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TOTAL QUALITY MANAGEMENT PRACTICES AND OPERATIONAL PERFORMANCE OF OIL AND GAS FIRMS IN RIVERS STATE.

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ABSTRACT

This study examines the relationship between Total quality management practices and operational performance of oil and gas firms in Rivers State. The study was operationalized by total quality management practices as the predictor variable with dimensions of customers focus, continuous improvement and process management while the criterion variable operational performance has measures of efficiency, cost minimization, effectiveness. 3 research questions and 3 hypotheses were raised to guide the study. Cross sectional survey design was adopted for this study. The population of this study is twenty (20) listed oil and gas firms as retrieved from National Bureau of Statistics, Federal Republic of Nigeria report (2022).The study adopted the census techniques. Three key managers (production manager, marketing manager and logistics manager) were chosen as respondents from each, of the thirty two firms is the sample. This gave us a total of sixty (60) respondents for the study. Structured questionnaire was adopted for the study. The result of the Cronbach's Alpha reliability test indicates .800 which implies that the items are reliable. The research questions were analysis with the aid of descriptive statistics using mean and standard deviation while hypotheses were tested using Pearson product moment correlation on SPSS. The study revealed that there is a significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state. There is a relationship between continuous improvement and operational performance of oil and gas firms in Rivers state. There is a relationship between process management and operational performance of oil and gas firms in Rivers state. The study concluded that there is a positive relationship between Total Quality Management practices and operational performance of oil and gas firms in Rivers state. The study recommended among others that oil and gas firm should establish a culture of quality throughout the organization focusing on customers need and preferences

INTRODUCTION

Background to the Study

Total Quality Management (TQM) is a management approach that aims to improve the quality of products and services by involving all employees in continuous improvement processes. TQM practices focus on customer satisfaction, continuous improvement, and effective process management. These practices are essential for organizations to achieve high levels of quality and performance. Customer focus is a key aspect of TQM practices as it emphasizes understanding and meeting customer needs and expectations. By focusing on the customer, organizations can identify areas for improvement and develop products and services that align with customer preferences (Adeleye, 2017). Continuous improvement is another fundamental principle of TQM, which involves constantly seeking ways to enhance processes, products, and services. Through continuous improvement efforts, organizations can adapt to changing market conditions and stay ahead of competitors. Process management is also crucial in TQM practices as it involves designing, monitoring, and improving organizational processes to ensure efficiency and effectiveness. By managing processes effectively, organizations can streamline operations, reduce waste, and deliver consistent quality to customers. Overall, Total Quality Management practices such as customer focus, continuous improvement, and process management are essential for organizations looking to achieve excellence in quality and performance (Oakland, 2003).

Operational performance is a critical aspect of organizational management that encompasses efficiency, cost minimization, and effectiveness. It refers to the ability of an organization to utilize its resources effectively in order to achieve its strategic objectives and deliver value to its stakeholders. Operational performance is often measured through key performance indicators (KPIs) such as productivity, quality, lead times, and costs. Efficiency in operational performance relates to how well an organization utilizes its resources to produce goods or services. It involves minimizing waste and maximizing output without compromising quality. Cost minimization focuses on reducing expenses while maintaining or improving the quality of products or services (Oluwatayo, 2018). This includes optimizing processes, negotiating better deals with suppliers, and implementing cost-saving measures. Effectiveness, on the other hand, pertains to the organization's ability to achieve its goals and objectives. It involves delivering products or services that meet customer expectations and contribute to the overall success of the organization. Studying operational performance is crucial for organizations seeking to improve their competitiveness, profitability, and sustainability. By analyzing and enhancing efficiency, cost minimization strategies, and effectiveness, organizations can streamline their operations, increase profitability, and deliver greater value to customers (Okoli, 2019).

Total Quality Management (TQM) is a management approach that focuses on continuous improvement of processes and products/services to enhance customer satisfaction. In the context of oil and gas firms in Rivers state, Nigeria, the study on TQM practices and operational performance aims to investigate how the implementation of TQM principles can lead to improved efficiency, productivity, and overall performance in the oil and gas industry. Rivers state is known for its significant oil and gas reserves, making it a key player in Nigeria's energy sector. However, the industry faces challenges such as fluctuating oil prices, regulatory issues, environmental concerns, and competition from other global players. By adopting TQM practices, oil and gas firms in Rivers state can streamline their operations, reduce waste, enhance employee engagement, and ultimately deliver high-quality products and services to customers (Adebisi, 2020).

Olaleye (2021) the study on TQM practices and operational performance of oil and gas firms in Rivers state may involve examining various aspects such as leadership commitment to quality, employee training and involvement, supplier relationships, process improvement initiatives, customer focus, and performance measurement systems. By analyzing these factors in the specific context of the oil and gas industry in Rivers state, researchers can gain insights into how TQM practices can be effectively implemented to drive operational excellence and sustainable growth. Overall, this research contributes to the body of knowledge on TQM implementation in the oil and gas sector, particularly in a region like Rivers state where the industry plays a crucial role in the economy. By identifying best practices and success factors related to TQM adoption, this study can provide valuable guidance for oil and gas firms seeking to enhance their operational performance and competitive advantage.

Various studies (Oke, et al.,2016). have been carried out on Total Quality Management practices and operational performance in Nigeria, however, it is observed that there are rare literature or scare studies on the study of Total Quality Management practices and operational performance of oil and gas firms in Rivers state, it is in the light of the above that this study is carried out to determine the relationship between Total Quality Management practices and operational performance of oil and gas firms in Rivers state.

Statement of the problem

The study on the operational performance of oil and gas firms in Rivers State may face several challenges that can hinder its effectiveness. Some of the problems affecting this study include: The oil and gas industry is heavily regulated, and changes in regulations can significantly impact the operational performance of firms in Rivers State. Understanding and navigating these regulatory frameworks can be a challenge for researchers studying the sector. The oil and gas

industry is known for its volatility, with fluctuations in oil prices and market demand affecting the performance of firms. Researchers studying operational performance need to account for these external factors that can influence results. The rapid pace of technological advancements in the oil and gas sector can pose a challenge for researchers trying to assess operational performance. Keeping up with new technologies and their impact on firm performance requires continuous monitoring and analysis. Oil and gas operations have significant environmental implications, including pollution, habitat destruction, and climate change. Researchers studying operational performance must consider these environmental factors and their potential effects on firm performance (Adebanjo et al.,2013).

Total Quality Management (TQM) practices can help salvage the situation by providing a systematic approach to improving operational performance in oil and gas firms in Rivers State. TQM focuses on continuous improvement, customer satisfaction, employee involvement, and process efficiency (Adebayo et al., 2018). By implementing TQM principles such as quality control, quality assurance, continuous training, and employee empowerment, oil and gas firms can enhance their operational performance, streamline processes, reduce costs, improve product quality, and ultimately achieve sustainable growth. Overall, addressing the challenges facing the study on operational performance of oil and gas firms in Rivers State through Total Quality Management practices can lead to more robust research outcomes and contribute to enhancing the overall efficiency and effectiveness of the sector.

Conceptual Framework

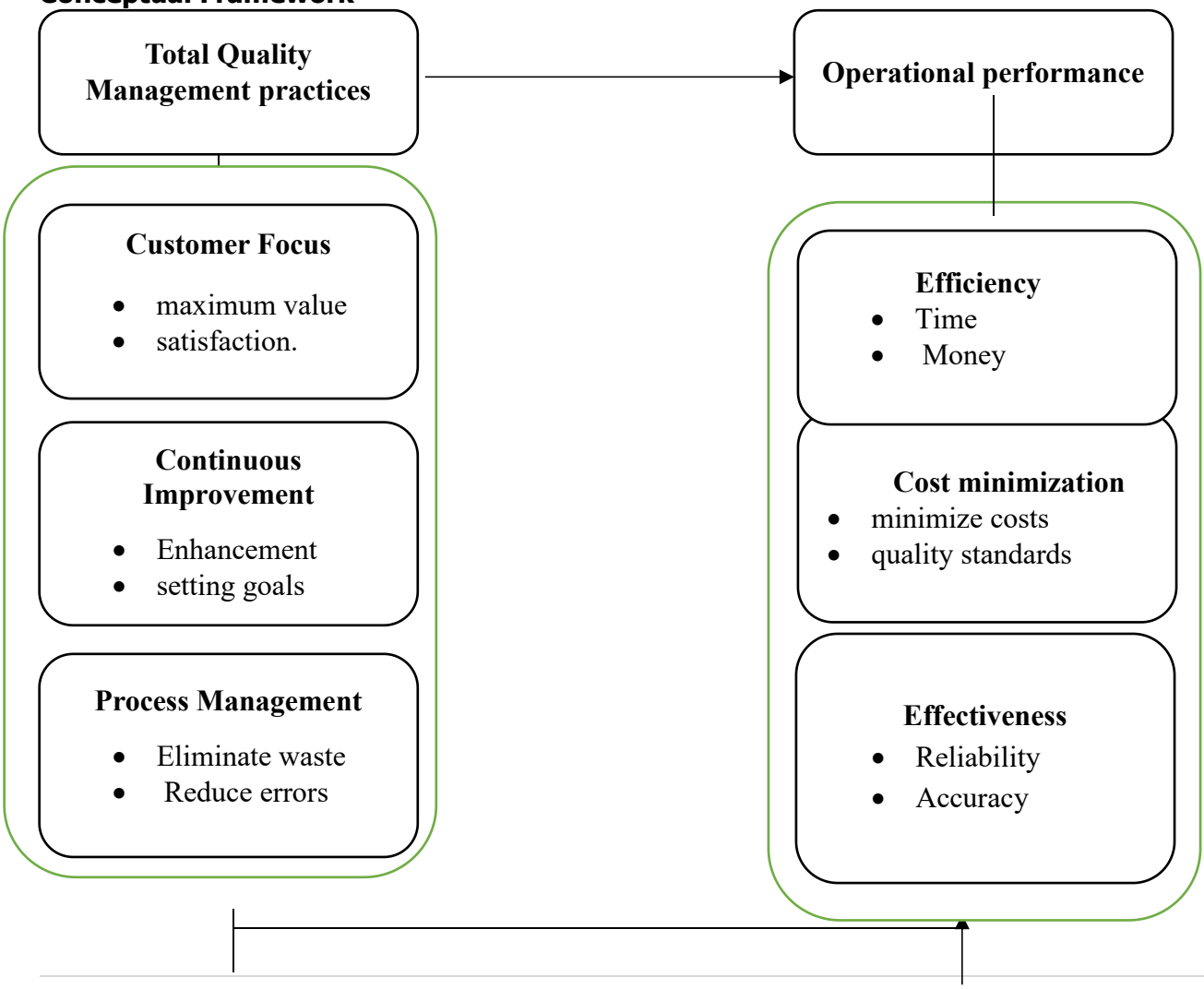


Figure 1: conceptual framework showing Total Quality Management practices and operational performance of oil and gas firms in Rivers state.

Source: Olawale et al., (2015) and Ogunnaike et al., (2017).

Aim & Objectives

This study examines the relationship between Total Quality Management practices and operational performance of oil and gas firms in Rivers state. The specific objectives are to:

1. Determine the relationship between Customer Focus and operational performance of oil and gas firms in Rivers state.
2. Determine the relationship between continuous improvement and operational performance of oil and gas firms in Rivers state.
3. Determine the relationship between process management and operational performance of oil and gas firms in Rivers state.

Research Questions

The following research questions were raised to guide the study.

1. What is the relationship between Customer Focus and operational performance of oil and gas firms in Rivers state?
2. What is the relationship between continuous improvement and operational performance of oil and gas firms in Rivers state?
3. What is the relationship between process management and operational performance of oil and gas firms in Rivers state?

Hypotheses

The following null hypotheses were formulated and will be tested at a significant level of 0.05.

Ho_1: There is no significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state.

Ho_2: There is no relationship between continuous improvement and operational performance of oil and gas firms in Rivers state.

Ho_3: There is no relationship between process management and operational performance of oil and gas firms in Rivers state.

Significance of the study

Total Quality Management (TQM) practices play a crucial role in enhancing the operational performance of organizations, including oil and gas firms. In the context of Rivers state, where the oil and gas industry is a significant contributor to the economy, studying the relationship between TQM practices and operational performance is of great significance. By examining how TQM principles are implemented and their impact on operational efficiency, this study can provide valuable insights for oil and gas firms in Rivers state to improve their processes, increase productivity, reduce costs, and enhance overall performance.

The significance of this study lies in its potential to contribute to the body of knowledge on TQM practices in the specific context of oil and gas firms operating in Rivers state. By identifying best practices and areas for improvement, this research can help these firms optimize their operations and remain competitive in the industry. Additionally, the findings of this study can also benefit policymakers, regulatory bodies, academics, researchers, and consultants working in the field of quality management by offering practical recommendations based on empirical evidence.

Conceptual Clarification

Total quality management practice

Total Quality Management (TQM) is a management approach that aims to improve the quality of products and services through continuous improvement processes. TQM involves all members of an organization in a systematic approach to enhance customer satisfaction by meeting or exceeding their expectations. The concept of TQM originated in the 1950s and gained popularity in the 1980s and 1990s, particularly in manufacturing industries. However, its principles have since been applied across various sectors, including healthcare, education, and service industries. One of the key principles of TQM is customer focus. Organizations practicing TQM prioritize understanding and meeting customer needs and expectations. This involves gathering feedback from customers, analyzing data to identify areas for improvement, and implementing changes to enhance customer satisfaction. Another important aspect of TQM is continuous improvement. Organizations that adopt TQM strive to continually improve their processes, products, and services through ongoing evaluation and refinement (Ogunnaike et al.,2017).

TQM also emphasizes the importance of employee involvement and empowerment. Employees are encouraged to contribute ideas for improvement, participate in decision-making processes, and take ownership of their work. This fosters a culture of collaboration, innovation, and accountability within the organization. Additionally, TQM promotes a systematic approach to problem-solving by using tools such as root cause analysis, process mapping, and statistical process control (Oyewobi, et al.,2019).
Adeleye, et al., (2017) Effective leadership is crucial for the successful implementation of TQM. Leaders play a key role in setting a clear vision for quality improvement, establishing goals and objectives, allocating resources effectively, and providing support and guidance to employees. Communication is also essential in TQM practices to ensure that all stakeholders are informed about quality initiatives, progress towards goals, and areas for improvement. Overall, Total Quality Management is a holistic approach to quality improvement that requires commitment from all levels of an organization. By focusing on customer needs, continuous improvement, employee involvement, effective leadership, and communication, organizations can achieve higher levels of quality performance and competitive advantage in today's dynamic business environment.

Dimensions of Total quality management practice

Customer focus

Customer focus is a crucial dimension of Total Quality Management (TQM) practices in Nigeria, as it emphasizes the importance of meeting and exceeding customer expectations to ensure long-term success and sustainability for organizations. In the context of TQM, customer focus involves understanding customer needs and preferences, delivering high-quality products and services that meet those needs, and continuously seeking feedback to improve processes and enhance customer satisfaction. In Nigeria, where competition in various industries is increasing rapidly, organizations are recognizing the significance of placing customers at the center of their operations to gain a competitive edge. By adopting a customer-focused approach within their TQM framework, Nigerian companies can build strong relationships with their customers, increase loyalty, and drive business growth (Oakland, 2003).

One key aspect of customer focus in TQM practices in Nigeria is the implementation of effective communication channels to gather customer feedback and insights. This feedback can be used to identify areas for improvement, address issues promptly, and innovate products or services based on customer preferences. By actively listening to customers and incorporating their feedback into decision-making processes, Nigerian organizations can enhance their overall quality management practices and stay ahead in the market. Moreover, fostering a culture of customer orientation among employees is essential for successful TQM implementation in Nigeria. Organizations need to train their staff to prioritize customer needs, deliver exceptional service, and proactively seek

ways to add value for customers. By empowering employees to take ownership of customer satisfaction goals, Nigerian companies can create a customer-centric work environment that drives continuous improvement and innovation. In conclusion, customer focus plays a vital role in shaping Total Quality Management practices in Nigeria by emphasizing the importance of understanding and meeting customer expectations. By integrating customer-centric strategies into their TQM framework, Nigerian organizations can enhance competitiveness, build brand loyalty, and achieve sustainable growth in today's dynamic business landscape (Olawale & Garwe, 2010).

Continuous improvement

Continuous improvement is a crucial dimension of Total Quality Management (TQM) practices in Nigeria. TQM is a management approach that aims to enhance the quality of products and services through continuous improvement processes. Continuous improvement involves constantly seeking ways to improve processes, products, and services within an organization. In the context of Nigeria, where businesses face various challenges such as infrastructure deficits, regulatory issues, and market competition, implementing continuous improvement practices becomes essential for organizations to remain competitive and meet customer expectations (Ezejiofor et al.,2020).

In Nigeria, the concept of continuous improvement within TQM practices is gaining traction as organizations strive to enhance their operational efficiency and effectiveness. By focusing on continuous improvement, Nigerian companies can identify areas for enhancement, streamline processes, reduce waste, and ultimately deliver better products and services to their customers. This approach not only helps organizations meet quality standards but also fosters a culture of innovation and excellence within the workforce. One key aspect of continuous improvement in TQM practices in Nigeria is the involvement of employees at all levels of the organization. Engaging employees in identifying opportunities for improvement, implementing changes, and monitoring outcomes can lead to sustainable improvements in quality and performance. Additionally, fostering a culture that values learning from mistakes and encourages experimentation can drive innovation and creativity within Nigerian organizations (Ajayi et al.,2018).

Okoli, (2019) furthermore, continuous improvement in TQM practices in Nigeria requires a systematic approach that includes setting clear objectives, measuring performance against established benchmarks, analyzing data to identify trends and areas for improvement, implementing changes based on findings, and monitoring results to ensure sustained progress. By following this structured process, Nigerian companies can effectively embed continuous improvement principles into their organizational culture and drive ongoing success. In conclusion, continuous improvement is a vital component of Total Quality Management practices in Nigeria. By embracing a culture of continuous learning, innovation, and excellence, Nigerian organizations can enhance their competitiveness, meet customer expectations, and achieve sustainable growth in today's dynamic business environment.

Process Management

Process management is a critical dimension of Total Quality Management (TQM) practices in Nigeria. TQM is a management approach that aims to enhance the quality of products and services through continuous improvement processes. Process management within the context of TQM involves the systematic identification, analysis, and optimization of organizational processes to ensure efficiency, effectiveness, and customer satisfaction. In Nigeria, where businesses face increasing competition both locally and globally, implementing TQM practices, including process management, has become essential for organizations seeking to remain competitive and meet customer expectations. By focusing on process management as part of their TQM strategy, Nigerian companies can streamline operations, reduce waste, improve product quality, and ultimately enhance customer satisfaction (Adebisi,2020).

Effective process management in the Nigerian context requires a commitment from top management to drive organizational change and foster a culture of continuous improvement. It involves defining key processes, establishing performance metrics, monitoring process performance, identifying areas for improvement, implementing changes, and evaluating the impact of those changes on overall quality. Furthermore, process management in TQM practices in Nigeria also emphasizes the importance of employee involvement and empowerment. Engaging employees in process improvement initiatives not only leads to better outcomes but also fosters a sense of ownership and accountability among staff members. Overall, integrating process management into Total Quality Management practices in Nigeria can help organizations achieve operational excellence, increase customer loyalty, and drive sustainable growth in an increasingly competitive business environment (Olaleye, 2021).

Operational performance

Stevenson, (2018) is of the view that Operational performance refers to the efficiency and effectiveness of an organization's core business activities in achieving its strategic objectives. It encompasses various aspects such as productivity, quality, cost control, delivery speed, flexibility, and innovation. Improving operational performance is crucial for organizations to remain competitive in today's dynamic business environment. One key aspect of operational performance is productivity, which measures the efficiency of converting inputs into outputs. Organizations strive to increase productivity by optimizing processes, utilizing resources effectively, and eliminating waste. Quality is another critical factor that directly impacts customer satisfaction and loyalty. Organizations must maintain high-quality standards to meet customer expectations and build a strong reputation in the market. Cost control is essential for ensuring profitability and sustainability. By managing costs efficiently, organizations can improve their financial performance and allocate resources strategically. Delivery speed refers to the time it takes to deliver products or services to customers. In today's fast-paced world, organizations need to streamline their operations to meet customer demands promptly (Heizer 2017).

Flexibility is another important aspect of operational performance, allowing organizations to adapt quickly to changes in the market or internal environment. Flexible operations enable companies to seize opportunities and mitigate risks effectively. Lastly, innovation plays a vital role in enhancing operational performance by driving continuous improvement and fostering creativity within the organization. Overall, operational performance is a multifaceted concept that requires a holistic approach towards optimizing processes, enhancing quality, controlling costs, improving delivery speed, fostering flexibility, and promoting innovation. By focusing on these key areas, organizations can achieve sustainable growth and competitive advantage in the long run (Chase 2019).

Measures of operational performance

Efficiency

Efficiency is a crucial measure of operational performance that reflects the ability of an organization to utilize its resources effectively in achieving its goals. It is a key indicator of how well an organization is utilizing its inputs to produce outputs, and it plays a significant role in determining the overall success and competitiveness of a business. Efficiency can be measured in various ways depending on the industry and context, but common metrics include labor productivity, capital utilization, energy efficiency, and process optimization. One of the primary reasons why efficiency is important for operational performance is that it directly impacts the cost structure of an organization. By improving efficiency, businesses can reduce waste, lower production costs, and increase profitability. Efficient operations also lead to higher productivity

levels, improved quality of products or services, faster delivery times, and better customer satisfaction. In addition, efficient organizations are better equipped to adapt to changes in the market environment and stay competitive in the long run(Mahadevan 2015).
Efficiency as a measure of operational performance is closely related to concepts such as lean management, Six Sigma, total quality management (TQM), and continuous improvement. These methodologies focus on eliminating waste, streamlining processes, reducing defects, and enhancing overall efficiency within an organization. By implementing these principles effectively, businesses can achieve higher levels of operational excellence and sustainable growth. In conclusion, efficiency is a critical measure of operational performance that directly impacts the success and competitiveness of organizations. By focusing on improving efficiency through effective resource utilization, process optimization, and continuous improvement initiatives, businesses can enhance their productivity levels, reduce costs, improve quality standards, and ultimately achieve long-term success in today's dynamic business environment(Chase 2019).

Cost minimization

Cost minimization is a crucial measure of operational performance for businesses and organizations. It involves the process of reducing expenses and optimizing resources to achieve maximum efficiency in operations. By minimizing costs, companies can improve their profitability, competitiveness, and overall financial health. Cost minimization strategies are essential for achieving sustainable growth and success in today's highly competitive business environment. One key aspect of cost minimization is identifying and eliminating unnecessary expenses. This can involve streamlining processes, reducing waste, negotiating better deals with suppliers, and implementing cost-effective technologies. By analyzing cost structures and identifying areas where savings can be made, organizations can significantly reduce their operating expenses without compromising the quality of their products or services (Mahadevan 2015).
Chase (2019) another important aspect of cost minimization is optimizing resource utilization. This involves ensuring that resources such as labor, materials, equipment, and facilities are used efficiently to minimize waste and maximize productivity. By improving resource allocation and scheduling, organizations can reduce idle time, improve throughput, and lower production costs. Furthermore, cost minimization also involves managing overhead costs effectively. Overhead costs include expenses such as rent, utilities, insurance, and administrative salaries that are not directly tied to production but are necessary for running the business. By controlling overhead costs through measures such as outsourcing non-core activities, implementing energy-saving initiatives, or consolidating office space, organizations can free up resources to invest in core business activities. Overall, cost minimization plays a critical role in enhancing operational performance by enabling organizations to operate more efficiently, competitively, and profitably. By continuously seeking ways to reduce costs while maintaining quality standards and customer satisfaction levels, businesses can achieve sustainable growth and long-term success in today's dynamic marketplace(Heizer, 2017).

Effectiveness

Effectiveness is a crucial measure of operational performance in organizations. It refers to the extent to which an organization achieves its goals and objectives efficiently. Assessing effectiveness involves evaluating how well an organization utilizes its resources to produce desired outcomes. Effective operational performance ensures that an organization is meeting customer expectations, maximizing productivity, and achieving strategic objectives. One key aspect of measuring effectiveness in operational performance is through the use of key performance indicators (KPIs). KPIs are quantifiable metrics that reflect the success of an organization in achieving its operational goals. By tracking KPIs such as cost efficiency, quality, productivity,

customer satisfaction, and employee performance, organizations can assess their effectiveness in delivering products or services(Mahadevan, 2015).

Chase (2019) another important factor in measuring operational performance effectiveness is benchmarking. Benchmarking involves comparing an organization's processes and performance metrics against industry best practices or competitors. By benchmarking against top performers in the industry, organizations can identify areas for improvement and set targets for enhancing their operational effectiveness. Continuous improvement is also essential for enhancing operational performance effectiveness. Organizations that prioritize continuous improvement initiatives such as Lean Six Sigma or Total Quality Management can streamline processes, reduce waste, and enhance overall efficiency. By fostering a culture of continuous improvement, organizations can adapt to changing market conditions and improve their operational effectiveness over time.

Furthermore, effective communication and collaboration among employees are critical for ensuring operational performance effectiveness. Clear communication channels, teamwork, and knowledge sharing contribute to streamlining processes, resolving issues promptly, and driving organizational success. In conclusion, measuring effectiveness as a measure of operational performance is essential for organizations to evaluate their success in achieving strategic objectives and delivering value to customers. By utilizing KPIs, benchmarking practices, continuous improvement initiatives, and fostering a culture of collaboration, organizations can enhance their operational effectiveness and drive sustainable growth (Stevenson, 2018).

Theoretical foundation

Resource-Based View (RBV) theory

Resource-Based View (RBV) Theory is a management theory that focuses on the internal resources of a firm as sources of sustainable competitive advantage. The theory suggests that a firm's unique resources and capabilities are key drivers of its performance and success in the market. RBV posits that firms should identify, develop, and leverage their valuable, rare, inimitable, and non-substitutable resources to achieve a competitive advantage over their rivals. The RBV theory was first proposed by Jay Barney in 1991. Barney argued that for a firm to achieve sustained competitive advantage, it must possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). These resources can include physical assets, human capital, organizational capabilities, knowledge assets, and brand reputation.

Assumptions of the Resource-Based View Theory include Resources are heterogeneously distributed among firms. Firms are rational actors seeking to maximize their performance. Resources must be valuable, rare, inimitable, and non-substitutable to provide a sustainable competitive advantage. Resources can be both tangible (e.g., physical assets) and intangible (e.g., knowledge assets). Critiques of the Resource-Based View Theory include Lack of clear guidelines on how to identify and develop key resources. Difficulty in determining the exact contribution of specific resources to competitive advantage. Overemphasis on internal factors may lead to neglect of external environmental factors. Limited focus on dynamic capabilities and adaptation to changing market conditions.

Relevance of the theory

Relevance of RBV Theory to Total Quality Management Practices and Operational Performance of Oil and Gas Firms in Rivers State: RBV theory can be highly relevant to the study of Total Quality Management (TQM) practices and operational performance in oil and gas firms in Rivers State. By applying RBV principles, these firms can identify their unique resources that contribute to quality management practices and operational efficiency. For example, human capital with specialized skills in safety protocols or technological capabilities for efficient extraction processes could be key resources for achieving operational excellence. One prominent theory is the Resource-Based View (RBV), which suggests that a firm's resources and capabilities, including TQM practices, can lead

to sustainable competitive advantage and improved operational performance. According to this theory, firms that effectively implement TQM practices can develop unique capabilities that are valuable, rare, inimitable, and non-substitutable, leading to superior performance.

Contingency Theory

Contingency Theory is a behavioral theory that suggests there is no one best way to organize a corporation, lead a company, or make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external factors influencing the situation. Contingency Theory posits that different situations require different management approaches for effectiveness. This theory emphasizes the importance of adapting management practices to fit the unique circumstances of each situation. The theory was first proposed by Fred Fiedler in 1964. Fiedler's Contingency Theory of leadership suggests that effective leadership depends on matching a leader's style with the right situation. The theory assumes that there is no universal or one-size-fits-all approach to leadership and management. Instead, it argues that the success of a leader depends on various situational factors such as the leader's style, the characteristics of followers, and the nature of tasks.

Critiques of Contingency Theory include: Lack of Predictive Power: Some critics argue that Contingency Theory lacks predictive power because it does not provide clear guidelines on how to match leadership styles with specific situations. Overemphasis on Situational Factors: Critics suggest that Contingency Theory may overemphasize situational factors at the expense of other important aspects of leadership and management. Complexity: Some critics find Contingency Theory overly complex and difficult to apply in practice due to its focus on multiple variables and interactions. Limited Generalizability: Critics argue that Contingency Theory may have limited generalizability across different industries or organizational contexts. Lack of Empirical Support: Some critics question the empirical support for Contingency Theory, suggesting that more research is needed to validate its claims.

Relevance of the theory

In relation to Total Quality Management (TQM) practices and operational performance in oil and gas firms in Rivers State, Contingency Theory can be relevant in understanding how different management approaches may be more effective in specific situations within these organizations. By considering the unique circumstances faced by oil and gas firms in Rivers State, managers can tailor their TQM practices to better suit their operational needs and improve overall performance. Another relevant theory is the Contingency Theory, which posits that the effectiveness of TQM practices in improving operational performance depends on various contingencies such as organizational culture, leadership style, and external environment. This theory emphasizes the importance of aligning TQM practices with the specific context of oil and gas firms in Rivers state to achieve optimal results.

Stakeholder Theory

Stakeholder Theory is a management theory that suggests that a firm should consider the interests of all its stakeholders, including customers, employees, suppliers, shareholders, and the community, rather than just focusing on maximizing profits for shareholders. The theory posits that by taking into account the needs and concerns of all stakeholders, a company can achieve long-term success and sustainability. The concept of Stakeholder Theory was first proposed by R. Edward Freeman in his book "Strategic Management: A Stakeholder Approach" in 1984. Freeman argued that businesses should not only prioritize the interests of shareholders but also consider the impact of their decisions on all stakeholders involved in or affected by the business.

Assumptions of Stakeholder Theory include: Stakeholders have legitimate interests in the activities and decisions of a company. Companies should strive to create value for all stakeholders, not just

shareholders. Managing relationships with stakeholders is essential for long-term success and sustainability. Stakeholders can influence or be influenced by the actions of a company. Critiques of Stakeholder Theory include: Difficulty in prioritizing conflicting stakeholder interests. Lack of clear guidelines on how to balance stakeholder interests. Potential for stakeholder manipulation or exploitation. Challenges in measuring and quantifying stakeholder value.

Relevance of the theory

Stakeholder Theory is relevant to the study of Total Quality Management (TQM) practices and operational performance in oil and gas firms in Rivers State because it emphasizes the importance of considering the needs and expectations of various stakeholders in decision-making processes. In the context of oil and gas firms, which operate in complex environments with multiple stakeholders such as government agencies, local communities, environmental groups, and investors, applying Stakeholder Theory can help companies improve their relationships with these groups and enhance overall operational performance. Furthermore, the Stakeholder Theory suggests that TQM practices should not only focus on meeting customer requirements but also consider the interests of other stakeholders such as employees, suppliers, regulators, and local communities. By engaging with all relevant stakeholders and incorporating their feedback into TQM initiatives, oil and gas firms can enhance their operational performance while maintaining positive relationships with key stakeholders.

Empirical Review

Customer Focus and operational performance

One such study was conducted by Adeleye et al. (2017) titled "Customer Focus and Operational Performance of Deposit Money Banks in Nigeria." The study focused on the population of deposit money banks in Nigeria, with a sample size of 300 respondents. The researchers used a quantitative research method to analyze the data collected through structured questionnaires. The findings revealed a significant positive relationship between customer focus and operational performance in Nigerian deposit money banks. The study concluded that enhancing customer focus can lead to improved operational performance in the banking sector and recommended that organizations prioritize customer-centric strategies to achieve better business outcomes.

Another relevant study was carried out by Oluwatayo et al. (2018) in their paper "Customer Focus and Operational Performance: A Study of Selected Manufacturing Firms in Nigeria." The study targeted manufacturing firms in Nigeria as the population, with a sample size of 200 respondents. The researchers employed a mixed-method approach combining both quantitative and qualitative data analysis techniques. The results indicated a strong correlation between customer focus initiatives and operational performance improvement in Nigerian manufacturing firms. The study concluded that fostering a customer-centric culture is essential for enhancing operational efficiency and recommended that organizations invest in customer-focused strategies to drive sustainable growth.

Furthermore, Okoli et al. (2019) conducted a study titled "Impact of Customer Focus on Operational Performance: Evidence from Service Sector Firms in Nigeria." This research focused on service sector firms in Nigeria, with a sample size of 250 participants. The researchers utilized statistical analysis methods to examine the relationship between customer focus practices and operational performance outcomes. The findings demonstrated a significant positive impact of customer focus on enhancing operational performance metrics within Nigerian service sector organizations. The study concluded that prioritizing customer-centric approaches can lead to competitive advantages and recommended that firms integrate customer-focused strategies into their operations for long-term success.

In addition, Adebisi et al. (2020) explored the topic in their paper "Customer Orientation and Operational Performance: A Study of Small and Medium Enterprises in Nigeria." This study

targeted small and medium enterprises (SMEs) in Nigeria, with a sample size of 150 SME owners/managers. The researchers employed regression analysis to analyze the survey data collected from the participants. The results indicated a positive association between customer orientation practices and operational performance outcomes among Nigerian SMEs. The study concluded that cultivating a customer-centric mindset is crucial for SMEs to achieve sustainable growth and recommended that SME owners prioritize customer satisfaction initiatives to drive business success.

Lastly, Olaleye et al. (2021) conducted research titled "The Influence of Customer Focus on Operational Performance: Empirical Evidence from Retail Businesses in Nigeria." This study focused on retail businesses operating in Nigeria, with a sample size of 180 respondents comprising retail managers and employees. The researchers utilized structural equation modeling (SEM) to analyze the survey data collected from the participants. The findings revealed a significant positive relationship between customer focus strategies and operational performance indicators within Nigerian retail enterprises. The study concluded that adopting customer-centric practices can lead to enhanced operational efficiency and profitability for retail businesses in Nigeria.

Continuous improvement and operational performance

Continuous improvement and operational performance are crucial aspects of organizational success in various industries, including Nigeria. Several empirical studies have been conducted to explore the relationship between continuous improvement practices and operational performance in Nigerian organizations. One such study is by Oke et al. (2016), who investigated the impact of continuous improvement practices on operational performance in Nigerian manufacturing firms. The study's population consisted of manufacturing firms in Nigeria, with a sample size of 150 firms. The authors used a quantitative research approach and employed statistical analysis methods to analyze the data collected. The findings revealed a significant positive relationship between continuous improvement practices and operational performance in Nigerian manufacturing firms.

Another relevant study is by Adebanjo et al. (2013), which examined the influence of continuous improvement initiatives on operational performance in Nigerian manufacturing organizations. The population for this study comprised manufacturing organizations in Nigeria, with a sample size of 200 firms. The researchers utilized a mixed-methods approach, combining both quantitative and qualitative data analysis techniques. The results indicated that effective implementation of continuous improvement initiatives positively impacted operational performance in Nigerian manufacturing organizations.

Furthermore, Adebayo et al. (2018) conducted a study on the relationship between total quality management practices, continuous improvement, and operational performance in Nigerian service organizations. The study focused on service organizations in Nigeria, with a sample size of 100 firms. The authors employed regression analysis to examine the relationships between the variables under investigation. The findings demonstrated that total quality management practices and continuous improvement significantly influenced operational performance in Nigerian service organizations.

In another study by Olawale et al. (2015), the researchers explored the effects of lean manufacturing practices on operational performance in Nigerian small and medium enterprises (SMEs). The population for this study comprised SMEs in Nigeria, with a sample size of 80 companies. The authors utilized case study methodology and qualitative data analysis techniques to investigate the impact of lean manufacturing practices on operational performance. The results indicated that the adoption of lean principles positively affected operational performance outcomes in Nigerian SMEs.

Lastly, Ogunnaike et al. (2017) conducted a study on the implementation of Six Sigma practices and their impact on operational performance in Nigerian banking institutions. The population for

this study included banking institutions in Nigeria, with a sample size of 15 banks. The researchers employed a case study approach and qualitative data analysis methods to assess the effects of Six Sigma implementation on operational performance indicators within the banking sector. The findings revealed that Six Sigma practices contributed to improved operational efficiency and customer satisfaction levels in Nigerian banking institutions.

Process management and operational performance

Empirical studies on process management and operational performance in Nigeria have been conducted to understand the relationship between these two factors. One such study was conducted by Oyewobi et al. (2019) titled "Process Management and Operational Performance in Nigerian Manufacturing Firms: The Moderating Role of Information Technology." The population of this study consisted of manufacturing firms in Nigeria, with a sample size of 200 firms. The authors used a quantitative research method to analyze the data collected through structured questionnaires. The findings revealed that process management has a significant positive impact on operational performance, and information technology moderates this relationship. The study concluded that effective process management practices can enhance operational performance in Nigerian manufacturing firms, especially when supported by information technology.

Another empirical study on this topic was conducted by Adeleye (2017) in their paper titled "Impact of Process Management on Organizational Performance: A Study of Selected Manufacturing Firms in Lagos State, Nigeria." The population for this study included selected manufacturing firms in Lagos State, Nigeria, with a sample size of 150 firms. The authors employed a mixed-method approach for data analysis, combining both qualitative and quantitative methods. The findings indicated a positive relationship between process management and organizational performance in the context of Nigerian manufacturing firms. The study recommended that organizations should focus on improving their process management practices to enhance overall performance.

Gap in Literature

From various extant empirical review (e.g Adeleye, 2017, Oyewobi et al. 2019), it is observed that there are few studies centered on Total Quality Management practices and operational performance , it is in this regards that this study seek to fill this lacuna by providing empirical evidence on the relationship between Total Quality Management practices and operational performance of oil and gas firms in Rivers state.

METHODOLOGY

Cross sectional survey design was adopted for this study. . The population of this study is twenty (20) listed oil and gas firms as retrieved from National Bureau of Statistics, Federal Republic of Nigeria report (2022).

Table 1: population of the study

s/n	Firms
1	Shell Petroleum Development Company of Nigeria Limited (SPDC)
2	Total E&P Nigeria Limited
3	Nigerian Agip Oil Company Limited (NAOC)
4	Chevron Nigeria Limited
5	ExxonMobil Nigeria
6	Seplat Petroleum Development Company Plc
7	Sahara Energy Group
8	First Exploration & Petroleum Development Company Limited (First E&P)
9	Oando Energy Resources

10	Conoil Producing Limited
11	Belemaoil Producing Limited
12	Aiteo Eastern Exploration and Production Company
13	Neconde Energy Limited
14	ND Western Limited
15	Shoreline Natural Resources Limited
16	Waltersmith Petroman Oil Limited
17	Niger Delta Exploration & Production Plc (NDEP)
18	Platform Petroleum Limited
19	Midwestern Oil & Gas Company Limited
20	Dubri Oil Company

Source: National Bureau of Statistics, Federal Republic of Nigeria report (2022).

The study adopted the census techniques. Three key managers (production manager, marketing manager and logistics manager) were chosen as respondents from each, of the thirty two firms is the sample. This gave us a total of sixty (60) respondents for the study. Primary data were collected expressly for a specific purpose by the investigator himself. This data gives the exact information wanted. Primary data mainly come from direct observation of events, manipulation of variables, performance of experiments and responses to questionnaire. The primary data for this study were generated through questionnaire.

Total Quality Management practices and operational performance questionnaire was independently subjected to content and construct validity by three Lecturers in the Department of Management, Faculty of Management Sciences, Ignatius Ajuru University of Education, Port Harcourt. The corrections and suggestions of the validators were affected on the finale copy of the instrument. The reliability of empirical measurement is indicated by the internal consistency, Questionnaire item statements with Cronbach's alpha reliability coefficient below the 0.70 threshold were eliminated. the test-re-test method was used. 20 copies of the questionnaire instrument were issue and some days later same copies were issue through electronic media. the results were used in computation using Cronbach's alpha test of reliability.

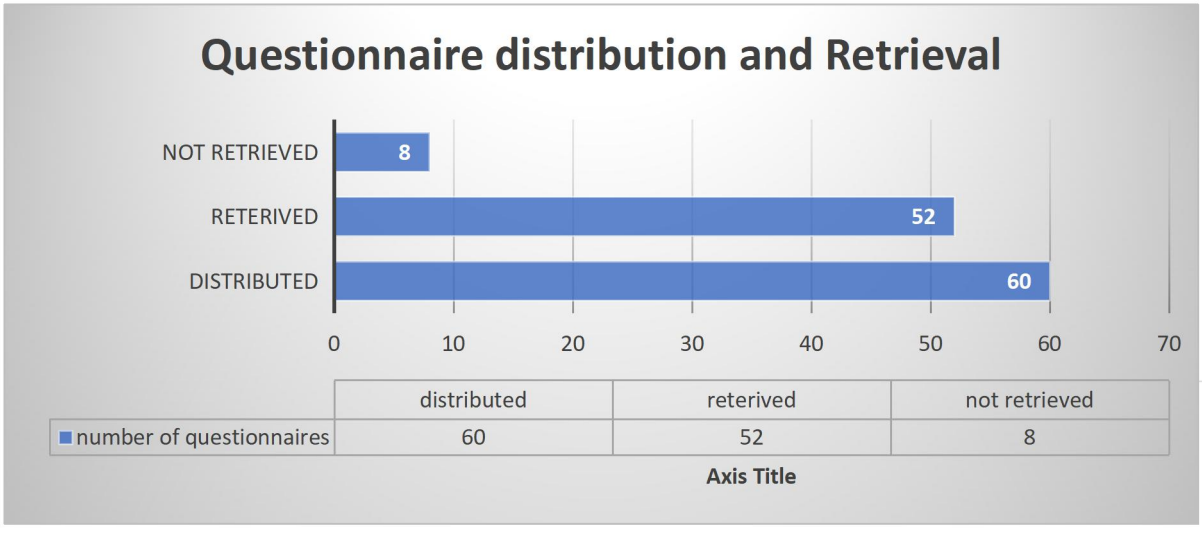
Reliability Statistics

Cronbach's Alpha	N of Items
.800	6

Source: Researcher computation via SPSS version 25

The result of the Cronbach's Alpha reliability test indicates .800 which is above .70 which implies that the items are reliable. The research questions were analysis with the aid of descriptive statistics using mean and standard deviation while hypotheses were tested using Pearson product moment correlation on SPSS.

Data Presentation



Data analysis

Table 2: Descriptive Statistics on total quality management practice

	N	Min	Max	Sum	Mean	Std. Dev
How satisfied are you with the level of customer focus in our organization	52	1	5	178	3.42	1.500
Do you believe that continuous improvement is actively encouraged and implemented in our organization	52	1	5	161	3.10	1.575
To what extent do you feel that process management is effectively carried out in our organization	52	1	5	168	3.23	1.722
How well do you think our organization manages its internal processes to deliver quality products/services	52	1	5	162	3.12	1.629
Do you believe that our organization actively seeks ways to improve its products/services?	52	1	5	156	3.00	1.534
The level of Total Quality Management practices in our firm is on the increasing side.	52	1	5	166	3.19	1.657
Valid N (listwise)	52					

Source: Researcher survey data (2024) via SPSS v. 22

Table 2 revealed descriptive statistics on total quality management practice. Based on our criterion mean of 3.0 and since all our respective mean score is above 3, this implies that respondents agreed on the manifestation of total quality management practice in oil and gas firms in Rivers state.

Table 3: Descriptive Statistics on operational performance

	N	Min	Max	Sum	Mean	Std. Dev
how would you rate the efficiency of the current operational processes in your organization?	52	1	5	178	3.42	1.500
How satisfied are you with the cost minimization strategies implemented in your department?	52	1	5	160	3.08	1.595

To what extent do you agree that the operational activities in your organization effectively meet the set goals and objectives?	52	1	5	167	3.21	1.741
How often do you encounter bottlenecks or delays in the operational processes?	52	1	5	161	3.10	1.648
Do you believe that there is room for improvement in terms of operational performance within your organization?	52	1	5	154	2.96	1.559
Generally, our operational performance is on the increasing side	52	1	5	163	3.13	1.681
Valid N (listwise)	52					

Source: Researcher survey data (2024) via SPSS v. 22

Table 3 revealed descriptive statistics on operational performance. Based on our criterion mean of 3.0 and since all our respective mean score is above 3, this implies that respondents agreed on the manifestation of total operational performance in oil and gas firms in Rivers state.

Hypotheses

Ho_1: There is no significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state.

Correlations

		Customer Focus	operational performance
Customer Focus	Pearson Correlation	1	.954**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.954**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

Ho_1: There is no significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state (correlation 1) reveals there is a significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state (where rho = .954 and p =0.000) and based on the decision rule of $p < 0.05$ for null rejection; we reject the null hypothesis and restate *that there is a significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state.*

Ho_2: There is no relationship between continuous improvement and operational performance of oil and gas firms in Rivers state.

Correlations

		continuous improvement	operational performance
continuous improvement	Pearson Correlation	1	.568**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.568**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

$Ho_{2:}$: There is no significant relationship between continuous improvement and operational performance of oil and gas firms in Rivers state (correlation 2) reveals there is a significant relationship between continuous improvement and operational performance of oil and gas firms in Rivers state (where rho = .568 and p =0.000) and based on the decision rule of $p < 0.05$ for null rejection; we reject the null hypothesis and restate *that there is a significant relationship between continuous improvement and operational performance of oil and gas firms in Rivers state.*

Ho_3: There is no relationship between process management and operational performance of oil and gas firms in Rivers state.

Correlations

		process management	operational performance
process management	Pearson Correlation	1	.748**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.748**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

$Ho_{3:}$: There is no significant relationship between process management and operational performance of oil and gas firms in Rivers state (correlation 3) reveals there is a significant relationship between process management and operational performance of oil and gas firms in Rivers state (where rho = .748 and p =0.000) and based on the decision rule of $p < 0.05$ for null rejection; we reject the null hypothesis and restate *that there is a significant relationship between process management and operational performance of oil and gas firms in Rivers state.*

Summary of findings

- **i.** There is a significant relationship between Customer Focus and operational performance of oil and gas firms in Rivers state.
- **ii.** There is a relationship between continuous improvement and operational performance of oil and gas firms in Rivers state.

iii. There is a relationship between process management and operational performance of oil and gas firms in Rivers state.

CONCLUSION

The study concluded that there is a positive relationship between Total Quality Management practices and operational performance of oil and gas firms in Rivers state as such Total Quality Management practices focusing on customer satisfaction, continuous improvement, and process management can significantly impact the operational performance of oil and gas firms in Rivers State. By prioritizing customer needs, striving for continuous enhancement, and effectively managing processes, these organizations can achieve sustainable growth and success in a competitive industry.

RECOMMENDATIONS

Recommendations for oil and gas firms in Rivers State looking to implement TQM practices include:

1. Establishing a culture of quality throughout the organization focusing on customers need and preferences
2. Providing adequate training for employees on TQM principles in order to enhance continuous improvement
3. Ensure that the service / product processes is adequately managed in order to enhance Total quality management practices within the organization.
4. Conducting regular operational performance evaluations to monitor progress.
5. Seeking feedback from customers to identify areas for improvement.

REFERENCES

Adebanjo D., Kehoe D., & Abdullah M., (2013). The Impact of Continuous Improvement Initiatives On Operational Performance: Evidence From Nigerian Manufacturing Organizations. *International Journal of Production Economics, 7*(3), 13-39.

Adebayo S.O., Abiodun A.J., & Adeniji A.A., (2018). Total Quality Management Practices and Operational Performance in Service Organizations In Nigeria. *International Journal Of Quality & Reliability Management, 7*(3), 17-39.

Adebisi, K.(2020). Customer Orientation and Operational Performance: A Study of Small and Medium Enterprises in Nigeria. *International Journal of Quality & Reliability Management, 1*(3), 142-163.

Adeleye, I.O., Adebisi, J.F., & Adeniji, A.A. (2017). Impact of Process Management on Organizational Performance: A Study of Selected Manufacturing Firms in Lagos State, Nigeria. *Journal of Business Administration and Education,6*(9), 12-37.

Adeleye, T. (2017). Customer Focus and Operational Performance of Deposit Money Banks in Nigeria. *International Journal of Quality & Reliability Management, 1*(3), 12-33.

Ajayi S.O., Oladipo S.E., & Alabi T.B.(2018). Effect of Strategic Planning on Organizational Performance Of Selected Food and Beverage Companies In Lagos State. *Journal of Business Administration and Education,6*(9), 148--167.

Chase R. B(2019). *Operations Management for Competitive Advantage*. McGraw-Hill Education.

Ezejiofor R.A., Okoye P.V.C., Nwankwo C.N., & Nwakoby I.C.(2020). Impact of Total Quality Management On Organizational Performance In Selected Banks In Anambra State. *Journal of Business Administration and Education,6*(7), 91-127.

Heizer J.(2017). *Operations Management: Sustainability and Supply Chain Managemen*t. Pearson Education Limited.

Mahadevan B.(2015).*Operations Management: Theory and Practice*. Pearson India Education Services Pvt Ltd.

Oakland, J. S.(2003). *Total Quality Management: Text with Cases*. Wily & sons.

Ogunnaike O.O., Adetunji I.O., & Ajayi O.S., (2017). Six Sigma Implementation and Operational Performance in Banking Institutions in Nigeria: A Case Study Approach. *International Journal of Business and Management Invention, 5*(7), 33-56.

Oke, A., Poksinska, B., & Dahlgaard, J.J., (2016). Investigating Continuous Improvement Implementation Practices: Evidence from Nigerian Manufacturing Firms. *International Journal of Quality & Reliability Management 2*(4), 22-46.

Okoli, C.(2019).Impact of Customer Focus on Operational Performance: Evidence from Service Sector Firms in Nigeria. *International Journal of Quality & Reliability Management, 1*(3), 101-133.

Olaleye, S.(2021).The Influence of Customer Focus on Operational Performance: Empirical Evidence from Retail Businesses in Nigeria. *International Journal of Quality & Reliability Management, 1*(3), 172-193.

Olawale Y.A., Sunmola A.M., & Oyewobi L.O., (2015). "Lean Manufacturing Practices and Operational Performance Of Small And Medium Enterprises In Lagos State. *European Scientific Journal,7*(4), 23-48.

Olawale, F., & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *Journal of Business Administration and Education,6*(9), 58-87.

Oluwatayo, J., (2018). Customer Focus and Operational Performance: A Study of Selected Manufacturing Firms in Nigeria. *International Journal of Quality & Reliability Management, 1*(3), 45-73.

Oyewobi, L.O., Oludayo, O.A., & Akinbode, M.O. (2019). Process Management and Operational Performance in Nigerian Manufacturing Firms: The Moderating Role of Information Technology*. International Journal of Engineering Business Management* 6(3), 22-48.

Slack, N.(2016). Operations Management. Pearson Education Limited.

Stevenson, W.J.(2018). *Operations Management*. McGraw-Hill Education.

Letter of Introduction

I am a Ph.D student in Ignatius Ajuru university of Education , faculty of management sciences, Department of management. I am carrying out a study on **Total Quality Management practices and operational performance of oil and gas firms in Rivers state.** I will appreciate your honest response as it will be confidential and strictly for academic purposes only.

INSTRUCTION 1: *For section "A", please tick (√) as appropriate*

SECTION A: PERSONAL INFORMATION

1. Name of firm: ……
2. Gender: (i) Male ☐ (ii) Female ☐
3. Marital status: (i) Single ☐ (ii) Married ☐

NOTE: *strongly agree (SA) =5; agree (A) = 4; undecided (U) = 3; disagree (D) =2; strongly disagree (SD) =1*

SECTION B: Total Quality Management practices

S/N	Item Statement	SA	A	U	SD	D
1.	How satisfied are you with the level of customer focus in our organization					
2.	Do you believe that continuous improvement is actively encouraged and implemented in our organization					
3.	To what extent do you feel that process management is effectively carried out in our organization					
4	How well do you think our organization manages its internal processes to deliver quality products/services					
5	Do you believe that our organization actively seeks ways to improve its products/services?					
6	The level of Total Quality Management practices in our firm is on the increasing side.					

SECTION C: operational performance

S/N	Item Statement	SA	A	U	SD	D
1	how would you rate the efficiency of the current operational processes in your organization?					
2	How satisfied are you with the cost minimization strategies implemented in your department?					
3	To what extent do you agree that the operational activities in your organization effectively meet the set goals and objectives?					
4	How often do you encounter bottlenecks or delays in the operational processes?					
5	Do you believe that there is room for improvement in terms of operational performance within your organization?					
6	Generally, our operational performance is on the increasing side					

Appendix B
SPSS output

Warning # 849 in column 23. Text: en_NG
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[DataSet0]

Statistics

		How satisfied are you with the level of customer focus in our organization	Do you believe that continuous improvement is actively encouraged and implemented in our organization	To what extent do you feel that process management is effectively carried out in our organization	How well do you think our organization manages its internal processes to deliver quality products/services	Do you believe that our organization actively seeks ways to improve its products/services?	The level of Total Quality Management practices in our firm is on the increasing side.
N	Valid	52	52	52	52	52	52
	Missing	0	0	0	0	0	0
Mean		3.42	3.10	3.23	3.12	3.00	3.19
Std.		1.500	1.575	1.722	1.629	1.534	1.657

Deviation						
Minimum	1	1	1	1	1	1
Maximum	5	5	5	5	5	5
Sum	178	161	168	162	156	166

Frequency Table

How satisfied are you with the level of customer focus in our organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.6	9.6	9.6
	2	15	28.8	28.8	38.5
	3	6	11.5	11.5	50.0
	4	5	9.6	9.6	59.6
	5	21	40.4	40.4	100.0
	Total	52	100.0	100.0	

Do you believe that continuous improvement is actively encouraged and implemented in our organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	19.2	19.2	19.2
	2	16	30.8	30.8	50.0
	4	11	21.2	21.2	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

To what extent do you feel that process management is effectively carried out in our organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	28.8	28.8	28.8
	2	5	9.6	9.6	38.5
	3	6	11.5	11.5	50.0
	4	5	9.6	9.6	59.6
	5	21	40.4	40.4	100.0
	Total	52	100.0	100.0	

How well do you think our organization manages its internal processes to deliver quality products/services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	28.8	28.8	28.8
	2	5	9.6	9.6	38.5
	3	6	11.5	11.5	50.0
	4	11	21.2	21.2	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

Do you believe that our organization actively seeks ways to improve its products/services?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	28.8	28.8	28.8
	3	22	42.3	42.3	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

The level of Total Quality Management practices in our firm is on the increasing side.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	28.8	28.8	28.8
	2	6	11.5	11.5	40.4
	4	16	30.8	30.8	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

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	Cases Used	All non-missing data are used.
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	Elapsed Time	00:00:00.05

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
How satisfied are you with the level of customer focus in our organization	52	1	5	178	3.42	1.500
Do you believe that continuous improvement is actively encouraged and implemented in our organization	52	1	5	161	3.10	1.575
To what extent do you feel that process management is effectively carried out in our organization	52	1	5	168	3.23	1.722
How well do you think our organization manages its internal processes to deliver quality products/services	52	1	5	162	3.12	1.629
Do you believe that our organization actively seeks ways to improve its products/services?	52	1	5	156	3.00	1.534

The level of Total Quality Management practices in our firm is on the increasing side.	52	1	5	166	3.19	1.657
Valid N (listwise)	52					

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FREQUENCIES VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006
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Frequencies

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	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN SUM /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.03

Statistics

	how would you rate the efficiency of the current operational processes in your	How satisfied are you with the cost minimizatio n strategies implemente d in your	To what extent do you agree that the operational activities in your organization	How often do you encounter bottlenecks or delays in the operational processes?	Do you believe that there is room for improveme nt in terms of operational	Generally, our operational performanc e is on the increasing side

		organization?	department?	effectively meet the set goals and objectives?		performance within your organization?	
N	Valid	52	52	52	52	52	52
	Missing	0	0	0	0	0	0
Mean		3.42	3.08	3.21	3.10	2.96	3.13
Std. Deviation		1.500	1.595	1.741	1.648	1.559	1.681
Minimum		1	1	1	1	1	1
Maximum		5	5	5	5	5	5
Sum		178	160	167	161	154	163

Frequency Table

how would you rate the efficiency of the current operational processes in your organization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.6	9.6	9.6
	2	15	28.8	28.8	38.5
	3	6	11.5	11.5	50.0
	4	5	9.6	9.6	59.6
	5	21	40.4	40.4	100.0
	Total	52	100.0	100.0	

How satisfied are you with the cost minimization strategies implemented in your department?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	21.2	21.2	21.2
	2	15	28.8	28.8	50.0
	4	11	21.2	21.2	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

To what extent do you agree that the operational activities in your organization effectively meet the set goals and objectives?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	30.8	30.8	30.8

	2	4	7.7	7.7	38.5
	3	6	11.5	11.5	50.0
	4	5	9.6	9.6	59.6
	5	21	40.4	40.4	100.0
	Total	52	100.0	100.0	

How often do you encounter bottlenecks or delays in the operational processes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	30.8	30.8	30.8
	2	4	7.7	7.7	38.5
	3	6	11.5	11.5	50.0
	4	11	21.2	21.2	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

Do you believe that there is room for improvement in terms of operational performance within your organization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	30.8	30.8	30.8
	3	21	40.4	40.4	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

Generally, our operational performance is on the increasing side

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	30.8	30.8	30.8
	2	6	11.5	11.5	42.3
	4	15	28.8	28.8	71.2
	5	15	28.8	28.8	100.0
	Total	52	100.0	100.0	

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Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
how would you rate the efficiency of the current operational processes in your organization?	52	1	5	178	3.42	1.500
How satisfied are you with the cost minimization strategies implemented in your department?	52	1	5	160	3.08	1.595
To what extent do you agree that the operational activities in your organization effectively meet the set goals and objectives?	52	1	5	167	3.21	1.741
How often do you encounter bottlenecks or delays in the operational processes?	52	1	5	161	3.10	1.648
Do you believe that there is room for improvement in terms of operational performance within your organization?	52	1	5	154	2.96	1.559
Generally, our operational performance	52	1	5	163	3.13	1.681

is on the increasing side						
Valid N (listwise)	52					

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  /MISSING=PAIRWISE.
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Correlations

Notes

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	N of Rows in Working Data File	52
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

Correlations

		Customer Focus	operational performance
Customer Focus	Pearson Correlation	1	.954**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.954**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

```
CORRELATIONS
  /VARIABLES=VAR00001 VAR00002
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		24-APR-2024 09:51:08
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	52
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.09

Correlations

		continuous improvement	operational performance
continuous improvement	Pearson Correlation	1	.568**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.568**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

```
CORRELATIONS
  /VARIABLES=VAR00001 VAR00002
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		24-APR-2024 09:52:58
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	52
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=VAR00001 VAR00002 /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

Correlations

		process management	operational performance
process management	Pearson Correlation	1	.748**
	Sig. (2-tailed)		.000
	N	52	52
operational performance	Pearson Correlation	.748**	1
	Sig. (2-tailed)	.000	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).