



Facilities Management Challenges and Their Impact on Operational Efficiency and Guest Satisfaction in Villa Garden and Rockview Hotels, Owerri, Nigeria.

By

Ijioma James Kelechi¹, Okorji Utchay, PhD²

^{1,2}Department of Estate Management, Faculty of Environmental Sciences, Rivers State University, Nkpolu-Orowurukwo, Port Harcourt, Nigeria.



Article History

Received: 15/07/2026

Accepted: 28/07/2026

Published: 30/07/2026

Vol – 5 Issue –7

PP: - 44-53

Abstract

This study examined facilities management (FM) challenges and their effects on operational efficiency and guest satisfaction in Villa Garden Hotel and Rockview Hotel, Owerri, Imo State, Nigeria. A descriptive comparative design was adopted. The study involved staff, management, and guests of both hotels. A sample of 168 respondents was selected using Cochran's formula and stratified random sampling. Data were collected through questionnaires, interviews, observations, hotel records, and secondary sources. Analysis was done using descriptive statistics and thematic interpretation. Findings show that both hotels face FM challenges in areas such as finance, technical systems, staffing, administration, environment, and customer service. However, Villa Garden Hotel experiences these challenges more severely than Rockview Hotel. The most pronounced differences were in customer-related, financial, and technical issues. The study further found that these challenges negatively affect operational efficiency and guest satisfaction in both hotels, with stronger impacts in Villa Garden Hotel. Issues such as poor maintenance, equipment breakdowns, and delayed service responses reduce service quality and overall performance. The study concludes that FM challenges are key determinants of hotel performance in the study area. It recommends improved funding for FM, adoption of preventive maintenance practices, staff training, and investment in modern technologies.

Introduction

Facilities Management (FM) is a multidisciplinary professional discipline that integrates people, processes, technology, and the built environment to ensure functionality, safety, comfort, and efficiency within organizations. It is concerned with the effective coordination and delivery of support services that enhance the value of physical assets while improving user satisfaction and organizational productivity. According to ISO 41001 (2018), FM is defined as the organizational function that integrates people, places, and processes within the built environment to improve quality of life and support the core objectives of an organization. This definition underscores FM's dual responsibility of promoting operational efficiency and enhancing user well-being, making it a critical component in service-driven industries such as hospitality. Facilities Management (FM) is the integration of people, place, processes, and technology within the built environment to ensure that buildings and support services function efficiently, safely, and in a way that enhances organizational performance and user satisfaction (Brian Atkin & Adrian Brooks, 2021).

In the Nigerian context, FM has gained increasing recognition as an essential driver of organizational performance, particularly within the built environment and service sectors. Scholars such as Nubi (2015) emphasize that effective facilities management practices contribute significantly to asset sustainability, cost efficiency, and service quality in developing economies. Similarly, Oladapo (2006) highlights that FM in Nigeria is evolving from a maintenance-focused function to a strategic management tool that supports long-term organizational goals. Adewunmi (2012) further notes that integrating FM into corporate strategy enhances operational performance, especially in sectors where service delivery and customer satisfaction are critical.

Within the hospitality industry, FM plays a pivotal role in ensuring uninterrupted operations, regulatory compliance, and high standards of guest experience. Hotels depend heavily on both hard services—such as mechanical, electrical, plumbing, HVAC systems, elevators, and fire safety infrastructure—and soft services, including housekeeping, security, landscaping, and waste management. The effectiveness of these services directly influences customer satisfaction, brand reputation, and repeat patronage. As noted by Nigerian researchers like

Ogunmakinde (2014), the adoption of structured FM practices in hotels enhances service quality, reduces operational downtime, and improves overall facility performance.

Furthermore, FM operates at both operational and strategic levels. At the operational level, it focuses on routine maintenance and service delivery, while at the strategic level, it encompasses asset lifecycle management, capital investment planning, sustainability initiatives, and regulatory compliance. In emerging economies such as Nigeria, where infrastructure challenges and maintenance culture remain significant concerns, the strategic application of FM is vital for maximizing the lifespan and performance of hospitality assets.

As argued by Ajayi (2018), the integration of performance measurement systems within FM enables organizations to benchmark service quality, optimize resource utilization, and align facility operations with broader business objectives.

Overall, the growing importance of FM in Nigeria's hospitality sector reflects its potential to drive economic growth, enhance service delivery, and position hotels as competitive contributors to tourism and foreign exchange earnings. By adopting best practices and aligning with global standards, facilities management can significantly improve the sustainability and profitability of hotel operations. Facilities Management operates on both an operational level handling day-to-day maintenance and service delivery and a strategic level addressing asset lifecycle management, capital planning, regulatory compliance, and enhancing guest experience.

In order to boost the hospitality sector as a reliable source of foreign exchange—anchored by the hotel and hospitality industry—it is vital to explore every available strategy that can make the sector more dynamic and competitive. Hotels, like any other investment, are primarily established for profit; however, they also play a significant role in supporting other sectors of the economy. As such, effective management becomes critical to their survival and profitability. The ultimate goal of any business is to remain operational, profitable, and capable of attracting and retaining customers (Bevan, 2007). In this regard, facilities management (FM) has emerged as a central function in ensuring that hotels achieve these objectives.

FM in the hospitality industry involves the integration of people, processes, technology, and the physical environment to ensure efficient operation, maintenance, and sustainability of hotel infrastructure (Amaratunga & Baldry, 2002; Atkin & Brooks, 2021). It covers the design, operation, maintenance, and coordination of building systems and support services that directly influence guest experience and organizational performance. According to Nutt (1999), FM encompasses the entire building system, including its structure, services, and operational components, with the goal of aligning physical resources with organizational objectives. To ensure that corporate needs are effectively met, there is a growing need to develop performance measurement systems that provide facilities managers with clear benchmarks for workplace quality (Warren, 2003). An effective performance

measurement system delivers key benefits such as satisfying customer needs, monitoring performance, benchmarking operations, and driving organizational improvement (Amaratunga, 2012). Furthermore, it is essential to develop methodologies that clearly establish the relationship between facilities and the core business objectives of organizations operating within buildings (Loosemore & Hsin, 2011).

Despite its importance, FM in many hotels—particularly in developing economies—faces numerous challenges. These include financial constraints, aging infrastructure, inadequate maintenance practices, limited technical expertise, and human resource shortages (Mensah & Osei-Tutu, 2020; Oladokun, 2022). Additional pressures arise from increasing customer expectations, regulatory requirements, and the growing demand for energy efficiency and sustainability (Chan et al., 2019; Au-Yong, 2024). Hotels are also increasingly burdened by rising energy consumption, aging facilities, and escalating operational costs, challenges that are more severe in high-rise buildings due to their complexity (Clairvoyant UAE, 2025; FM Middle East, 2025).

Facilities management challenges have direct implications for operational efficiency. Ineffective maintenance systems, equipment failures, and poor resource allocation often lead to service delays, increased downtime, and higher operational costs (Lai, 2012; Were, 2022). In many cases, hotels rely on reactive maintenance rather than preventive strategies, resulting in frequent breakdowns and disrupted services. This weakens operational reliability and reduces the ability of hotels to maintain consistent service standards. Beyond operational efficiency, FM challenges also significantly affect guest satisfaction, which is central to hospitality success. The quality of facilities, responsiveness to service requests, safety conditions, and overall physical environment shape guest perception and experience (Au-Yong, 2024; Chan et al., 2019). Poorly maintained facilities or delayed services due to FM inefficiencies often result in dissatisfaction, negative reviews, and reduced customer loyalty, all of which affect long-term profitability.

In Nigeria, these challenges are more pronounced due to infrastructural and institutional limitations. Many high-rise hotels continue to experience unstable electricity supply, weak maintenance culture, inadequate skilled personnel, and poor technological adoption. These issues result in frequent equipment failures, high operational costs, and service disruptions, ultimately affecting guest satisfaction and competitiveness. In addition, local infrastructural problems such as erratic power supply, inadequate water systems, and regulatory inefficiencies further compound FM challenges, particularly in emerging hospitality hubs such as Owerri, Imo State (Imo State Government, 2025; Nigeria Water Statistics, 2025). These realities highlight the importance of context-specific FM analysis in Nigerian hotels, including facilities such as Imo Concord Hotel and Rock View Hotel.

Previous studies in Nigeria have examined different aspects of FM in isolation. For example, Akinsolas (2023) focused on energy management and found that unstable electricity supply

forces hotels to rely heavily on generators, increasing operational costs. However, the study does not link energy issues to broader FM systems or guest satisfaction outcomes. Oladokun and Komolafe (2017) examined maintenance practices and found a dominance of reactive maintenance, but did not connect maintenance performance to customer experience or hotel efficiency. Similarly, Ojo (2018) identified poor infrastructure and inadequate funding as key challenges but failed to examine how financial constraints interact with human resources and technology adoption.

Adewunmi and Omirin (2016) highlighted issues such as lack of skilled manpower and weak maintenance culture, yet did not integrate safety, energy, and guest experience variables. Akinyele (2010) associated organizational inefficiencies with poor performance but did not isolate FM as a core determinant. More recently, Eze and Chinedu (2021) examined infrastructural challenges in Nigerian hotels but remained largely descriptive without empirically testing relationships between FM challenges and hotel performance outcomes.

From these studies, a clear knowledge gap exists. Most research on FM in Nigeria treats variables such as energy, maintenance, funding, and infrastructure as separate issues rather than interconnected systems. There is also limited empirical evidence linking FM challenges directly to both operational efficiency and guest satisfaction, despite their central importance in hospitality performance. Furthermore, existing studies are often descriptive and fail to develop strong analytical models that explain how FM variables collectively influence hotel outcomes, particularly in high-rise hotel environments where systems are highly interdependent.

The research problem, therefore, lies in the persistent inefficiencies in FM practices within high-rise hotels in Nigeria, where interconnected challenges such as poor maintenance systems, unstable energy supply, inadequate funding, and shortage of skilled personnel continue to undermine operational efficiency and guest satisfaction. Despite several studies addressing individual FM components, there remains no comprehensive understanding of how these factors jointly influence hotel performance in a high-rise context.

This study is significant because it provides a more integrated and realistic understanding of FM in high-rise hotels in Nigeria by examining multiple FM variables simultaneously. It contributes to knowledge by moving beyond fragmented analysis to show how energy management, maintenance practices, financial capacity, human resource capability, and technology adoption collectively influence operational efficiency and guest satisfaction. Practically, the study will assist hotel managers in improving maintenance strategies, optimizing resource allocation, and enhancing service delivery. It will also guide policymakers and industry stakeholders in developing stronger FM frameworks that promote sustainability, efficiency, and competitiveness in Nigeria's hospitality sector.

Therefore, the purpose of this study is to examine the challenges of facilities management and their impact on operational efficiency and guest satisfaction in Villa Garden Hotel and Rockview Hotel, Owerri, guided by the following questions.

- i. What are the key challenges confronting facilities management in both hotels?
- ii. How do facilities management challenges affect operational efficiency and guest satisfaction in the selected hotels?

Literature Review

Theoretical Framework

Resource-Based View (RBV) Theory

The Resource-Based View (RBV), introduced by Jay Barney (1991), is a foundational concept in strategic management that explains how firms achieve sustained competitive advantage through the effective utilization of valuable internal resources. According to Barney, "a firm is said to have a competitive advantage when it is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors" (Barney, 1991). This perspective shifts attention from external market conditions to internal resource capabilities as the primary drivers of superior performance.

RBV asserts that both tangible and intangible resources underpin organizational success and long-term performance. For such resources to be strategically significant, they must satisfy the VRIN criteria—being valuable, rare, inimitable, and non-substitutable. Barney (1991) further emphasizes that resources possessing these attributes "enable firms to conceive of and implement strategies that improve their efficiency and effectiveness". Within the context of Facilities Management (FM) in high-rise hotel buildings, these resources include well-maintained physical infrastructure, advanced maintenance technologies, skilled technical personnel, efficient service delivery systems, and adequate financial investment in facility operations (Akinsolas, 2023). When effectively managed, these FM resources become strategic assets that enhance operational efficiency by reducing downtime, optimizing energy use, and ensuring uninterrupted service delivery.

Operational efficiency, in this regard, is a direct outcome of how effectively FM resources are deployed and coordinated. For instance, the integration of preventive maintenance systems, smart building technologies, and competent facility personnel enables hotels to minimize equipment failures, control operational costs, and maintain high service standards. This is particularly critical in the hospitality sector, where guest satisfaction is closely tied to the functionality, comfort, and reliability of facilities. Hotels that strategically leverage their FM resources are therefore better positioned to achieve consistent service quality, improved asset performance, and enhanced customer experience. Conversely, hotels with inadequate FM resources or inefficient management practices often experience frequent system breakdowns, escalating maintenance costs, and service disruptions, which negatively impact operational efficiency and customer satisfaction (Chaudhry, 2025). Such deficiencies highlight the importance

of not just resource availability but also the capability to effectively manage and deploy these resources in alignment with organizational goals.

The relevance of RBV to this study lies in its ability to explain performance differentials among hotels operating within similar environmental conditions, such as Villa Garden and Rock View hotels. While external factors may be constant, differences in the quality, availability, and strategic utilization of FM resources largely determine operational outcomes. Thus, RBV provides a theoretical lens for linking facilities management resources to operational efficiency and sustained competitive advantage in high-rise hotel operations. It underscores that organizational resilience and superior performance are primarily driven by internal resource strength and managerial capability rather than external conditions alone.

Concept of facilities management challenges

Facilities Management (FM) has been studied from various perspectives, and empirical research has significantly clarified its meaning and scope. According to Then (1999), FM is an integrated resource management function focused on coordinating people, processes, and the built environment to enhance organizational effectiveness. His empirical analysis of FM practices within corporate organizations revealed that FM encompasses more than just building maintenance; it also involves the strategic alignment of facilities with core business objectives. This perspective positions FM as both an operational and strategic discipline.

More recent studies, such as those by Were (2022) and Au-Yong (2024), support the argument that FM has a broad scope with significant implications for organizational performance and customer satisfaction. Were (2022) found that FM practices in Kenyan hotels, including preventive maintenance and health and safety compliance, positively impacted employee performance. Similarly, Au-Yong (2024) showed that effective maintenance management in Malaysian hotels enhanced guest satisfaction.

According to the International Facility Management Association (IFMA, 2020), facilities encompass both hard services, which include the physical, structural, and technical systems of a building, and soft services, which are the people-oriented support services that improve user experience. Together, these services enable organizations to achieve their core objectives while maintaining productivity and minimizing operational risks. Facilities management (FM) challenges refer to the constraints, inefficiencies, and operational difficulties that hinder the effective planning, operation, and maintenance of building facilities and support services within an organization. FM itself encompasses the integration of people, place, process, and technology to ensure functionality, safety, and efficiency of the built environment (Amaratunga & Baldry, 2002; Atkin & Brooks, 2021). Challenges arise when any of these elements are inadequately managed or constrained by internal or external factors.

Scholars have identified financial constraints as a primary FM challenge, particularly in developing economies, where

limited budgets affect maintenance quality, infrastructure upgrades, and adoption of modern technologies (Mensah & Osei-Tutu, 2020; Oladokun, 2022). Technical and equipment-related challenges are also significant, often involving aging infrastructure, inadequate maintenance systems, and limited access to advanced technologies, which can reduce operational efficiency (Lai, 2012; Were, 2022).

Human resource challenges constitute another critical dimension, including shortages of skilled personnel, inadequate training, and low staff productivity, all of which affect service delivery and maintenance effectiveness (Okoroh, Jones & Ilozor, 2003). In addition, organizational and administrative challenges—such as poor planning, weak policy implementation, and ineffective coordination—can further limit FM performance (Amaratunga & Baldry, 2002).

Environmental and safety-related challenges, including compliance with regulatory standards, health and safety risks, and sustainability pressures, also play a key role in shaping FM outcomes (Chan et al., 2019). Furthermore, customer-related challenges, particularly in service-oriented sectors like hospitality, involve managing increasing guest expectations, complaints, and demand variability, which place additional strain on facilities and services (Au-Yong, 2024). Overall, facilities management challenges are multidimensional and interrelated, often leading to reduced operational efficiency, increased costs, and lower user satisfaction if not effectively addressed. As such, understanding and mitigating these challenges is essential for improving organizational performance and ensuring sustainable facility operations (He et al., 2020; Atkin & Brooks, 2021).

Operational Efficiency and Guest Satisfaction

Facilities management (FM) in high-rise hotel buildings is characterized by complex operational, technical, and financial challenges. Unlike low-rise hotels, high-rise structures demand more sophisticated infrastructure and safety systems due to their vertical nature, occupancy density, and continuous service requirements (LarsonReever, 2025). The following subsections highlight the most common FM challenges encountered in such facilities. Facilities management (FM) plays a pivotal role in determining both operational efficiency and guest satisfaction in the hotel sector. In high-rise hotels, particularly within developing economies such as Nigeria, persistent FM challenges significantly disrupt service delivery, increase operational costs, and diminish the overall guest experience.

I. Energy management

One of the most critical issues is energy management. High-rise hotels require substantial energy to operate elevators, HVAC systems, lighting, and other essential services. However, the unreliable public power supply in Nigeria compels hotels to depend heavily on diesel generators, resulting in increased operational costs and reduced efficiency (Akinsolas, 2023; Bohdanowicz & Martinac, 2007). This financial strain limits the ability of hotel management to invest in service improvements, thereby indirectly affecting

guest satisfaction and sustainability outcomes (Clairvoyant UAE, 2025).

II. Elevator and vertical transportation systems

Similarly, elevator and vertical transportation systems are central to guest mobility and convenience. Poor maintenance practices, aging equipment, and limited access to spare parts often lead to frequent breakdowns, long waiting times, and safety concerns (Mensah & Osei-Tutu, 2020). These disruptions not only reduce operational reliability but also negatively shape guests' perceptions of service quality.

III. Water supply and plumbing systems

Challenges related to water supply and plumbing systems further constrain operational performance. Inconsistent municipal water supply and reliance on alternative sources such as boreholes increase operational complexity and costs (Nigeria Water Statistics, 2025). Plumbing failures, leakages, and inadequate water pressure can disrupt daily hotel operations and significantly reduce guest comfort and satisfaction.

IV. Health, safety, and security (HSE)

In terms of health, safety, and security (HSE), high-rise hotels face heightened risks due to their structural complexity. Ineffective fire safety systems, poor emergency preparedness, and weak regulatory enforcement expose hotels to severe operational and reputational risks (Okoroh et al., 2003; LarsonReever, 2025). When safety standards are compromised, guest trust declines, which directly affects satisfaction and repeat patronage. Another major concern is aging infrastructure and maintenance backlogs. Many hotels adopt reactive rather than preventive maintenance strategies due to financial constraints, leading to frequent system failures and increased long-term costs (Wireman, 2010; Chaudhry, 2025). This reactive approach reduces operational efficiency and creates service interruptions that negatively impact the guest experience.

V. Human resource challenges, including shortages of skilled FM professionals, further exacerbate these issues. Effective FM requires expertise in building systems, sustainability practices, and digital technologies. However, many hotels face competency gaps and limited access to professional training, resulting in inefficiencies and prolonged downtime during technical failures (RICS & IFMA, 2024; Pitt et al., 2009).

VI. Financial limitations also play a crucial role. Inadequate funding and capital investment often lead to deferred maintenance, outdated infrastructure, and underinvestment in modern technologies (Then, 1999). This restricts the adoption of efficient systems such as Building Management Systems (BMS) and Computerized Maintenance Management Systems (CMMS), which are essential for optimizing operations (Kamaruzzaman & Zawawi, 2010). Consequently, operational

inefficiencies persist, and service quality declines.

VII. Additionally, procurement and supply chain challenges—including delays, counterfeit spare parts, and unreliable vendors—extend maintenance downtime and increase operational risks (Leung & Chan, 2012). Poor outsourcing and vendor management practices further contribute to inconsistent service delivery, undermining both efficiency and guest satisfaction (Grimshaw & Keeffe, 2010).

VIII. Environmental concerns such as waste management and regulatory compliance also influence hotel performance. Ineffective waste disposal practices not only attract regulatory penalties but also damage the hotel's reputation among environmentally conscious guests (Mensah, 2006). Weak enforcement of FM standards and building regulations further compounds these challenges, allowing substandard practices to persist (Amaratunga & Baldry, 2002).

Facilities Management Challenges, Operational Efficiency and Guest Satisfaction

Empirical evidence from Nigeria provides deeper insight into facilities management (FM) practices and their implications for operational efficiency, particularly within service-oriented environments such as hospitality. For instance, Oladapo A. A. (2006) established that many Nigerian organizations rely heavily on reactive maintenance strategies, which often result in higher operational costs, frequent system failures, and service disruptions. This finding has been reinforced by more recent studies emphasizing the need for preventive and predictive maintenance systems to improve asset performance and service continuity.

A more recent empirical study by Tosin B. Fateye et al. (2022) assessed operation and maintenance practices in Lagos and found that inadequate planning and poor maintenance culture significantly affect building performance and service delivery. The study revealed that structured maintenance systems and proactive management approaches are critical to reducing breakdowns and improving operational efficiency in Nigerian facilities.

Similarly, Okechukwu B. N. and Oladejo E. I. (2024) examined maintenance practices in public institutions and found that the adoption of preventive maintenance strategies significantly improves user satisfaction and facility performance. Their findings highlight that poor maintenance practices remain a major constraint to efficiency in Nigeria, reinforcing the need for systematic FM frameworks.

In terms of technological advancement, Orayinka S. Awosode et al. (2023) investigated the role of automation in high-rise buildings in Lagos and found that the integration of automated systems significantly enhances facility performance, energy efficiency, and operational control. The study demonstrated that smart technologies, including building automation

systems, improve maintenance coordination and reduce operational downtime.

Further supporting this, Olajide (2021) examined sustainable FM practices in smart buildings and reported that the adoption of energy-efficient systems, predictive maintenance, and integrated service delivery significantly improves building efficiency and return on investment. The study emphasized that sustainability-oriented FM practices are essential for optimizing operational performance in modern facilities.

From a service delivery perspective, Ogbunankwor et al. (2024) found that the quality of facilities and supporting services significantly influences hotel patronage, occupancy rates, and customer satisfaction in Nigeria. Their findings confirm that efficient management of facilities is a key determinant of competitive performance in the hospitality industry.

Moreover, recent evidence by Ibrahim-Ahmed et al. (2025) demonstrates that structured facility maintenance practices significantly improve employee productivity, safety, and organizational performance. The study concluded that regular maintenance, proper infrastructure management, and conducive work environments directly enhance operational efficiency in Nigerian organizations.

Collectively, these empirical studies highlight a consistent pattern: effective facilities management—through preventive maintenance, technological integration, sustainability practices, and strong managerial commitment—plays a critical role in enhancing operational efficiency in Nigeria. They further reveal that organizations that strategically invest in FM resources and adopt modern management approaches are better positioned to minimize operational disruptions, reduce costs, and deliver superior service quality. This reinforces the argument that FM is not merely a support function but a strategic driver of operational performance, particularly in the hospitality sector.

Research in developing countries has also provided valuable insights. For instance, case studies from Egypt, Vietnam, and Ghana revealed that hotels faced similar challenges, including inadequate budgets, poor procurement systems, shortages of skilled staff, and weak preventive maintenance programs (Okoroh, Jones & Ilozor, 2003; Amaratunga & Baldry, 2002). These studies consistently found that most hotels depend on reactive maintenance approaches, which increase costs and reduce guest satisfaction. The implication is that effective facilities management requires adequate funding, staff training, and reliable supply chains for spare parts.

Empirical studies on facilities management (FM) in the hospitality sector indicate a wide range of practical challenges, operational realities, and strategic responses across various contexts. Collectively, these studies emphasize how FM directly influences operational efficiency, guest satisfaction, and the overall sustainability of hotel enterprises. In the African context, research consistently identifies infrastructural inadequacies and financial limitations as significant constraints on effective FM. Mensah and Osei-

Tutu (2020), in their investigation of hotel facilities in Ghana, reported ongoing challenges such as unreliable power supply, water scarcity, and inadequate fire safety systems. They concluded that “the absence of structured maintenance and safety procedures compromises hotel service quality and international competitiveness” (Mensah & Osei-Tutu, 2020). Similarly, in South Africa, Oladokun (2022) found that limited technical training among FM personnel and the slow adoption of sustainability practices significantly hindered the operational performance of high-rise hospitality facilities. These findings highlight the urgent need for both capacity-building and stronger regulatory enforcement mechanisms in African hotel FM practices.

Regarding outsourcing, Lok & Finch (2012) conducted a seminal study on hotel facilities management, discovering that the success of outsourcing “depends more on the clarity of service-level agreements and supplier competence than on cost savings alone” (p. 118). Their research emphasized that well-defined contracts, effective relationship management, and accountability mechanisms are vital for achieving service quality in outsourced FM functions. Recent empirical works have reinforced the argument that facilities management plays a strategic role in organizational outcomes rather than being merely an operational expense.

For instance, Were (2022) explored the relationship between FM practices and employee performance in Kenyan hotels. Using regression analysis, he revealed that preventive maintenance and safety compliance practices positively influence employee motivation and productivity. Similarly, Au-Yong (2024) demonstrated that effective maintenance regimes are positively correlated with guest satisfaction and repeat patronage in Malaysian hotels, further underscoring the strategic value of FM as a driver of customer experience and brand competitiveness.

Empirical evidence reveals systemic infrastructural failures and chronic underinvestment in FM. Akinsolas (2023) reported that most high-rise hotels predominantly rely on reactive maintenance approaches, leading to frequent breakdowns of essential systems such as elevators, HVAC units, and plumbing installations. In a comparative study, Chaudhry (2025) found that international hotel chains in Lagos and Abuja demonstrated superior FM performance due to stronger financial capacity, adherence to global maintenance standards, and the presence of professional FM departments. In contrast, locally owned hotels struggle with inadequate waste management, insufficient fire protection systems, and limited technical expertise.

This study aims to fill this gap by critically examining the facilities management challenges facing two high-rise hotels—Garden Hotel and Rock View Hotel in Owerri, Imo State. By doing so, it contributes context-specific evidence to the discourse on FM practices and operational sustainability in Nigeria’s growing hospitality sector.

Research Methodology

The study population includes the staff and management of the two selected hotels who are directly or indirectly involved in facilities management, as well as the guests who utilize the hotel facilities. The sample size was determined using Cochran's (1977) formula for sample size calculation. The calculated sample size is approximately 384 respondents. However, because the study population (staff and stakeholders of Garden View and Rock View Hotels) is not extremely large, the sample was adjusted downward using Cochran's correction formula for the finite. Thus, the sample size for the study consists of 168 respondents, distributed proportionally across the two hotels. The researcher believes that this approach will effectively meet the research objectives by providing a diverse range of responses to the questions being investigated, ensuring maximum variability. The study

employed a stratified random sampling technique to ensure adequate representation of all relevant categories of respondents. The researcher collected data from both primary and secondary sources: Primary data includes questionnaires, structured interviews with hotel management and FM staff, and direct observation of facilities. Whereas secondary data includes hotel maintenance records, policy manuals, energy bills, guest reviews on online platforms, published studies, and industry reports. Data for the study was analyzed using both quantitative and qualitative techniques, using descriptive statistics (frequencies, percentages, and mean scores).

Data Presentation and Analysis

Research Question 1: What are the major challenges of facilities management in both hotels?

Table 1: Major Challenges of Facilities Management in Villa Garden Hotel and Rockview Hotel

Challenges	Villa Garden Hotel		Rockview Hotel		Mean Difference (VG – RV)
	Mean	SD	Mean	SD	
Financial and Budgeted Challenges	3.45	0.50	3.00	0.00	0.45
Technical and Equipment-Related Challenges	3.11	0.89	2.66	0.48	0.45
Human Resource and Skill Challenges	3.24	0.43	3.00	0.00	0.24
Organizational/Administrative Challenges	3.02	0.67	3.00	0.00	0.02
Environmental and Safety Challenges	3.34	0.81	3.32	1.26	0.02
Customer related challenges	3.70	1.15	3.00	0.81	0.7

Source: Field Survey, 2026

The findings reveal that both Villa Garden Hotel and Rockview Hotel experience facilities management (FM) challenges across financial, technical, human resource, administrative, environmental, and customer-related dimensions, though with varying intensity. Villa Garden Hotel records higher levels of FM challenges across all dimensions, indicating greater operational strain. The most pronounced differences are observed in customer-related challenges (Mean Difference = 0.70), followed by financial and budgetary challenges (Mean Difference = 0.45) and technical/equipment-related challenges (Mean Difference = 0.45). These results suggest higher service pressure, maintenance demands, and resource constraints in Villa Garden Hotel. Human resource challenges also show a moderate difference (Mean Difference = 0.24), while administrative/organizational (Mean Difference = 0.02) and environmental/safety challenges (Mean Difference = 0.02) indicate minimal variation between both hotels.

Research Question 2: How do facilities management challenges affect operational efficiency and guest satisfaction in Villa Garden Hotel and Rockview Hotel?

Table 2: Impact of Facilities Management Challenges on Operational Efficiency and Guest Satisfaction in Villa Garden Hotel and Rockview Hotel

Impact Area	Villa Garden Hotel		Rockview Hotel		Mean Difference (VG – RV)
	Mean	SD	Mean	SD	
Impact on Operational Efficiency	3.42	0.50	3.00	0.82	0.42
Impact on Operational Deficiency	3.24	0.43	2.33	0.47	0.91
Impact on Guest Satisfaction	4.34	0.48	3.00	0.82	1.34
Combined Impact on	3.45	0.50	3.00	0.82	0.45

Impact Area	Villa Garden Hotel		Rockview Hotel		Mean Difference (VG – RV)
	Mean	SD	Mean	SD	
Overall Hotel Performance					

Source: Field Survey, 2026

In terms of performance outcomes, facilities management challenges significantly affect both hotels' operational efficiency, service delivery, guest satisfaction, and overall performance. Villa Garden Hotel shows stronger negative effects, particularly on guest satisfaction (Mean Difference = +1.34) and operational deficiencies (Mean Difference = +0.91). Moderate differences are observed in operational efficiency (Mean Difference = +0.42) and overall hotel performance (Mean Difference = +0.45). Rockview Hotel, while also affected by similar FM challenges, records lower impact levels across all performance indicators.

Overall, the results demonstrate that FM challenges are a key determinant of hotel performance in both establishments. However, their effects are more severe in Villa Garden Hotel, highlighting the importance of effective maintenance systems, adequate funding, and skilled personnel in improving operational efficiency and enhancing guest satisfaction in the hospitality sector.

Conclusion

The study indicates that both hotels adopt key facilities management practices such as maintenance, energy management, safety, and customer-focused services, but Villa Garden Hotel generally demonstrates higher adoption levels. Major challenges affecting facilities management include financial constraints, technical/equipment issues, human resource limitations, and customer-related challenges. These challenges significantly influence operational efficiency, operational deficiencies, guest satisfaction, and overall hotel performance, with the largest effects observed on guest satisfaction. To address these challenges, the study identified strategies such as increased budgetary allocation, preventive maintenance programs, staff training, use of modern technologies, renewable energy investment, regulatory enforcement, and public-private partnerships. Overcoming these challenges in facilities management is critical for improving operational efficiency and guest satisfaction in hotel buildings.

Recommendations

The study recommends as follows:

- Hotel owners should invest in structured and proactive facilities management systems by prioritising preventive maintenance, energy management, staff development, and the adoption of modern technologies to improve operational efficiency, service quality, and guest satisfaction.

- Facility managers should adopt proactive and technology-driven facilities management approaches through the integration of smart monitoring systems, computerized maintenance management systems (CMMS), and data-driven decision-making tools to enhance maintenance planning, minimise equipment downtime, and improve overall facility performance.
- Government and regulatory agencies should strengthen the enforcement of maintenance, safety, environmental, and building regulations within the hospitality sector. Policies that promote sustainable facilities management practices, energy efficiency, and infrastructure development should be encouraged to improve industry performance and ensure compliance with established standards.
- Investors and property developers should incorporate facilities management considerations into the planning, design, construction, and operational stages of hotel development. Investment in durable building systems, energy-efficient technologies, and sustainable infrastructure should be prioritised to increase asset value and reduce long-term operational costs.
- A coordinated industry framework for facilities management should be established within the hospitality sector to promote standardised FM practices, encourage knowledge sharing, support professional development, and provide clear benchmarks for maintenance, safety, environmental management, and service quality.
- Industry stakeholders, including hotel owners, facility managers, government agencies, professional bodies, and training institutions, should strengthen collaboration and partnership efforts to promote best practices, enhance operational sustainability, improve guest experiences, and increase the competitiveness of the hospitality industry.

References

- Adewunmi, Y. A., & Omirin, M. M. (2016). Building maintenance management in Nigeria. *Journal of Facilities Studies*.
- Akinyele, S. T. (2010). Organizational performance in Nigerian hospitality firms. *International Journal of Business and Management*, 5(7), 43–52.
- Akinsola, O. E., Hussaini, P. O., Oyenuga, S. O., & Fatokun, A. O. (2012). Critical factors influencing maintenance management of tertiary institutional buildings in South West Nigeria. *Mediterranean Journal of Social Sciences*, 3(11), 23–28. <https://doi.org/10.5901/mjss.2012.v3n11p489>
- Akinsolas, A. A. (2023). Energy management challenges in Nigerian hotels. *Journal of Hospitality Energy Studies*.
- Ahmed, S. Z., & Ali, S. M. (2006). People as partners: Facilitating people's participation in

- public-private partnerships for solid waste management. *Habitat International*, 30(1), 781–796.
6. Alexander, K. (1996). *Facilities management: Theory and practice*. E & FN Spon.
7. Aliyu, A. A., Hussaini, A., & Abubakar, M. (2016). The challenges of effective property management. *Anikpress*, 21(26), 23–34.
8. Amaratunga, D. (2012). Performance measurement in facilities management. *Facilities Management Journal*.
9. Amaratunga, D., & Baldry, D. (2000). Assessment of facilities management performance in higher education properties. *Facilities*, 18(7), 293–301.
10. Amaratunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities*, 20(5/6), 217–223.
11. Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment. *Work Study*, 51(1), 17–31.
12. Asiabaka, I. P. (2008). The need for effective facility management in schools in Nigeria. *New York Science Journal*, 1(2), 10–21.
13. Atkin, B., & Brooks, A. (2021). *Total facilities management*. Wiley-Blackwell.
14. Au-Yong, C. P. (2024). Maintenance management and guest satisfaction in hospitality facilities. *Journal of Hospitality Engineering*.
15. Awosode, O. S., et al. (2023). Automation and facility performance in high-rise buildings. *Journal of Smart Built Environment*.
16. Bevan, J. (2007). Business sustainability and customer retention strategies. *Journal of Business Strategy*.
17. Bohdanowicz, P., & Martinac, I. (2007). Energy consumption and environmental performance in hotels. *Energy and Buildings*, 39(1), 82–95.
18. Chaudhry, A. (2025). Comparative facilities management performance in Nigerian hotels. *Facilities Management Review*.
19. Clairvoyant UAE. (2025). Energy efficiency and operational sustainability in hospitality buildings. Industry Report.
20. Eltringham, M. (2017). BIFM formally adopts new ISO definition of facilities management. *Workplace Insight*.
21. Eze, C. U., & Chinedu, A. N. (2021). Infrastructure challenges in Nigerian hotels. *African Journal of Hospitality Studies*, 12(3), 55–70.
22. Faremi, O. J. (2021). Sustainable facilities management practices in smart buildings. *Journal of Sustainable Built Environment*.
23. FM Middle East. (2025). A closer look at facilities management challenges in the hospitality industry.
24. Garcia, M. C., Sanz-Bobi, M. A., & Del Pico, J. (2006). SIMAP: Intelligent system for predictive maintenance. *Computers in Industry*, 57(6), 552–568. <https://doi.org/10.1016/j.compind.2006.02.011>
25. Grimshaw, D., & Keeffe, S. (2010). Outsourcing and service quality in facilities management. *Facilities*, 28(5/6), 244–257.
26. Hinks, J., & McNay, P. (1999). Management-by-variance tool for facilities management performance assessment. *Facilities*, 17(2), 31–53.
27. IFMA (International Facility Management Association). (2020). *Global standards for facilities management*. IFMA Publications.
28. Ibrahim-Ahmed, A. M., et al. (2025). Facility maintenance practices and organizational performance in Nigeria. *African Journal of Management Studies*.
29. Johnson, B., & Onwuegbuzie, A. (2006). Mixed methods research: A paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.
30. Johnson, G., & Scholes, K. (2002). *Exploring corporate strategy* (6th ed.). Pearson Education.
31. Jutt, B. (2000). Four competing futures for facility management. *Facilities*, 18(3), 124–132.
32. Kamaruzzaman, S. N., & Zawawi, E. M. A. (2010). Development of facilities management systems. *Journal of Building Appraisal*, 6(1), 29–39.
33. Kincaid, D. (1994). Integrated facility management. *Facilities*, 12(8), 20–23.
34. Kremic, T., & Tukul, O. I. (2003). *Assisting outsourcing in the outsourcing endeavor*. Cleveland State University.
35. LarsonReever. (2025). High-rise building maintenance strategies and challenges. Medium.
36. Leung, M., & Chan, K. (2012). Supply chain challenges in facilities management. *Engineering, Construction and Architectural Management*, 19(4), 387–403.
37. Ling, T. T. (2014). Managing high-rise residential buildings in Malaysia. *INSPEEN*.
38. Lok, L., & Finch, E. (2012). Outsourcing facilities management in hotels. *Facilities*, 30(1/2), 113–128.
39. Mensah, I. (2006). Environmental management practices in hotels. *International Journal of Hospitality Management*, 25(3), 414–429.
40. Mensah, I., & Osei-Tutu, E. (2020). Facilities management challenges in Ghanaian hotels. *Journal of Hospitality and Tourism Management*, 45, 320–330.
41. Mohammed, M. A., & Hassanain, M. A. (2010). Facilities operation and maintenance feedback. *The Built & Human Environment Review*, 3, 72–87.
42. Mohd-Tawil, N., et al. (2010). Facilities management indicators for high-rise residential property. *WSEAS Transactions on Environment and Development*, 6(4), 255–264.
43. Nutt, B. (1999). *Smart knowledge in facilities management*. Macmillan.
44. Nutt, B. (2012). *Life history of property, facilities and services*. UCL.
45. Nigeria Water Statistics. (2025). Water supply and sanitation in Nigeria.

46. Ogbunankwor, C. E., et al. (2024). Facilities quality and hotel patronage in Nigeria. *Allied Business Academies Journal*.
47. Oladapo, A. A. (2006). Maintenance practices in Nigerian organizations. *Journal of Construction in Developing Countries*, 11(2), 75–89.
48. Oladokun, O. (2022). Facilities management challenges in South African hospitality buildings. *African Built Environment Journal*.
49. Oladokun, O., & Komolafe, O. (2017). Maintenance practices in Nigerian hotel buildings. *Nigerian Journal of Environmental Design*, 9(1), 33–48.
50. Okechukwu, B. N., & Oladejo, E. I. (2024). Preventive maintenance and facility performance in Nigeria. *Journal of Facility Management Research*.
51. Okoroh, M. I., Jones, M., & Ilozor, B. D. (2003). Application of facilities management in Nigeria. *Journal of Engineering, Design and Technology*, 1(1), 45–56.
52. Ojo, O. (2018). Facilities management practices in Nigerian hotels. *Journal of Hospitality Studies*.
53. Pitt, M., et al. (2009). Skills and competencies in facilities management. *Facilities*, 27(5/6), 216–224.
54. RICS & IFMA. (2024). Global facilities management skills report.
55. Sarshar, M., & Pitt, M. (2009). Adding value to clients through FM. *Facilities*, 27(9), 399–412.
56. Then, D. S. S. (1999). Facilities management and organizational effectiveness. *Journal of Facilities Management*.
57. Tosin, B. F., et al. (2022). Operation and maintenance practices in Lagos buildings. *Journal of Built Environment Studies*.
58. Warren, C. M. J. (2003). Performance measurement in workplace management. *Facilities Journal*.
59. Were, S. (2022). Preventive maintenance and employee performance in hotels. *African Journal of Hospitality Research*.
60. Wireman, T. (2010). Benchmarking maintenance management. *Industrial Press*.