

An analysis of the implementation of the quality management system in the public sector in Tanzania: A case study of TANESCO Kinondoni South Region

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ABSTRACT

This study examines effective implementation of Quality Management System (QMS) in the public sector in Tanzania, using Tanzania Electric Supply Company Limited (TANESCO) at Kinondoni South region as a case study. The main objective is to assess the extent of QMS implementation and its impact on service quality. Guided by Total Quality Management (TQM) theory, a quantitative cross-sectional survey design was employed. Data were collected from 110 TANESCO employees selected through stratified and convenience sampling techniques. We used structured questionnaires to collect primary data. We analysed our empirical data using descriptive and inferential statistics. The findings revealed that TANESCO has substantially implemented many aspects of QMS practices, particularly in the assessment of quality standards, monitoring and evaluation, and in determining performance accountability. Regression analysis further indicated that QMS practices have significantly influenced organizational performance, especially in service delivery as demonstrated by improved customer services, customer satisfaction and proper resource utilization. This study also noted that challenges such as inadequate employee training, financial constraints, and resistance to change continued to hinder effective implementation of QMS. The study concludes that effective QMS implementation enhances organizational efficiency, performance accountability, and service delivery in public sector organizations. It is recommended that public organizations should strengthen employees' training programs in the use of QMS, expanding the use of digital technologies, improving performance monitoring systems, and enhances top management's commitment to ensure sustainable QMS implementation.

Keywords: Organizational Performance, Public Sector Management, Quality Management System (QMS), Service Delivery, TANESCO

I. INTRODUCTION

Public administration plays a central role in promoting socio-economic development through the provision of efficient, accountable, and citizen-centered services. Governments and public institutions are expected to ensure transparency, responsiveness, and effective utilization of public resources while meeting the needs and expectations of citizens. In recent decades, growing public demand for improved institutional performance and accountability has compelled governments across the world to introduce administrative reforms aimed at strengthening governance systems and improving service delivery (Tiika et al., 2024). These reforms have encouraged public organizations to adopt management approaches that emphasize efficiency, accountability, performance measurement, customer orientation, and continuous organizational improvement.

One of the approaches increasingly adopted to improve organizational performance in both public and private sectors is the Quality Management System (QMS). A Quality Management System refers to a structured managerial framework that emphasizes standardized procedures, strategic leadership, customer focus, performance evaluation, effective communication, and continuous improvement (Akhmatova et al., 2022). The primary objective of QMS is to ensure that organizational activities are implemented systematically to achieve efficiency, effectiveness, and consistent service quality. Effective quality management contributes to improved administrative coordination, reduced operational inefficiencies, enhanced accountability, and better alignment between institutional performance and stakeholder expectations (Nchimbi & Korojelo, 2021).

The concept of quality management originated from industrial quality control mechanisms developed during the twentieth century to improve production efficiency and product consistency. Initially, quality management focused mainly on inspection and defect control within manufacturing industries. However, the concept gradually evolved into

a broader managerial philosophy emphasizing organizational excellence, employee participation, strategic leadership, customer satisfaction, and continuous improvement. This transformation contributed to the emergence of internationally recognized frameworks such as Total Quality Management (TQM), ISO 9001, the European Foundation for Quality Management (EFQM), and the Malcolm Baldrige Excellence Framework. These frameworks emphasize leadership commitment, process management, employee involvement, and continuous performance assessment as essential components of organizational effectiveness and sustainability. According to Oakland (2014), effective quality management improves operational performance, strengthens institutional accountability, and enhances customer satisfaction through systematic process improvement and performance monitoring.

The increasing adoption of QMS in public administration is closely associated with the emergence of New Public Management (NPM) reforms during the late twentieth century. NPM reforms emphasized efficiency, accountability, decentralization, customer orientation, and results-based management within public institutions (Hood, 1991). Consequently, governments increasingly integrated private-sector managerial principles into public administration to improve institutional performance and service delivery. Within this context, QMS emerged as an important administrative tool for strengthening governance systems, improving organizational effectiveness, and enhancing public confidence in public institutions.

Globally, many governments have integrated quality management practices into broader public sector reform programs aimed at promoting good governance and improving institutional effectiveness. In developed countries, the implementation of QMS has contributed to improved administrative coordination, standardized operational procedures, enhanced transparency, and increased citizen satisfaction. For example, the adoption of ISO 9001 certification systems and the Common Assessment Framework (CAF) in Poland and other European countries improved institutional coordination and service delivery outcomes (Kobylińska, 2016). Similarly, frameworks such as EFQM and the Malcolm Baldrige Excellence Framework have promoted organizational excellence by emphasizing strategic leadership, customer focus, process management, and continuous improvement. These experiences demonstrate that effective quality management can strengthen institutional credibility and improve public service delivery.

In developing countries, the importance of QMS has increased significantly, particularly within public utility institutions responsible for delivering essential social and economic services (Tiika et al., 2024). Rapid urbanization, technological advancement, population growth, and increasing public expectations have intensified pressure on governments to improve service quality and operational efficiency. Public utility organizations responsible for electricity, water supply, transportation, and communication services therefore require effective management systems capable of ensuring accountability, operational reliability, and sustainable service delivery.

Reliable electricity supply is particularly important for industrialization, economic growth, technological advancement, and social welfare. Electricity supports key sectors such as manufacturing, healthcare, education, communication, and business activities. In Tanzania, the Tanzania Electric Supply Company Limited (TANESCO) remains the primary public utility institution responsible for electricity generation, transmission, and distribution. Given its strategic role in national development, improving organizational performance and service delivery within TANESCO is essential for supporting economic activities and improving citizens' welfare.

In response to increasing operational demands and public expectations, TANESCO has introduced several quality management initiatives intended to strengthen accountability, improve customer satisfaction, and enhance operational performance (Hyera & Lyimo, 2023). These initiatives include process standardization, performance monitoring systems, customer service improvement strategies, employee training programs, and administrative reforms designed to improve institutional effectiveness. The adoption of such initiatives reflects growing recognition of quality management practices as important mechanisms for improving performance within public sector organizations.

Despite the increasing emphasis on QMS implementation, many public institutions in Tanzania continue to experience challenges related to weak implementation mechanisms, inadequate institutional commitment, insufficient monitoring systems, limited employee involvement, and resource constraints (Mutarubukwa & AsumiteMusomba, 2018). In several cases, quality management initiatives are introduced without adequate organizational support or effective communication systems necessary for successful implementation. Consequently, many institutions fail to realize the intended benefits of QMS despite continued administrative reforms and management efforts.

Similarly, evidence regarding the effectiveness of QMS implementation within TANESCO remains inconclusive. While some studies report improvements in accountability, operational coordination, employee performance, and customer service delivery, others identify persistent challenges related to communication systems, operational inefficiencies, service delays, and customer dissatisfaction (Hyera & Lyimo, 2023). These mixed findings suggest that although quality management initiatives have generated positive outcomes in certain areas, institutional and operational challenges continue to undermine the effectiveness of QMS implementation within TANESCO.

Furthermore, most existing studies on TANESCO and other public institutions in Tanzania have focused mainly on isolated administrative practices such as customer service, employee performance, or operational efficiency rather than examining QMS as an integrated organizational framework. Limited attention has been directed toward

understanding how leadership commitment, communication systems, employee participation, process management, and continuous improvement collectively influence organizational performance and service delivery. This creates a significant knowledge gap regarding the practical effectiveness of QMS implementation within public utility institutions in Tanzania.

It is within this context that the present study assessed the effectiveness of Quality Management System implementation at TANESCO Kinondoni South. Specifically, the study examined the extent of QMS implementation within the organization, assessed the influence of QMS on organizational performance and service delivery, and identified institutional challenges affecting effective implementation. The findings of the study are expected to contribute to existing knowledge on quality management practices in public institutions and provide practical recommendations for improving organizational efficiency, accountability, and service delivery within TANESCO and other public utility organizations in Tanzania.

1.1 Research Objectives

- i. To examine the effective implementation of Quality Management system at TANESCO.
- ii. To examine the influence of quality management systems in improving service delivery at TANESCO.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Total Quality Management (TQM) Theory

Total Quality Management (TQM) is a management philosophy that emphasizes continuous improvement, customer satisfaction, employee participation, and organizational commitment to quality across all organizational processes. The theory was developed through the contributions of quality management scholars such as W. Edwards Deming, Joseph Juran, and Philip Crosby, who argued that organizational success depends on the ability to consistently meet customer expectations through systematic quality improvement initiatives.

TQM advocates the integration of quality principles into every organizational function rather than confining quality control to specific departments. The theory promotes leadership commitment, employee involvement, teamwork, process standardization, continuous improvement, and data-driven decision-making as key elements for enhancing organizational performance. According to Deming (1986), quality improvement should be viewed as a continuous organizational process aimed at reducing inefficiencies and increasing customer satisfaction.

Within public administration, TQM has increasingly been adopted as a strategy for improving institutional performance, accountability, and service delivery. Public organizations are expected to provide efficient, transparent, and citizen-centered services. Consequently, the implementation of quality management systems based on TQM principles seeks to strengthen operational efficiency, improve resource utilization, and enhance public trust through improved service quality.

The present study adopts TQM Theory because its principles correspond directly with the study variables. Quality Management System (QMS) implementation, reflected through quality standards, monitoring and evaluation practices, employee involvement, and management commitment, constitutes the independent variable. According to TQM Theory, effective implementation of these practices contributes to improved service delivery, organizational efficiency, and accountability, which are the dependent variables of the study. The theory further recognizes that organizational and technical factors, including employee competence, technological capacity, financial resources, and leadership support, may influence the effectiveness of QMS implementation. Therefore, TQM provides an appropriate theoretical foundation for examining the effectiveness of QMS implementation at TANESCO Kinondoni South.

2.2 Empirical Review

2.2.1 Effectiveness of Quality Management System Implementation in Public Organizations

Quality Management Systems (QMS) have become important tools for enhancing organizational performance in both public and private institutions. Effective implementation of QMS involves the adoption of standardized procedures, continuous monitoring mechanisms, employee participation, and commitment to quality improvement. Evidence from developed and developing countries indicates that QMS implementation contributes significantly to operational effectiveness and institutional performance.

Matei and Lazăr (2011) found that the implementation of ISO 9001 in public institutions in South-Eastern Europe improved administrative coordination, transparency, and service quality through standardized operational procedures. Similarly, Kobylńska (2016) reported that quality management practices enhanced organizational performance and strengthened accountability mechanisms in public sector organizations in Poland. In Tanzania, Bwemelo and Mohammed (2016) examined the implementation of KAIZEN quality management practices in public institutions and found that quality improvement initiatives contributed to enhanced operational efficiency, reduced

administrative costs, and improved service quality. More recently, Hyera and Lyimo (2023) reported that employee empowerment, effective communication systems, and top management commitment positively influenced quality management implementation and organizational performance within TANESCO.

Although previous studies demonstrate the importance of QMS implementation in improving organizational performance, most have focused on public administration reforms and quality improvement initiatives in general. Limited empirical evidence exists regarding the effectiveness of QMS implementation as an integrated management system within Tanzanian public utility institutions. This study therefore seeks to assess the effectiveness of QMS implementation at TANESCO Kinondoni South.

2.2.2 Influence of Quality Management Systems on Service Delivery, Organizational Efficiency, and Accountability

The primary objective of QMS implementation is to improve organizational performance outcomes through systematic quality improvement processes. Existing studies suggest that quality-oriented management practices contribute significantly to service delivery, operational efficiency, and accountability. Matei and Lazăr (2011) observed that quality management standards improved service responsiveness and citizen satisfaction in public institutions. Likewise, Kobylińska (2016) found that quality management initiatives enhanced service consistency and strengthened institutional accountability through improved process control and performance monitoring.

Recent evidence from African countries supports these findings. Tiika *et al.* (2024), in a study conducted in Ghana and Kenya, found that effective monitoring systems, digital integration, and institutional coordination significantly improved public service delivery performance. Their findings indicate that quality-oriented management practices contribute to greater efficiency, responsiveness, and accessibility of services.

In Tanzania, Wilson and Bernard (2021) found that management commitment, continuous performance assessment, and customer-oriented service approaches positively influenced organizational effectiveness and accountability within public organizations. However, TANESCO continues to face challenges related to service delays, infrastructure limitations, operational inefficiencies, and customer complaints (Hyera & Lyimo, 2023). While previous studies acknowledge the contribution of quality management practices to organizational performance, limited evidence exists regarding the specific influence of QMS implementation on service delivery, organizational efficiency, and accountability within TANESCO. This study seeks to fill this gap.

2.2.3 Organizational and Technical Factors Affecting Effective QMS Implementation

The success of Quality Management Systems depends on organizational and technical conditions that support continuous improvement and quality assurance processes. Several studies have identified both enabling and constraining factors influencing effective QMS implementation. Mutarubukwa and Musomba (2018) argue that leadership commitment, employee involvement, adequate resource allocation, and continuous staff training are critical determinants of successful QMS implementation. Similarly, Pasape and Godson (2022) emphasize the importance of technological infrastructure, employee competence, and effective monitoring and evaluation systems in sustaining quality management initiatives.

Despite these enabling conditions, numerous challenges continue to affect the implementation of quality management systems. Nchimbi and Korojelo (2021) found that financial constraints, inadequate management support, and resistance to organizational change significantly hindered quality improvement initiatives within public institutions. Likewise, Mwamunyange (2019) identified bureaucratic procedures, weak institutional coordination, insufficient technical capacity, and limited employee participation as major barriers to effective quality management implementation.

Furthermore, some organizations adopt QMS primarily for certification purposes rather than as a mechanism for continuous improvement. Such practices often result in weak employee commitment, ineffective implementation, and failure to achieve intended organizational outcomes. Within TANESCO, challenges such as technological limitations, infrastructure constraints, and operational inefficiencies may affect the successful implementation of quality management systems. However, empirical studies specifically examining these barriers within Tanzanian public utility institutions remain limited. Consequently, there is a need for a comprehensive assessment of the organizational and technical factors affecting QMS implementation at TANESCO Kinondoni South.

2.3 Research Gap

The reviewed empirical studies demonstrate that Quality Management Systems contribute to improved organizational performance, accountability, customer satisfaction, and operational efficiency. However, most international studies were conducted in developed countries and private sector organizations, making it difficult to generalize their findings to Tanzanian public utility institutions.

Within the African and Tanzanian context, existing studies largely focus on public sector reforms, leadership practices, and general organizational performance rather than specifically evaluating the effectiveness of QMS implementation in public utility organizations. Furthermore, limited empirical evidence exists regarding how Quality Management Systems influence service delivery performance within TANESCO, particularly at Kinondoni South. Therefore, this study seeks to fill this knowledge gap by assessing the effectiveness of Quality Management System implementation on service delivery at TANESCO Kinondoni South, with specific focus on operational efficiency, customer satisfaction, and challenges affecting implementation effectiveness.

III. METHODOLOGY

3.1 Research Design

The study adopted a quantitative research approach using a cross-sectional survey design. The design enabled data collection at a single point in time to assess the effectiveness of QMS implementation at TANESCO Kinondoni South. A quantitative approach is the most appropriate for this study because it facilitated statistical analysis of relationships between quality management practices and organizational performance (Kothari, 2004; Hughes & Barlo, 2021).

3.2 Study Area

The study was conducted at TANESCO Kinondoni South Region in Dar es Salaam, Tanzania. The institution was selected because it plays a critical role in electricity service provision in a large part of the city of Dar es Salaam and has implemented quality management initiatives aimed at improving operational efficiency and service delivery.

3.3 Population and Sampling

The target population comprised 240 employees involved in operational, technical, and administrative activities at TANESCO Kinondoni South. These included senior management staff, technical personnel, and customer service officers. A sample size of 110 respondents was determined using Yamane's formula (1967). Stratified sampling was employed to ensure representation across different staff categories, while convenience sampling was used to recruit respondents who were available and willing to participate in the study (Etikan, 2019).

3.4 Data Collection Techniques

Data were collected using structured questionnaires containing closed-ended questions based on a five-point Likert scale ranging from Strongly Disagree to Strongly Agree. The questionnaires collected information regarding quality management practices, organizational challenges, employee perceptions, and service delivery performance. Prior to actual data collection, a pilot study was conducted to test the clarity, consistency, and reliability of the research instruments. Reliability of the questionnaire was tested using Cronbach's Alpha coefficient, and values above 0.70 were considered acceptable (Kumar, 2019; Saunders et al., 2016).

3.5 Data Analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS) version 26. Descriptive statistics such as frequencies, percentages, means, and tables were used to summarize findings. Inferential statistics, particularly correlation and multiple regression analysis, were employed to examine relationships between quality management practices, organizational factors, and public administration performance.

3.6 Ethical Considerations

The study adhered to established ethical research principles. Permission to conduct the study was obtained from Mzumbe University and TANESCO management before data collection. Participants provided informed consent prior to participation. Confidentiality and anonymity were maintained throughout the study, and information collected was used strictly for academic purposes.

IV. FINDINGS & DISCUSSION

4.1 Demographic Characteristics of Respondents

The study examined respondents' demographic characteristics, including education level, gender, and work experience. These characteristics were considered important in assessing respondents' knowledge, experience, and understanding of Quality Management System (QMS) implementation at Tanzania Electric Supply Company Limited (TANESCO) Kinondoni South.

Table 1*Demographic Characteristics of Respondents*

Variable	Category	Frequency	Percent (%)
Education Level	Certificate	34	30.9
	Diploma	45	40.9
	Bachelor's degree	24	21.8
	Master's Degree	7	6.4
Gender	Male	71	64.5
	Female	39	35.5
Work Experience	1–3 Years	37	33.6
	4–6 Years	24	21.8
	7 Years and Above	49	44.5

The findings presented in Table 1 indicate that respondents possessed adequate educational qualifications and professional experience to provide reliable information concerning QMS implementation at TANESCO. The majority of respondents were diploma holders (40.9%), followed by certificate holders (30.9%), while respondents with bachelor's and master's degrees accounted for 21.8% and 6.4%, respectively. Regarding gender distribution, male respondents constituted 64.5% of the sample, while female respondents accounted for 35.5%. In terms of work experience, 44.5% of respondents had worked at TANESCO for seven years and above, suggesting that a large proportion of respondents had substantial institutional experience and familiarity with organizational operations and quality management practices.

These data indicate that respondents had sufficient technical competence and organizational experience to provide credible information regarding service delivery and quality management practices at TANESCO. The findings are consistent with Hyera and Lyimo (2023), who observed that employee experience and technical competencies significantly influence organizational performance and quality management implementation in public utility institutions.

4.1.1 Effective Implementation of Quality Management System at TANESCO

The first objective of this study is to assess the effective implementation of Quality Management System (QMS) at TANESCO Kinondoni South. In this study, effective QMS implementation was measured through employee awareness of the presence of quality procedures, adherence to quality standards, accountability mechanisms, and monitoring and evaluation systems.

Table 2*The implementation of Quality Management System (QMS) at TANESCO Kinondoni South*

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
TANESCO has effectively implemented a Quality Management System (QMS).	37 (33.6%)	54 (49.1%)	10 (9.1%)	9 (8.2%)	0 (0%)
Employees are aware of the quality management procedures in place.	52 (40%)	38 (29.2%)	13 (10%)	27 (20.8%)	0 (0%)
Quality standards are consistently followed in daily operations.	50 (45.5%)	42 (38.2%)	8 (7.3%)	10 (9.1%)	0 (0%)
The QMS at TANESCO helps in ensuring accountability and transparency.	47 (42.7%)	40 (36.4%)	15 (13.6%)	8 (7.3%)	0 (0%)
There are regular monitoring and evaluation of the quality management processes.	46 (41.8%)	52 (47.3%)	8 (7.3%)	4 (3.6%)	0 (0%)

As demonstrated in Table 2 above most respondents (82.7%) agreed that TANESCO had effectively implemented a Quality Management System. Similarly, 69.2% of the respondents reported that they are aware of quality management procedures, while 83.7% confirmed that quality standards were consistently followed in daily operations. The findings further revealed that 79.1% of respondents agreed that QMS contributes to performance accountability and transparency within the organization. In addition, 89.1% indicated that regular monitoring and evaluation mechanisms were in place to assess quality management processes. These results suggest that TANESCO has substantially institutionalized quality management practices through standardized procedures, operational controls, accountability mechanisms, and continuous monitoring systems.

Overall, the findings demonstrate that the independent variable, namely Quality Management System implementation, has been effectively adopted within TANESCO Kinondoni South. However, the presence of a small

proportion of respondents reporting limited awareness of quality procedures and inconsistent adherence to standards suggests that implementation levels may vary across departments and operational units.

4.1.2 Influence of Quality Management System Implementation on Organizational Performance

The second objective examined the influence of Quality Management System implementation on organizational performance. In the conceptual framework, QMS implementation represents the independent variable, while service delivery, organizational efficiency, and accountability constitute the dependent variables.

Table 3

The Influence of QMS Implementation on Service Delivery at TANESCO Kinondoni South

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
QMS implementation has improved customer service at TANESCO.	48 (43.6%)	39 (35.5%)	14 (12.7%)	9 (8.2%)	0 (0%)
Quality management practices have led to more timely service delivery	39 (35.5%)	55 (50.0%)	9 (8.2%)	7 (6.4%)	0 (0%)
There is better responsiveness to customer complaints and feedback.	61 (55.5%)	32 (29.1%)	10 (9.1%)	7 (6.4%)	0 (0%)
Customers are more satisfied with TANESCO's services since QMS was introduced.	52 (47.3%)	39 (35.5%)	15 (13.6%)	4 (3.6%)	0 (0%)
QMS has led to a reduction in service interruptions or outages.	44 (40%)	52 (47.3%)	9 (8.2%)	5 (4.5%)	0 (0%)

4.1.3 Influence of QMS on Service Delivery

Our second study objective is to determine the role of quality management system (QMS) in improving many aspects organizational management. Table 3 above reflects our respondents' perceptions regarding the influence of QMS implementation on service delivery at TANESCO. It is demonstrated that 79.1% of respondents agreed that QMS implementation improved customer service, while 85.5% reported improvements in timely service delivery. Furthermore, most respondents (84.6%) indicated that QMS has enhanced TANESCO's responsiveness to customer complaints and feedback had improved following the introduction of QMS. Similarly, 82.8% of respondents agreed that customer satisfaction had increased, while 87.3% reported a reduction in service interruptions and outages. These findings suggest that QMS implementation has enhanced service reliability, responsiveness, timeliness, and customer orientation within TANESCO.

4.1.4 Influence of QMS on Organizational Efficiency and Accountability

To further examine the relationship between QMS implementation and organizational performance, regression analysis was conducted. The model produced a statistically significant relationship between quality management variables and organizational performance ($R = 0.701$, $p < .05$). The coefficient of determination ($R^2 = 0.491$) indicates that approximately 49.1% of the variation in organizational performance is explained by quality management practices, perceived service quality, and organizational factors.

The ANOVA results confirmed that the regression model was statistically significant ($F = 27.03$, $p < .001$), indicating that the predictor variables collectively influence organizational performance. The regression coefficients further revealed that Quality Management System practices positively and significantly influence organizational performance ($\beta = 0.107$, $p = .006$). Likewise, perceived quality demonstrated a positive and significant relationship with organizational performance ($\beta = 0.127$, $p = .006$).

These findings imply that effective implementation of Quality Management Systems contributes to improved organizational efficiency, accountability, and overall service delivery performance. Therefore, the dependent variables of the study were positively influenced by the implementation of QMS practices at TANESCO Kinondoni South.

Table 4

Model Summary and ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.203	3	6.734	27.03	0.000a
Residual	26.554	106	0.250		
Total	46.757	109			

$R=0.701$, $R^2=0.491$, Adjusted $R^2=0.0477$, Std. Error of the Estimate = 0.500, Durbin-Watson = 2.285

The regression coefficients in Table 5 below revealed that QMS practices positively and significantly influence organizational performance ($\beta = 0.107$, $p = .006$). Similarly, perceived quality demonstrated a positive and significant relationship with organizational performance ($\beta = 0.127$, $p = .006$). These findings imply that effective implementation of quality management systems contributes to improved accountability, operational efficiency, and service delivery performance.

Table 5
Multiple Regression Analysis

Model	Unstandardised Coefficients		T	Sig.
	B	Std. Error		
Constant	3.155	0.211	14.959	0.000
Perceived Quality	0.127	0.045	2.82	0.006
Quality Management Systems Practices (QMS)	0.107	0.038	2.82	0.006
Organizational Factors Challenges	-0.106	0.033	-2.03	0.045

The findings are consistent with Bwemelo and Mohammed (2016), who reported that quality management practices enhance institutional efficiency and service quality in public organizations. Similarly, Wilson and Bernard (2021) found that effective monitoring systems and continuous assessment mechanisms improve service delivery outcomes in public institutions. The results also support the New Public Management (NPM) perspective, which advocates the adoption of performance-oriented management practices to improve efficiency, accountability, and service quality in public sector organizations (Hood, 1991).

4.1.5 Organizational and Technical Factors Hindering QMS Implementation

Further to our two research objectives, we also wanted to understand and identify the organizational and technical factors that hinder effective implementation of Quality Management Systems (QMS) at TANESCO Kinondoni South. These factors should be seen as intervening variables that influence the relationship between QMS implementation and organizational performance. Table 6 below indicates various factors that affect effective implementation of QMS at TANESCO. These factors include that inadequate employee training, financial constraints, and resistance to change. For instance, 84.6% of respondents either agreed or strongly agreed that lack of employee training hinders effective implementation of QMS, indicating that employee capacity development remains a critical requirement for sustaining quality management initiatives. This finding supports Mutarubukwa and Musomba (2018), who identified staff training and employee competence as critical determinants of successful quality management implementation

Table 6
The organizational factors hindering quality management practices

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Lack of employee training hinders effective implementation of QMS.	52 (47.3%)	41 (37.3%)	12 (10.9%)	5 (4.5%)	0 (0%)
There is inadequate leadership support for quality management at TANESCO.	12 (10.9%)	31 (28.2%)	44(40%)	23 (29%)	0 (0%)
Technological limitations impact the success of QMS implementation.	9 (8.2%)	29(26.4%)	20 (18.2%)	31 (28.2%)	21 (19.1%)
There is resistance to change among staff regarding quality procedures.	33 (30.0%)	39 (35.5%)	26 (23.6%)	8 (7.3%)	4 (3.6%)
Financial constraints limit the proper application of quality management initiatives.	43 (39.1%)	37 (33.6%)	21 (19.1%)	9 (8.2%)	0 (0%)

Similarly, 72.7% of respondents agreed that financial constraints limit the proper application of quality management practices, suggesting that inadequate resources may affect the implementation of quality improvement programs and monitoring activities. This finding is consistent with Nchimbi and Korojelo (2021), who found that limited financial resources significantly constrain quality improvement initiatives within public institutions. The findings further showed that 65.5% of respondents agreed that resistance to change among employees affects adherence to quality procedures. This implies that employee attitudes and organizational culture may influence the successful adoption of quality management practices within the organization. Similar observations were reported by Mwamunyange (2019), who found that resistance to organizational change and limited employee participation hinder the effectiveness of quality management programs.

Regarding leadership support, respondents expressed mixed views. While 39.1% agreed that inadequate leadership support affects quality management implementation, 40.0% remained neutral, suggesting uncertainty regarding the extent of management commitment across operational units. Likewise, technological limitations were not perceived as a major challenge by most respondents, as 47.3% disagreed or strongly disagreed that technological constraints significantly affect QMS implementation, compared to 34.6% who agreed. Nevertheless, Pasape and Godson (2022) emphasize that technological infrastructure remains an important enabler of effective quality management systems. Overall, the findings suggest that human resource capacity, financial resources, and resistance to organizational change constitute the most significant barriers to effective implementation of Quality Management Systems at TANESCO Kinondoni South.

4.2 Discussion

The study established that Quality Management System implementation contributes positively to organizational performance at TANESCO Kinondoni South. The findings revealed substantial implementation of QMS practices, particularly in quality standards, monitoring and evaluation, accountability mechanisms, and employee awareness of quality procedures. These findings are consistent with Matei and Lazăr (2011), who found that quality management systems improve administrative coordination, accountability, and operational effectiveness within public institutions. Similarly, Kobylińska (2016) reported that quality management practices strengthen organizational performance through process standardization and continuous quality improvement.

Furthermore, QMS implementation was found to positively influence service delivery through improvements in customer service, responsiveness, timeliness, customer satisfaction, and service reliability. These findings support the results of Bwemelo and Mohammed (2016), who observed that quality management initiatives enhance service quality and operational efficiency within public organizations. The findings are also consistent with Wilson and Bernard (2021), who found that continuous performance assessment and customer-oriented management practices contribute significantly to improved service delivery outcomes in public institutions.

Despite these positive outcomes, the study identified several barriers that hinder effective implementation of quality management practices. Inadequate employee training emerged as the most significant challenge, followed by financial constraints and resistance to organizational change. Similar findings were reported by Nchimbi and Korojelo (2021), who identified resource limitations and organizational resistance as major obstacles to quality improvement initiatives. Likewise, Mwamunyange (2019) found that insufficient staff capacity and weak institutional support negatively affect the effectiveness of quality management programs.

The statistical analysis further confirmed that organizational and technical challenges negatively affect organizational performance, highlighting the importance of addressing internal constraints to maximize the benefits of QMS implementation. These findings support Total Quality Management Theory, which emphasizes employee involvement, leadership commitment, continuous improvement, and adequate organizational resources as essential conditions for successful quality management outcomes (Deming, 1986). Therefore, the findings suggest that strengthening employee capacity, resource allocation, and change management mechanisms would further enhance the effectiveness and sustainability of QMS implementation at TANESCO.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study assessed the effectiveness of Quality Management System (QMS) implementation in public administration using TANESCO Kinondoni South as a case study. The study was guided by three objectives: to assess the effectiveness of QMS implementation, to determine its influence on service delivery, organizational efficiency, and accountability, and to identify organizational and technical factors hindering its implementation. The findings revealed that TANESCO has substantially implemented Quality Management Systems through adherence to quality standards, employee awareness of quality procedures, and the establishment of monitoring and evaluation mechanisms. This indicates that the independent variable, QMS implementation, is well institutionalized within the organization.

The study further established that QMS implementation has a positive and significant influence on service delivery. Improvements were observed in customer service, responsiveness, timeliness, customer satisfaction, and reliability of electricity services. In addition, regression results confirmed that QMS practices significantly contribute to organizational performance, which reflects improvements in organizational efficiency and accountability within TANESCO Kinondoni South. However, the study also found that the effectiveness of QMS implementation is constrained by several organizational and technical factors. These include inadequate employee training, financial limitations, and resistance to organizational change. These intervening variables weaken the full realization of QMS benefits and limit optimal performance outcomes. Overall, the study concludes that while QMS implementation



significantly enhances service delivery, efficiency, and accountability in TANESCO, its effectiveness depends on the strength of organizational support systems, employee capacity, and availability of resources.

5.2 Recommendations

The study recommends strengthening the implementation of Quality Management Systems (QMS) at Tanzania Electric Supply Company Limited to improve public administration performance and service delivery. Management should strengthen leadership commitment to QMS implementation through effective supervision, regular monitoring, improved communication, and timely allocation of financial, human, and technological resources. In addition, management should align QMS objectives with TANESCO's strategic goals to enhance accountability, operational efficiency, and sustainable service delivery. Management should also promote a culture of continuous improvement by encouraging teamwork, employee participation in decision-making, innovation, and problem-solving practices.

Also, TANESCO should develop and enforce policies that support continuous employee training and capacity building to enhance technical competence and understanding of QMS procedures. Policies should also encourage digital transformation, technology upgrades, and process automation to improve monitoring, reporting, customer feedback management, and data-driven decision-making. Furthermore, the organization should institutionalize regular monitoring, evaluation, and independent quality audits to ensure compliance with QMS standards and continuous organizational improvement.

Operationally, TANESCO should optimize financial and operational resources to support process improvement initiatives and efficient service delivery. The organization should implement digital systems for operational monitoring, reporting, customer feedback analysis, and performance tracking to improve efficiency and responsiveness. TANESCO should also address resistance to change through employee sensitization, active staff involvement in QMS activities, and continuous awareness programs that encourage acceptance of quality improvement practices. In addition, regular operational assessments and compliance audits should be conducted to identify performance gaps and implement corrective actions promptly.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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REFERENCES

- Akhmatova, M.-S., Deniskina, A., Akhmatova, D.-M., & Prykina, L. (2022). Integrating quality management systems (TQM) in the digital age of intelligent transportation systems industry 4.0. *Transportation Research Procedia*, 63, 1512–1520. <https://doi.org/10.1016/j.trpro.2022.06.163>
- Bwemelo, G. S., & Mohammed, M. (2016). Improving public service delivery in Tanzania through KAIZEN: A review of empirical evidence. *Business Education Journal*, 1(2), 1–12.
- Deming, W. E. (1986). *Out of the crisis*. Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Etikan, I. (2019). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19.
- Hughes, C., & Barlo, K. (2021). *Research design and methodology in social science studies*. Sage Publications.
- Hyera, D., & Lyimo, B. J. (2023). The relationship between total quality management practices and organizational performance: A case study of TANESCO – Dar es Salaam. *International Journal of Innovative Research in Management*, 12(3), 45–60.
- Kobylińska, U. (2016). European Union support in the improvement of quality management systems in administration offices in Poland. *Public Policy and Administration*, 15(1), 9–24.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners* (5th ed.). Sage Publications.
- Matei, L., & Lazăr, C.-G. (2011). Quality management and the reform of public administration in several states in South-Eastern Europe: Comparative analysis. *Theoretical and Applied Economics*, 18(4), 65–98.



- Mutarubukwa, F. B., & Asumite Musomba, N. (2018). Outsourcing of the delivery of non-core services in Tanzanian public service institutions: A case of the President's Office – Public Service Management (PO-PSM). *Researchers World: Journal of Arts, Science and Commerce*, 9(3), 58.
- Mwamunyange, M. (2019). Contribution of client service charter on improvement of public service delivery in public sector: A case of Tanzania Revenue Authority-Head Office (Master's dissertation). Mzumbe University.
- Nchimbi, A., & Korojelo, S. (2021). Uplifting motivation of Tanzanian public service personnel for improved service delivery: The reflection of Public Service Motivation Theory. *International Journal of African and Asian Studies*, 75, 39–45. <https://doi.org/10.7176/JAAS/75-04>
- Oakland, J. S. (2014). *Total quality management and operational excellence: Text with cases* (4th ed.). Routledge.
- Pasape, L., & Godson, R. (2022). Quality management systems and public service delivery in Tanzania. *International Journal of Public Administration and Management Research*, 7(1), 45–58.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7th ed.). Pearson Education.
- Tiika, R., Mensah, P., & Boateng, K. (2024). E-government development among African Union member states: Impact on public administration and governance in Ghana. *African Journal of Public Administration*, 12(1), 22–39.
- Wilson, M. A., & Bernard, O. (2021). Effects of monitoring and evaluation framework on performance of public sector: A case of Ministry of Mining in Tanzania. *African Multidisciplinary Journal of Development (AMJD)*, 10(1), 76–133.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.