



Influence of Organizational Location on Quality Management Practices and Operational Efficiency among Organizations in Rivers State, Nigeria

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Abstract- This study investigated the influence of organizational location (urban vs. rural) on quality management practices and operational efficiency among organizations in Rivers State, Nigeria. Anchored on Contingency Theory, Resource-Based View, and Institutional Theory, the study adopted a descriptive survey design. Data were collected from 385 managerial and supervisory staff using the Influence of Organizational Location on Quality Management Practices and Operational Efficiency Questionnaire (ILQMPOEQ) with Cronbach's Alpha of 0.78. Results showed moderate levels of quality management practices for urban organizations (Mean = 2.89, SD = 0.04) and rural organizations (Mean = 2.85, SD = 0.04). Operational efficiency was also moderate for urban (Mean = 3.03, SD = 0.26) and rural organizations (Mean = 3.01, SD = 0.25). Independent Samples t-test revealed no statistically significant differences in quality management practices ($t = 0.562$, $df = 383$, $p = 0.574$) or operational efficiency ($t = 0.517$, $df = 383$, $p = 0.606$) between urban and rural locations, leading to the acceptance of both null hypotheses. The findings suggest that organizational location does not significantly influence quality management practices or operational efficiency in Rivers State. Recommendations include that Organizations should strengthen quality management systems by prioritizing continuous improvement practices such as mentoring, regular feedback, and process optimization.

Keywords- Organizational location, quality management practices, operational efficiency, urban-rural divide, Rivers State, Nigeria

I. Introduction

Across Nigeria's diverse landscapes, in the communities of Rivers State in Nigeria scattered across the riverine State, one thing as observed that is of concern to the people remains the issue with location of business. The quality of productivity in organizations may be tethered to the environments in which they are. Organizational location may influence the pace of progress, leaving some struggling to keep pace while others surge ahead. Oloruntoyin (2011) noted that the quality of organization such as education



offered in many rural areas in Nigeria is poor, leading parents to lose confidence in the system. Adebayo and Owoaje (2016) observed that despite national policies, the implementation of programs remains suboptimal in both rural and urban public primary areas. Abbey and Gospel (2024) reported that work environment factors significantly affect the performance of local governments in Rivers State. Nwaogbe and Ogorode (2024) indicated that poor infrastructure and management practices constrain operational performance in riverine transport sectors similar to those in Rivers State. Obi and Tim-Agbo (2026) noted that there is a greater difficulties in adopting essential record practices in rural areas compared to their urban counterparts. These patterns suggest that organizational location continues to create uneven conditions for quality management and efficiency in Nigeria.

Oloruntoyin (2011) defined quality assurance as a holistic process involving collaboration and participation for institutional development rather than individualistic approaches. The quality management practices as encompassing human resource management, top management commitment, and process management aimed at continuous improvement (Ruales Guzmán et al., 2019). Quality management systems help optimizes current assets such as inventory and receivables to reduce costs and improve liquidity (Zimon, 2019).

Abbey and Gospel (2024) linked operational efficiency to physical working conditions, organizational culture, and employee relationships that drive productivity in Rivers State local governments. Operational Efficiency refers to the effective conversion of inputs into outputs with minimal waste, often measured as productivity (output-input ratio) (Ruales Guzmán et al., 2019; Zimon, 2019). It encompasses efficient management of current assets (inventories, receivables), process optimization, and reduction of costs associated with poor quality. In asset-heavy sectors, operational efficiency directly impacts financial liquidity, profitability, and competitiveness (Zimon, 2019).

Theoretical Frameworks

This study is anchored on Contingency Theory by Lawrence and Lorsch (1967). The theory posits that organizational performance is contingent upon the alignment between internal management practices and external environmental factors. In this context, organizational location (urban versus rural) may serve as a critical contingency variable that may influence the adoption of quality management practices and the achievement of operational efficiency. Oloruntoyin (2011) noted that the disparities in the location of institutions, and those in rural areas may require context-specific quality assurance strategies due to unique environmental challenges. Similarly, Abbey and Gospel (2024) observed that differences in work environment conditions between urban and rural local governments in Rivers State significantly affect performance outcomes. These conditions may include the practices that enhances operational efficiency and quality management.



Barney (1991) in the Resource-Based View (RBV) noted that organizations achieve sustained competitive advantage by acquiring, developing, and exploiting valuable, rare, inimitable, and well-organized resources (VRIO framework). According to this approach, resources can be tangible (physical assets, financial capital, infrastructure) or intangible (human capital, knowledge, organizational culture, and processes). Hence, when organizations in Rivers State tend to possess more valuable and rare resources such as qualified personnel, modern technology, better funding opportunities, and reliable infrastructure; these resources enable them to implement advanced quality management practices and achieve superior operational efficiency, but whether location of organizations in Rivers state serves as a limitation to quality management practices and operations efficiency due to the availability remains a concern. When organizations operate with limited, less valuable, and easily substitutable resources, it makes it difficult to adopt sophisticated quality systems or optimize operational processes effectively.

DiMaggio and Powell (1983) in Institutional Theory explained that organizations are deeply influenced by their institutional environment and tend to become similar through a process called isomorphism. This theory identifies three main mechanisms of institutional pressure: coercive (formal rules, laws, and government regulations), mimetic (imitation of successful organizations under uncertainty), and normative (professional standards, values, and networks). Organizations in Rivers State may face stronger coercive, mimetic, and normative pressures from government policies, regulatory bodies, and professional expectations, compelling them to adopt quality management practices and modern administrative systems.

Institutional Theory thus complements Contingency Theory by explaining the external social and regulatory forces that reinforce urban-rural disparities in quality management practices. However, over the years, the quest for improved service delivery and sustainable development has placed quality management practices and operational efficiency at the forefront of organizational performance, particularly among organizations in Nigeria. Persistent disparities in performance across different locations continue to hinder the realization of organizational objectives in Nigeria. Adebayo and Owoaje (2016) found that 59.2% of public educational institutions had poor quality implementation of the School Health Program, with rural institutions showing better water supply access (88.5%) but significantly lagging in trained staff, first aid functionality, and health education content compared to urban institutions. Abbey and Gospel (2024) observed that rural local governments in Rivers State have poorer infrastructure, communication channels, and supportive organizational culture, leading to lower overall performance than their urban counterparts. Nwaogbe and Ogorode (2024) noted that infrastructure quality and cargo clearance significantly influence operational performance in riverine areas, with challenges more pronounced in rural settings.



Whether the influence of location affects quality management practices and operational efficiency among organizations in Rivers state remains a gap, as the quality management practices and operational efficiency are vital. Ruales Guzmán et al. (2019) confirmed that human resource management, top management commitment, and process management are the most relevant quality management constructs linked to productivity. Zimon (2019) revealed that enterprises with quality management systems achieve better efficiency in managing current assets than those without such systems. Hence, there is an urgent need to empirically investigate the influence of organizational location on quality management practices and operational efficiency among organizations in Rivers State.

Research Questions

Therefore, the following research questions emerged to achieve the goal of the study:

- What is the mean difference in quality management practices between urban and rural organizations in Rivers State, Nigeria?
- What is the mean difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria?
- Hypotheses
- The following null hypotheses were tested at 0.05 level of significance:
- H_{01} : There is no significant difference in quality management practices between urban and rural organizations in Rivers State, Nigeria.
- H_{02} : There is no significant difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria.

II. Methods

1. Research Design

This study adopted a descriptive survey research design. Nwankwo (2013) noted that descriptive research design or descriptive survey is a research approach that focuses on describing the characteristics, features, or current state of a phenomenon, population, or situation as it exists in its natural setting, without manipulating variables or establishing cause-and-effect relationships. The descriptive design is appropriate for this study because it enables the researcher to collect data from a large number of respondents on their perceptions regarding the influence of organizational location on quality management practices and operational efficiency in Rivers State.

2. Population and Sample

The target population comprised managerial and supervisory staff of public and private sector organizations in Rivers State, Nigeria, spanning oil and gas, manufacturing, financial services, commercial, and other sectors. Due to the difficulty in determining



the exact number of organizations from the Corporate Affairs Commission, the study used purposive sampling.

3. Sampling Procedure

Since the actual population size was unknown, purposive sampling technique was employed. This involved the deliberate selection of managerial and supervisory staff from organizations located in both urban and rural areas of Rivers State. A target sample size of 385 respondents was used, consistent with Cochran's (1977) recommendation for studies with unknown population sizes.

4. Instrument for Data Collection

A structured questionnaire was developed for the study after a pilot test was conducted with 30 respondents drawn from the target population. Data from the pilot test were subjected to reliability analysis, yielding a Cronbach's Alpha coefficient of 0.78, indicating acceptable internal consistency. The validity of the instrument was reviewed and confirmed by experts in measurement and evaluation.

The instrument was titled "Influence of Organizational Location on Quality Management Practices and Operational Efficiency Questionnaire (ILQMPOEQ)". It was divided into sections:

- Section A: Demographic information (including organizational location: urban or rural)
- Section B: Quality Management Practices (covering leadership commitment, employee involvement, training, customer focus, process management, and continuous improvement)
- Section C: Operational Efficiency (covering time efficiency, resource utilization, process reliability, cost reduction, and productivity)
- Items were measured on a 4-point Likert scale ranging from 1 (Rarely) to 4 (Very Frequently).

5. Method of Data Collection

Questionnaires were administered mainly distributed by hand face to face with the respondents via printed copies, and online via Google Forms for those who preferred the online option. The researcher and 2 trained research assistants personally distributed and collected the printed questionnaires during scheduled visits to participating organizations. Informed consent was obtained from all participants before administration, and the confidentiality of responses was assured.

6. Method of Data Analysis

Data collected were analysed using descriptive and inferential statistics with SPSS. Descriptive statistics (mean and standard deviation) were used to answer the research questions. Independent Samples t-test was employed to test the hypotheses and determine the mean differences in quality management practices and operational



efficiency between urban and rural organizations at 0.05 level of significance. The criteria for decision making to answer the research questions to find out the level, is based on the mean scale:

- 1.0 – 1.80 = Very low level,
- 1.90 – 2.60 = Low level,
- 2.70 – 3.40 = Moderate level,
- 3.50 – 4.0 = High level.

III. Results

What is the mean difference in quality management practices between urban and rural organizations in Rivers State, Nigeria?

Table 1: The mean difference in quality management practices between urban and rural organizations in Rivers State, Nigeria					
	Location	N	Mean	Std. Deviation	
Location	Urban	355	2.8915	0.0409	
	Rural	30	2.8472	0.0428	

In table 1, based on the responses on both urban and rural organizations, there is a moderate level of quality management practices in Rivers state. Urban organizations (Mean = 2.89, SD = 0.04) recorded a slightly higher mean than Rural (Mean = 2.84, SD = 0.04), but the difference was marginal. As the respondents seemed to not see the influence of location on quality management practices in Rivers state. Organizations in Rivers State are stronger in foundational practices (hiring and initial orientation) but weaker in continuous, long-term development activities such as mentoring, career progression, and regular feedback.

Test of Hypothesis

H₀₁: There is no significant difference in quality management practices between urban and rural organizations in Rivers State, Nigeria.

Table 2: Independent Sample t-test on the difference in quality management practices between urban and rural organizations in Rivers State, Nigeria

Gender	N	Mean	SD	DF	Cal t-value	P-value	Decision
Urban	355	2.8915	0.0409				Ho accepted P > 0.05
				383	0.562183	0.574	
Rural	30	2.8472	0.0428				



An independent samples t-test was conducted to determine whether there is a significant difference in quality management practices between urban and rural organizations in Rivers State, Nigeria.

The result revealed that the mean score for urban organizations ($M = 2.8915$, $SD = 0.0409$, $n = 355$) was slightly higher than that of rural organizations ($M = 2.8472$, $SD = 0.0428$, $n = 30$). However, this difference was not statistically significant, $t(383) = 0.562$, $p = 0.574$ ($p > 0.05$).

Therefore, the null hypothesis (H_{01}) which stated that there is no significant difference in quality management practices between urban and rural organizations in Rivers State, Nigeria is accepted.

What is the mean difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria?

Table 3: The mean difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria				
	Location	N	Mean	Std. Deviation
Location	Urban	355	3.0309	0.2597
	Rural	30	3.0055	0.2484

Table 3 presents the mean scores of operational efficiency between urban and rural organizations in Rivers State, Nigeria. Urban organizations recorded a slightly higher mean score ($M = 3.0309$, $SD = 0.2597$, $n = 355$) compared to rural organizations ($M = 3.0055$, $SD = 0.2484$, $n = 30$). The mean difference between the two groups is 0.0254.

Table 4: Independent Sample t-test on the difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria

Gender	N	Mean	SD	DF	Cal t-value	P-value	Decision
Urban	355	3.0309	0.2597				Ho accepted $P > 0.05$
				383	0.516613	0.606	
Rural	30	3.0055	0.2484				

In table 4, an independent samples t-test was performed to examine the difference in operational efficiency between urban and rural organizations. The result showed that



urban organizations had a marginally higher mean ($M = 3.0309$, $SD = 0.2597$) than rural organizations ($M = 3.0055$, $SD = 0.2484$). The null hypothesis is accepted, there is no significant difference in operational efficiency between urban and rural organizations in Rivers State, Nigeria.

IV. Discussion

The findings of this study reveal moderate levels of quality management practices (urban: $M = 2.89$, $SD = 0.04$; rural: $M = 2.85$, $SD = 0.04$) and operational efficiency (urban: $M = 3.03$, $SD = 0.26$; rural: $M = 3.01$, $SD = 0.25$) among organizations in Rivers State, Nigeria. Independent samples t-tests indicated no statistically significant differences between urban and rural locations for quality management practices ($t(383) = 0.562$, $p = 0.574$) or operational efficiency ($t(383) = 0.517$, $p = 0.606$). These results lead to the acceptance of both null hypotheses, suggesting that organizational location does not significantly influence on these variables studied.

This to an extent contrasts with Oloruntoyin (2011) who observed poor quality of education and institutional development in rural areas, attributing it to environmental challenges and limited collaboration. Adebayo and Owoaje (2016) reported suboptimal implementation of health programs in the public institutions, with rural areas lagging in trained staff and functionality despite better access to basic infrastructure like water. Abbey and Gospel (2024) found that rural local governments in Rivers State suffered from poorer infrastructure, communication, and organizational culture, resulting in lower performance. Similarly, Nwaogbe and Ogorode (2024) identified infrastructure deficits and management constraints as key barriers to operational performance in riverine sectors, while Obi and Tim-Agbo (2026) noted greater difficulties in adopting record-keeping practices in rural settings. These studies collectively shows the expected location-based inequalities driven by resource and environmental gaps. But the current findings from this study reveal that there is no significant differences from these patterns. This may be explained by several factors. First, the moderate levels across both locations may suggest a general baseline of practices shaped by national policies and regulatory frameworks that promote standardization, potentially mitigating extreme differences. Organizations in Rivers State, including those in oil and gas, manufacturing, logistics, services etc, may benefit from sector-specific influences (e.g., corporate standards or government oversight) that goes beyond the location.

From a theoretical perspective, the results challenge a strict application of Contingency Theory (Lawrence & Lorsch, 1967). While the theory posits that performance depends on the fit between internal practices and external contingencies like location, the lack of significant differences implies that other contingencies, such as industry type, organizational size, or national institutional pressures, may exert stronger influences in this setting. Urban-rural environmental differences (infrastructure, access) did not



translate into differing quality management or efficiency outcomes, suggesting adaptive strategies or compensatory mechanisms in rural organizations.

The Resource-Based View (Barney, 1991) to an extent agrees as Urban organizations are expected to leverage superior tangible (infrastructure, technology) and intangible resources (skilled personnel, culture) for VRIO advantages. However, the marginal (non-significant) edge in means for urban entities indicates that resources critical to quality practices and efficiency, such as leadership commitment, process management, and employee involvement (Ruales Guzmán et al., 2019), may be more evenly distributed or substitutable across locations than anticipated. Rural organizations might draw on alternative resources like community networks or resilience to achieve comparable outcomes. Institutional Theory (DiMaggio & Powell, 1983) provides the strongest alignment with the findings. Coercive pressures from government regulations, mimetic processes (imitation of successful models), and normative influences (professional standards) likely drive isomorphism, compelling organizations in both urban and rural Rivers State to adopt similar quality management systems and efficiency practices. This may override location-specific influence. Zimon (2019) linked quality management systems to improved asset management and efficiency regardless of context. The moderate ratings in foundational areas (e.g., hiring, orientation) versus weaker continuous improvement (mentoring, feedback) further suggest that institutional templates are adopted unevenly but similarly across locations.

V. Conclusion

This study concludes that organizational location does not significantly influence quality management practices or operational efficiency among organizations in Rivers State, Nigeria. The results of the mean shows moderate levels, which highlights the for strategies rather than location-centered assumptions in pursuing organizational excellence.

It is recommended that policymakers and organizational leaders should proactively address infrastructure gaps in rural Rivers State, to sustain current gains and prevent future failures. Targeted investments in rural training and technology access are essential. Organizations should strengthen quality management systems by prioritizing continuous improvement practices such as mentoring, regular feedback, and process optimization.

Government and regulatory bodies must intensify capacity-building efforts through training programs, monitoring, and incentives for best practices in both urban and rural settings. This will reinforce institutional isomorphism while adapting to local contexts. Future research should replicate the study using objective performance measures, larger rural samples, longitudinal designs, and comparisons across other Nigerian states to assess generalizability.



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