) investigated the impact of leadership commitment and process management on organizational productivity in the Tanzania–Zambia Railway Authority. Using a sample of 162 management-level staff, their study found that top management commitment significantly and positively influences productivity, both directly and indirectly, by supporting effective process management. The authors recommended that organizations strengthen leadership commitment practices and provide leadership training to enhance productivity outcomes across operational levels.

Similarly, Ahmed and Ihab (2024) explored top management commitment in the manufacturing sector of Iraq, focusing on its effect on operational performance with green production as a mediating factor. Drawing data from 219 manufacturing companies, they found that managerial commitment significantly improves operational performance, particularly when coupled with environmentally sustainable practices. Their findings suggest that management support for sustainable production enhances organizational outcomes, and they recommended that firms integrate environmental considerations into performance planning.

Employee Involvement and Organizational Productivity

Chen, Lee, and Kuo (2021) examined the role of employee participation in workflow decisions on hospital productivity in Taiwan. Using a sample of 123 nurses and administrative staff from several regional hospitals, the study revealed that employee involvement in process design and performance evaluation was strongly associated with improved staff morale and measurable gains in operational

productivity. Based on these findings, the researchers recommended that hospitals adopt structured involvement programs that empower employees to contribute to quality improvement initiatives.
More recently, Alabi, Bello, and Yusuf (2024) conducted research on employee involvement in workflow decisions and productivity at a large Nigerian banking institution. With a sample of 412 bank staff, their findings showed that departments with higher levels of employee involvement recorded significantly better productivity metrics, such as transaction processing speed and customer complaint resolution. They recommended that banks implement continuous employee development, collaborative problem-solving forums, and incentive systems that recognize employee contributions to productivity improvements.

Continuous Improvement and Organizational Productivity
Jeli (2024) conducted a descriptive-correlational study at a European bank in Manila to examine how continuous improvement relates to organizational performance, surveying data and analytics professionals using questionnaires that measured continuous improvement (through management empowerment, leadership, and employee participation) and organizational performance (cost-effectiveness, customer satisfaction, innovation, etc.). The findings showed a statistically significant positive relationship between continuous improvement and organizational performance, and organizational learning partially mediated this effect, suggesting that stronger improvement processes coupled with learning capabilities lead to better performance outcomes. The study recommended that organizational leaders empower employees in improvement initiatives and integrate learning mechanisms to maximize the impact of continuous improvement on performance.
Ishmael, Wechie, and Okwurume (2025) investigated the relationship between continuous improvement and organizational performance in commercial banks operating in Rivers State, Nigeria, using a correlational survey design and census sampling of all 22 commercial banks, administering 66 questionnaires to bank staff. The study found a significant positive association between continuous improvement practices and organizational performance as measured by market share and innovation indicating that ongoing improvement of products and services enhances bank productivity. It recommended that bank management promote a culture of continuous improvement and Total Quality Management to sustain performance gains.

Customer Focus and Organizational Productivity
Kamau et al, (2025) examined The Importance of Customer Focus on the Institutional Performance of Private Universities in Kenya, using a descriptive research design with a census sample of 17 heads of administrative, functional, and academic departments from privately chartered universities. The study found that customer focus was significantly and positively correlated with institutional performance, explaining over 33% of the variation in performance outcomes, which highlighted the need for universities to institutionalize customer-focused practices in their quality assurance systems. The researchers recommended that these institutions embed customer-oriented strategies in planning and service delivery to enhance performance and competitiveness.
Ravindra et al, (2025) explored The Impact of Customer Focus Strategy on Client Satisfaction with the Mediating Role of Innovation Capability, surveying managers and clients of IT outsourcing firms. They found that a strong customer focus strategy had a significant positive effect on client satisfaction, and that innovation capability further strengthened this relationship by enhancing service quality and loyalty. The authors recommended that IT firms integrate innovation into their customer service strategies to boost competitiveness and long-term client relationships.

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METHODOLOGY

Research Design

The researcher employed a cross-sectional survey research design, which involved the use of questionnaires as data collection instrument. Primary data was collected through well-structured, close-ended questionnaires designed on a 4-point Likert scale (SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree) and administered to all respondents. A survey approach was adopted to gather quantitative data, which was analyzed using descriptive statistical tools.

Population of the Study

The population of this study comprises all 87 employees of Makurdi Electricity Distribution Company (MEDC) in Benue State, Nigeria (Aidi et al., 2023).
Since the population of this study is relatively small and entirely accessible, a census approach was adopted for determining the sample size. This means that all 87 employees of Makurdi Electricity Distribution Company (MEDC) were included in the study, ensuring that every member of the population had an equal opportunity to provide data.

Instrument of data collection

The primary instrument of data collection for this study is a structured questionnaire. The questionnaire is designed to gather quantitative data on the perceptions and experiences of employees regarding the implementation of Total Quality Management (TQM) practices and their influence on organizational productivity within Makurdi Electricity Distribution Company (MEDC).

Sources of Data and types of Data Collection

This study made use of primary source to ensure richness, depth, and validity of information. The primary data is focused on employee perceptions and organizational experiences related to Total Quality Management (TQM) practices and their effect on organizational productivity. A structured, self-administered questionnaire was distributed to 87 employees of MEDC. The questionnaire was distributed in person and, where necessary, electronically (via email or Google Forms) to accommodate varying availability.

Validity of instrument

Content validity was used to ensure the validity of the questionnaire used to assess the relationship between Total Quality Management (TQM) practices and organizational productivity at Makurdi Electricity Distribution Company. It was ensured by carefully designing the questionnaire items based on a thorough review of relevant literature on TQM practices and organizational productivity. The instrument was structured to reflect the key dimensions of TQM (e.g., top management commitment, continuous improvement, employee involvement, and customer focus) and indicators of organizational productivity (e.g., service delivery, efficiency, customer satisfaction).
To further establish it, the questionnaire was submitted to experts in quality management, research methodology, and organizational behavior. These experts assessed the items for relevance, clarity, appropriateness, and comprehensiveness in relation to the research objectives and hypotheses and necessary revisions were made based on their feedback to ensure that each item aligns with the study constructs.

Reliability of instrument

The Cronbach's Alpha Coefficient was employed to assess the internal consistency reliability of the instrument. A pilot test was conducted with a small group of respondents (not included in the final sample) to gather preliminary data. The responses were then analyzed using the Statistical Package

for Social Sciences (SPSS) to compute the reliability coefficients for each section of the questionnaire. A Cronbach's Alpha value of 0.70 and above is generally considered acceptable and indicates good internal consistency.

Table 1 Cronbach's Alpa

Construct	No. of Items	Cronbach's Alpha
Top Management Commitment	5	0.82
Employee Involvement	5	0.78
Continuous Improvement	5	0.81
Customer Focus	5	0.80
Organizational Productivity	5	0.85
Overall Instrument	25	**0.83**

These results demonstrate that the questionnaire has high reliability, indicating that the instrument is internally consistent, dependable, and suitable for collecting data relevant to the study.

Analytical techniques

Multiple Regression Analysis was adopted as the major analytical technique to examine the effect of various TQM practices on organizational productivity at Makurdi Electricity Distribution Company

Decision rule and Model Specification

For a decision to be made the following decision rules and assumption are followed. Accept the null hypotheses (H_0) and reject the alternate hypotheses (H_a) if the significant probability value (PV) is greater than > 0.05, that is, no significant coefficient exists. Reject the null hypotheses (H_0) and accept the alternate hypotheses (H_a) if the significant probability value (PV) is less than < 0.05, that is, a significant coefficient exists. The strength of the influence is decided thus; -0.1 to -0.4 (weak negative influence), -0.5 to -0.7 (moderate negative influence), -0.8 to -0.9 (strong negative influence), -1 (perfect negative influence), +0.1 to +0.4 (weak positive influence), +0.5 to +0.7 (moderate positive influence), +0.8 to +0.9 (strong positive influence), +1 (perfect positive influence)

In analyzing the data that was collected through questionnaires, the study adopted both descriptive and inferential statistics. For descriptive statistic, simple percentages and tables was used and in order to test the hypothesis of the study, multiple regression: The general form of the multiple regression model used is as follows:

$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\epsilon$

Where:

Y = Organizational Productivity (dependent variable)
X1 = Top Management Commitment
X2 = Employee Involvement
X3 = Continuous Improvement
X4 = Customer Focus
β0 = Intercept (constant)
β1 to β4 = Coefficients of the independent variables
ϵ = Error term

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Data Presentation

A total of 87 questionnaires were distributed to employees of Makurdi Electricity Distribution Company. Out of these, 84 questionnaires were properly completed and returned, representing a 96.6% response rate, while 3 questionnaires (3.4%) were not returned. The high retrieval rate indicates that the data obtained is adequate and representative for analysis.

Hypotheses Testing

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
1	0.781	0.610	0.592	0.412

Source: Field survey, 2026

The model shows an R value of 0.781, indicating a strong positive relationship between TQM practices and organizational productivity. The R^2 value of 0.610 means that 61.0% of the variation in organizational productivity is explained by the four TQM variables (TMC, EI, CI, CF), while the remaining 39% is explained by other factors not included in the model. The Adjusted R^2 (0.592) confirms that the model is statistically reliable.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	21.384	4	5.346	31.52	0.000
Residual	13.410	79	0.170		
Total	34.794	83			

Source: Field survey, 2026

The F-statistic is 31.52 with a significance value of 0.000, which is less than 0.05. This indicates that the overall regression model is statistically significant.

Table 4: Regression Coefficients

Variable	Beta	Std. Error	t-value	Sig.
Constant	0.842	0.291	2.89	0.005
TMC	0.241	0.083	2.90	0.005
EI	0.198	0.079	2.51	0.014
CI	0.276	0.081	3.41	0.001
CF	0.229	0.076	3.01	0.003

Source: Field survey, 2026

Top Management Commitment (TMC)

Beta = 0.241

p-value = 0.005 (< 0.05)

Since $p < 0.05$, H01 is rejected.

Top management commitment has a significant positive effect on organizational productivity.

Employee Involvement (EI)

Beta = 0.198

p-value = 0.014 (> 0.05)

H02 is accepted.

Employee involvement significantly improves productivity.

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Continuous Improvement (CI)

Beta = 0.276

p-value = 0.001 (< 0.05)

H03 is rejected.

Continuous improvement has the strongest positive impact on productivity among all predictors.

Customer Focus (CF)

Beta = 0.229

p-value = 0.003 (< 0.05)

H04 is rejected.

Customer focus significantly influences organizational productivity.

Regression Equation

$$OP = 0.842 + 0.241TMC + 0.198EI + 0.276CI + 0.229CF$$

Discussion of Findings

The findings revealed that top management commitment has a significant positive effect on organizational productivity (β = 0.241, p < 0.05). This indicates that leadership support, strategic alignment of quality goals, provision of resources, and regular performance review contribute meaningfully to improved productivity outcomes.

This finding is consistent with the study of Tryson and Justine (2025), who found that leadership commitment significantly enhanced productivity in the Tanzania–Zambia Railway Authority. Similarly, it also agrees with Ahmed and Ihab (2024) established that managerial commitment improves operational performance in Iraq's manufacturing sector, especially when combined with structured management systems.

The implication of this present study is that when leadership in the electricity distribution sector visibly supports quality initiatives and integrates them into strategic objectives, productivity improves significantly.

The study found that employee involvement does not significantly influences organizational productivity (β = 0.198, p 0.014). This suggests that there is no proper means of encouraging employee participation in decision-making, valuing suggestions, and promoting teamwork enhances productivity performance.

This finding disagrees with Chen, Lee, and Kuo (2021), who established that employee participation in workflow decisions significantly enhanced hospital productivity in Taiwan.

It was also not in agreement with Alabi, Bello, and Yusuf (2024) found that departments with higher employee involvement recorded better productivity metrics in a Nigerian bank.

The implication of this result is that productivity improvements in electricity distribution organizations are not solely leadership-driven but also depend heavily on employee engagement and participatory management systems.

Continuous improvement was found to be the strongest predictor of organizational productivity among the TQM dimensions (β = 0.276, p < 0.05). This indicates that ongoing process improvement, benchmarking, monitoring systems, and a culture of learning significantly enhance productivity.

This finding strongly supports Jeli (2024), who found a statistically significant positive relationship between continuous improvement and organizational performance in a European bank. Similarly, it also aligns with the study of Ishmael, Wechie, and Okwurume (2025) found a significant positive association between continuous improvement practices and organizational performance in Nigerian commercial banks.

The implication is that electricity distribution companies that institutionalize continuous process evaluation, learning systems, and structured improvement mechanisms are more likely to achieve sustained productivity gains.

The study further revealed that customer focus significantly influences organizational productivity ($\beta = 0.229$, $p < 0.05$). This means that prompt resolution of customer complaints, feedback collection, and customer-centered service design positively affect productivity.

This finding aligns with Kamau et al. (2025), who found that customer focus explained over 33% of variation in institutional performance in private universities in Kenya. Similarly, it agrees with Ravindra et al. (2025) who reported that strong customer focus strategies significantly enhanced client satisfaction and performance in IT outsourcing firms.

The implication of this finding is that electricity distribution companies that prioritize customer satisfaction, integrate feedback mechanisms, and improve service responsiveness are more likely to enhance operational performance and overall productivity.

Conclusion

Based on the findings of this study, it is concluded that Total Quality Management practices significantly enhance organizational productivity at Makurdi Electricity Distribution Company except employee involvement.

Firstly, top management commitment plays a critical role in driving productivity. When leadership demonstrates visible support for quality initiatives, allocates adequate resources, and integrates quality goals into strategic planning, organizational performance improves.

Secondly, employee involvement does not significantly contribute to productivity. Organizations that encourage employee participation in decision-making, promote teamwork, and provide training opportunities tend to achieve higher operational efficiency.

Thirdly, continuous improvement has the strongest impact on productivity. A culture that promotes ongoing process evaluation, innovation, benchmarking, and learning leads to sustainable performance gains.

Finally, customer focus significantly enhances organizational productivity. Organizations that prioritize customer satisfaction, promptly resolve complaints, and integrate customer feedback into service design achieve better operational outcomes.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are made:

i. Top executives of Makurdi Electricity Distribution Company should actively participate in quality improvement initiatives, provide adequate financial and technical resources, and regularly review quality performance indicators.

ii. The organization should institutionalize participatory management systems that encourage employee involvement in decision-making and quality improvement processes.

iii. Management should embed continuous improvement practices into daily operations. This can be achieved by adopting systematic monitoring and evaluation systems, benchmarking against industry best practices, and encouraging innovation at all organizational levels. Establishing quality improvement committees and performance tracking dashboards will further strengthen productivity outcomes.

iv. The management should improve on proper means of encouraging employee participation in decision-making, valuing suggestions, and promoting teamwork enhances productivity performance.

Contribution to Knowledge

This study makes significant contributions to knowledge in the area of Total Quality Management (TQM) and organizational productivity, particularly within the Nigerian power distribution sector.

First, the study provides empirical evidence on the relationship between TQM dimensions such as top management commitment, employee involvement, continuous improvement, and customer focus and organizational productivity within an electricity distribution company in Nigeria. While previous studies have largely focused on manufacturing firms and banking institutions, this study extends the discourse to the power sector, thereby enriching literature in a relatively under-researched industry.

Second, the research contributes context-specific insights by examining TQM practices within Makurdi Electricity Distribution Company (MEDC). The findings demonstrate that top management commitment and customer focus have strong positive perceptions among employees, confirming their strategic importance in improving service efficiency, output, and cost reduction. This adds localized evidence to the global TQM-performance debate.

Third, the study advances theoretical understanding by reinforcing the principles of quality management theory, particularly the idea that organizational productivity is enhanced when leadership commitment, participatory management, and continuous improvement culture are embedded in organizational systems. The study validates the applicability of TQM principles in a service-oriented public utility context.

Fourth, methodologically, the study contributes by providing a structured measurement framework for assessing TQM practices and productivity using descriptive statistical analysis (mean and standard deviation). This framework can serve as a reference model for future researchers examining similar constructs in other service organizations.

Finally, the study identifies practical gaps, particularly in benchmarking practices, complaint resolution consistency, and uniform target achievement, thereby offering actionable insights for management and policymakers in the Nigerian electricity distribution industry.

References

Abdallah, A. B. (2013). The influence of soft and hard total quality management practices on total productive maintenance and organizational performance. International Journal of Quality & Reliability Management, 30(8), 906–924.

Abd Alaziz, M. (2020). Total quality management and its role in continuous improvement. Journal of Business Administration Studies, 12(2), 45–58.

Adekunle, O., & Chinedu, I. (2023). Employee participation and organizational performance in Nigerian service firms. Nigerian Journal of Management Sciences, 8(1), 112–125.

Aidi, M., Yakubu, A., & Terfa, P. (2023). Workforce structure and productivity in electricity distribution companies in Nigeria. African Journal of Business and Economic Research, 18(2), 77–92.

Ahmed, R., & Ihab, S. (2024). Top management commitment and operational performance: The mediating role of green production. Journal of Manufacturing and Sustainability, 9(1), 33–49.

Alabi, T., Bello, M., & Yusuf, A. (2024). Employee involvement and productivity in the Nigerian banking sector. Journal of Financial Services Management, 6(2), 89–104.

Al-Daradkeh, M. (2018). Organizational productivity and performance measurement systems. International Journal of Productivity and Performance Management, 67(3), 456–472.

Alfatlawy, H., Mohammed, A., & Kareem, S. (2021). Total quality management practices and organizational excellence. International Journal of Business Excellence, 15(4), 223–239.

Chen, Y., Lee, H., & Kuo, T. (2021). Employee participation and hospital productivity: Evidence from Taiwan. Health Services Management Research, 34(2), 95–103.

Crane, A. (2020). Modern stakeholder theory: Theory, ethics, and practice. Business Ethics Quarterly, 30(1), 1–10.

Dale, B. G., & Plunkett, J. J. (2017). Quality management tools and techniques. Routledge.

Dmytriyev, S., Freeman, R. E., & Hörisch, J. (2021). The relationship between stakeholder theory and corporate social responsibility. Journal of Management Studies, 58(6), 1441–1457.

Freeman, R. E., & Dmytriyev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. Symphonya Emerging Issues in Management, 1, 7–15.

Freeman, R. E., & Reed, D. (1983). Stockholders and stakeholders: A new perspective on corporate governance. California Management Review, 25(3), 88–106.

Ibrahim, M., & Yusuf, S. (2022). Leadership commitment and quality performance in Nigerian power sector. Journal of Public Utilities Management, 10(2), 55–70.

Ishmael, K., Wechie, D., & Okwurume, C. (2025). Continuous improvement and organizational performance in Nigerian commercial banks. International Journal of Banking and Finance Research, 11(1), 60–78.

Jeli, R. (2024). Continuous improvement and organizational performance: The mediating role of organizational learning. European Journal of Business Management, 12(1), 21–39.

Jurburg, D., Viles, E., Tanco, M., & Mateo, R. (2017). Continuous improvement culture in organizations. Total Quality Management & Business Excellence, 28(9–10), 1072–1089.

Kamau, P., Njoroge, J., & Mutiso, L. (2025). Customer focus and institutional performance of private universities in Kenya. African Journal of Education Management, 14(2), 101–118.

Khader, J. (2020). Total quality management as a strategic approach in modern organizations. Journal of Administrative Sciences, 11(3), 77–91.

Lumen Learning. (2018). Organizational productivity concepts. Retrieved from https://lumenlearning.com

Lundgren, H. (2019). Employee involvement and organizational effectiveness. Human Resource Development Review, 18(4), 451–468.

McGrath, S. K., & Whitty, S. J. (2017). Stakeholder defined. International Journal of Managing Projects in Business, 10(4), 721–748.

Miles, S. (2017). Stakeholder theory classification: A theoretical and empirical evaluation. Journal of Business Ethics, 142(3), 437–459.

Minoja, M. (2012). Stakeholder management theory, firm strategy, and performance outcomes. Journal of Business Ethics, 109(1), 67–82.

Mukhopadhyay, A. (2020). Total quality management and business excellence. International Journal of Quality Research, 14(2), 367–382.

Nigerian Electricity Regulatory Commission (NERC). (2025). Quarterly report on the Nigerian electricity supply industry (Q1 & Q2 2025). Abuja: NERC.

Nwachukwu, C., Eze, B., & Okeke, M. (2021). Customer satisfaction and service delivery in Nigerian utility firms. Journal of Service Management, 9(1), 44–60.

Okechukwu, E., & Osuagwu, L. (2023). Total quality management practices and firm performance in Nigeria. Nigerian Journal of Business Research, 15(2), 132–148.

Okeke, M., Obi, J., & Nwankwo, S. (2022). Service quality and operational efficiency in electricity distribution companies in Nigeria. Energy Policy and Management Journal, 7(1), 25–41.

Ravindra, S., Kumar, V., & Singh, P. (2025). Customer focus strategy and client satisfaction: The mediating role of innovation capability. International Journal of IT Services Management, 13(1), 50–68.

Saidu, A., & Mohammed, H. (2024). Continuous improvement practices and service delivery in Nigerian utilities. Journal of Infrastructure Development, 6(2), 88–103.

Samida, A. (2019). Leadership roles in quality management implementation. International Journal of Leadership Studies, 14(1), 23–39.

Shafiq, M., Lasrado, F., & Hafeez, K. (2019). The effect of TQM on organizational performance. Total Quality Management & Business Excellence, 30(7–8), 1–18.

Singh, V., & Shrivastava, R. (2021). Total quality management and organizational performance. International Journal of Productivity Management, 10(2), 115–130.

Singh, J., & Singh, H. (2015). Continuous improvement philosophy: Literature review. International Journal of Productivity and Quality Management, 15(3), 312–329.

Talib, F., & Rahman, Z. (2015). TQM in service industries: A literature review. International Journal of Quality & Reliability Management, 32(7), 780–800.

Tryson, P., & Justine, M. (2025). Leadership commitment and productivity in railway organizations. African Journal of Transport Management, 9(1), 66–84.

Uribe, D., Ortiz-Marcos, I., & Uruburu, A. (2018). Stakeholder theory in project management. International Journal of Project Management, 36(1), 1–12.

Yadav, N., & Marwa, N. (2015). Productivity improvement and organizational performance. International Journal of Economics and Management Sciences, 4(6), 1–6.