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APPRAISAL OF BUILDING MAINTENANCE PRACTICES AMONG LANDLORD AND PROPERTY MANAGERS

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Abstract

Effective building maintenance is essential for preserving the value and functionality of real estate properties. This study aims to appraise and compare building maintenance practices between landlords and property managers in the context of residential and commercial properties. The research investigates the roles, responsibilities, challenges, and best practices associated with building maintenance by these two groups. Landlords may tend to be more financially conscious and opt for reactive maintenance, while property managers often emphasize proactive maintenance and compliance with regulatory standards. Challenges identified include budget constraints, tenant turnover, and knowledge gaps. Property managers appear to have a more structured approach, employing computerized maintenance management systems (CMMS) and professional maintenance staff. In contrast, landlords often rely on ad-hoc arrangements and may postpone maintenance to minimize costs. This research underscores the need for further education and support for both landlords and property managers in understanding the long-term benefits of proactive maintenance. It also emphasizes the importance of budget allocation and compliance with safety and regulatory standards. The study contribute to improved building maintenance practices, ultimately benefiting property value, tenant satisfaction, and the overall real estate industry.

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Introduction

The maintenance of buildings is an essential aspect of property management and ownership. Proper maintenance practices not only preserve the physical integrity of buildings but also contribute to the overall quality of life for occupants. The responsibility for building maintenance often falls on two primary stakeholders: landlords and property managers. Landlords are property owners who may directly oversee maintenance tasks or delegate them to property management companies or individual property managers. Property managers, on the other hand, are professionals responsible for the day-to-day management of properties, including maintenance Yip, (2018).

Building maintenance practices encompass a wide range of activities, such as routine inspections, repairs, renovations, and general upkeep. The efficiency and effectiveness of these practices have a direct impact on the lifespan of a building, its safety, and its market value. Inadequate or improper maintenance can lead to deterioration, reduced tenant satisfaction, and increased operational costs Ali, Kamaruzzaman, Syahrul-Nizam, and Peng, (2010). According to El-Haram and Horner (2020) understanding the practices, challenges, and motivations behind building maintenance among landlords and property managers is critical for the sustainable management of real estate assets. However, there is a noticeable gap in the literature regarding the appraisal of building maintenance practices, particularly when it comes to comparing the approaches of landlords and property managers. This research seeks to address this gap and provide insights into the current state of building maintenance in the context of these two key stakeholders.

In order to attain optimal performance and maximize return on investment for commercial buildings, it is essential to implement effective maintenance management strategies (Emma and Syahrul, 2015). According to BS (2018), maintenance is a comprehensive set of technical, administrative, and managerial tasks carried out over the course of an item's lifespan with the intention of maintaining its functionality or restoring it to a state where it can serve its intended purpose. The concept of maintenance management pertains to the level of effectiveness with which a structure is maintained (Yahya & Ibrahim, 2011). Building maintenance management is a multifaceted process that encompasses the integration and coordination of many technical, social, legal, and economic factors that control and oversee the use of buildings (Francis et al., 2018).

Maintenance management of commercial buildings is a complex endeavor that presents significant issues and challenges. These include the substantial cost associated with maintenance, the need for a robust maintenance policy framework, and the limited involvement of facilities managers in the design stages, among others (Timilli, 2014; Omotehinshe et al., 2015). Shabha (2019) asserts that the absence of adequate building maintenance policies and plans, budgetary allocations, skills, and technological resources might give rise to possible dangers encountered throughout the maintenance phases of a facility.

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The field of building maintenance is confronted with the significant issue of elevated maintenance expenses. El-Haram and Horner (2020) assert that a multitude of variables contribute to the elevated expenses associated with housing maintenance. These elements include building features, human factors, maintenance implementation methods, and government regulations. In a study conducted by Al-Khatam (2019), many aspects were found and categorized into seven distinct categories. These categories included engineering services, labor, building materials, surroundings, management and administration, budget and finance, and building users. The aforementioned findings were corroborated by Ali et al. (2010), who identified various factors that significantly contribute to the elevated costs of maintenance. These factors encompass building materials, building services, building age, tenant expectations, inadequate execution of timely maintenance, maintenance-related factors, political influences, outstanding maintenance charges, excessive budget allocation, and other relevant considerations. Additional risk factors that contribute to the elevated expenses associated with maintenance due to financial losses encompass inadequate design and construction methodologies, insufficient accessibility for maintenance purposes, suboptimal material selection, incongruous specifications, limited availability of spare parts, the absence of standardized tools and instruments for routine maintenance, and adverse environmental conditions (De Silva et al., 2012).

One further obstacle in the realm of building maintenance pertains to the limited attention or absence of input from facilities managers, who possess specialized knowledge and assume the role of overseeing maintenance management during the first phases of design. According to Williamson et al. (2010), including the perspectives and insights of facilities management experts from the initial design phases may significantly mitigate, if not entirely prevent, a majority of the difficulties associated with building maintenance. Facilities managers play a crucial role in providing pertinent information to designers in order to mitigate design flaws that may result in unsatisfactory outcomes throughout the facility maintenance operations phase (Jawdeh et al., 2010). In order to mitigate the issues associated with maintenance, it is essential to include maintenance input throughout the design phases. This practice enables the use of views as points of reference for facilitating future maintenance activities, thereby minimizing design defects (Ali et al., 2013). Omotechinshe et al. (2015) assert that the consideration of maintenance aspects is lacking in the majority of design processes, and the involvement of maintenance specialists in design teams is infrequent. This deficiency often results in maintenance issues that significantly impact the performance of buildings.

Assessment of Building Maintenance Management

The field of building maintenance management has historically been overlooked or given little consideration inside organizations and institutions worldwide, until very recently. The issue gained prominence when the government began to intervene and emphasized the need for implementing maintenance management procedures in different institutions as a new cultural paradigm for the country. This has resulted in the emergence of facilities administration businesses, which assume a supervisory role in the administration of building upkeep. Research findings indicate that there have been notable advancements in several

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domains, such as the enhanced state of buildings and an increased level of knowledge about maintenance methods among both maintenance personnel and stakeholders. Nevertheless, research conducted on some institutions has shown that maintenance management techniques face challenges in many aspects, including the legislative framework, high maintenance costs, and the involvement of facilities management experts (Shabha, 2019). This issue has garnered attention and raised concerns among all relevant parties.

Maintenance management encompasses several activities and functions. According to Allen (2021), maintenance practices or management may be defined as the proficient and economical use of resources to ensure that the process and its facilities are maintained in a functional state, meeting the criteria expected by tenants or users. According to BS (2018), maintenance may be described as the comprehensive combination of technical, administrative, and managerial activities carried out throughout the lifespan of an item with the aim of preserving or reinstating its ability to fulfill the necessary duties. According to Francis et al. (2018), building maintenance management can be described as a complex process that encompasses various technical, social, legal, and economic aspects. It involves the effective governance and management of buildings, ensuring that they are utilized in accordance with established standards. Francis et al. further elaborate that building maintenance entails a combination of technical and administrative actions aimed at ensuring that all components and elements of a building are maintained to a satisfactory level, enabling them to fulfill their intended functions. According to the information provided by Wikipedia, a building can be defined as a fixed and enclosed structure constructed from various materials such as stones, blocks, bricks, wood, or other substances. It is situated on a specific plot of land and is typically equipped with a roof, windows, doors, and occasionally multiple levels. Buildings serve a range of purposes, including but not limited to residential, entertainment, office, and manufacturing activities. Commercial buildings are a distinct type of structure that is specifically designed and used for commercial purposes. These uses often include the provision of office spaces, hotels, residential accommodations, conference facilities, and retail malls, among others.

Building Conditions in Nigeria

Building conditions in Nigeria can vary widely depending on factors such as location, urban or rural setting, and the economic status of the region. Nigeria is a diverse country with a rapidly growing population, and as a result, there are significant differences in building conditions across the country. Here are some key factors to consider:

Urban vs. Rural Areas:

Urban areas like Lagos, Abuja, and Port Harcourt tend to have more modern and better-maintained buildings, with improved infrastructure and access to utilities.

Rural areas often have more basic and traditional building conditions, with structures made from locally available materials such as mud bricks, thatch, or corrugated metal sheets.

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Housing Types:

In urban areas, you can find a mix of housing types, including high-rise apartments, detached houses, and informal settlements (slums).

Rural areas typically have traditional housing styles, including huts, mud houses, and thatched-roof buildings.

Building Materials:

Building materials vary, but common materials include cement, concrete blocks, and steel for modern construction.

Traditional materials such as mud, bamboo, and thatch are still used in rural areas due to their affordability and availability.

Infrastructure:

Urban areas generally have better access to infrastructure like roads, electricity, water supply, and sewage systems.

Rural areas may lack basic infrastructure, making access to services more challenging.

Building Codes and Regulations:

Nigeria has building codes and regulations that are meant to ensure safety and quality in construction. However, enforcement can be lax in some areas, leading to substandard buildings.

Housing Challenges:

Nigeria faces various housing challenges, including a housing deficit, poor urban planning, and inadequate affordable housing options.

Informal settlements, often lacking basic amenities, are prevalent in many urban areas.

Climate Considerations:

Nigeria has a diverse climate, and building conditions should consider factors such as temperature, rainfall, and humidity.

Coastal areas may be prone to flooding, while northern regions experience dry conditions.

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Construction Industry:

Nigeria's construction industry is growing, with both local and foreign companies involved in building projects.

The construction sector is an essential contributor to the country's economy.

Challenges:

Challenges faced in building conditions in Nigeria include corruption in the construction industry, inadequate infrastructure development, and the use of substandard materials in some cases.

It's important to note that Nigeria is a vast and diverse country, and building conditions can vary greatly from one region to another. While some areas enjoy modern infrastructure and construction practices, others struggle with basic housing needs and infrastructure deficiencies. A combination of economic, social, and geographical factors affect building conditions in Nigeria.

THE REASONS FOR BUILDING DILAPIDATION IN NIGERIA

Dilapidation of buildings is a significant issue in Nigeria, as in many other countries, and it poses several challenges and concerns. Some of the factors contributing to the dilapidation of buildings in Nigeria include:

Poor Construction Standards: Inadequate building materials and substandard construction practices are common in Nigeria. This can result in buildings deteriorating quickly, especially in areas prone to extreme weather conditions like heavy rain and flooding.

Lack of Maintenance: Many building owners neglect regular maintenance, which accelerates the wear and tear of structures. This can include issues such as roof leaks, cracked walls, and faulty electrical and plumbing systems.

Unregulated Urbanization: Rapid urbanization often leads to haphazard and unplanned development, which can result in overcrowding and substandard construction, especially in informal settlements.

Natural Disasters: Nigeria is prone to natural disasters such as flooding, erosion, and earthquakes. These events can cause extensive damage to buildings, particularly in areas with inadequate infrastructure.

Corruption and Non-Adherence to Building Codes: Corruption can lead to building code violations and the approval of unsafe structures. Even when regulations exist, they are not always enforced, contributing to the problem.

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Inadequate Infrastructure: Many areas in Nigeria lack basic infrastructure like proper drainage systems and sewage facilities. This can lead to water damage and the deterioration of buildings.

Low-Income Housing: Inadequate financial resources among the population often lead to the construction of low-quality, cheap housing that deteriorates rapidly.

Socioeconomic Factors: Poverty and economic factors can prevent homeowners from investing in building maintenance, causing buildings to fall into disrepair.

PRINCIPLES OF BUILDING MAINTENANCE

Building maintenance is a critical aspect of ensuring the longevity, safety, and functionality of structures. Several principles guide effective building maintenance:

Preventive Maintenance: Preventive maintenance is the practice of regularly inspecting, servicing, and repairing building components to prevent minor issues from becoming major problems. It includes tasks such as cleaning gutters, checking for leaks, and inspecting HVAC systems.

Regular Inspections: Regular inspections are essential to identify and address issues before they escalate. This includes assessing the structural integrity, electrical systems, plumbing, and other building components. Inspections can be scheduled on a routine basis or conducted in response to specific concerns.

Proactive Approach: Proactive maintenance involves anticipating potential problems and taking action to prevent them. This may involve upgrading systems, replacing worn-out components, and improving insulation to reduce energy consumption.

Safety and Compliance: Building maintenance should prioritize safety and compliance with local building codes and regulations. Ensuring that the building is up to code not only promotes safety but also avoids legal issues.

Documentation: Maintaining accurate records of maintenance activities is crucial. Documentation helps track maintenance history, identify patterns of issues, and plan for future maintenance needs.

Budgeting: Effective building maintenance requires proper budgeting to allocate resources for routine maintenance, repairs, and renovations. A well-managed budget ensures that necessary maintenance tasks are not deferred due to lack of funds.

Proper Training: Maintenance personnel should be adequately trained in their respective areas of expertise, whether it's HVAC, electrical systems, plumbing, or general building maintenance. Training ensures that tasks are performed correctly and safely.

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Sustainability and Energy Efficiency: Building maintenance should take into account sustainability and energy efficiency. Upgrading to energy-efficient systems, such as LED lighting or smart HVAC controls, can reduce operating costs and environmental impact.

Lifecycle Planning: Building maintenance should align with the building's expected lifecycle. This includes planning for eventual renovations, replacements, and upgrades as the building ages.

Quality Materials and Workmanship: When making repairs or replacements, it's important to use quality materials and ensure that work is carried out by skilled professionals. Cutting corners can lead to ongoing maintenance issues.

Tenant or Occupant Involvement: In cases of multi-unit buildings or commercial spaces, involving tenants or occupants in the maintenance process can help identify issues early and promote a sense of responsibility.

Emergency Preparedness: Buildings should have emergency plans in place, including how to address issues like fires, flooding, and power outages. Regular drills and safety measures are essential for effective building maintenance.

Adaptability and Innovation: The principles of building maintenance should adapt to changing technologies and best practices. Staying current with innovations in construction and maintenance techniques can lead to more effective and efficient maintenance processes.

Effective building maintenance is essential for preserving the value, safety, and functionality of structures. By adhering to these principles, property owners and managers can ensure that buildings remain in good condition and meet the needs of occupants.

FACTORS CONTRIBUTING TO HIGH BUILDING MAINTENANCE COSTS

The ability to achieve optimal production levels in a building is contingent upon its ongoing maintenance and adherence to appropriate standards of functionality. The act of upholding a building to a satisfactory level is connected with several expenditures, including labor, materials, spare parts, equipment and tools, administrative costs, as well as fines or loss of revenue (El-Haram and Horner, 2020). According to Ali et al. (2010), the costs and expenditures associated with building maintenance account for around 33% to 50% of the total cost, depending on the specific kind of facility, such as residential flats, hotels, retail malls, or office buildings.

Through extensive literature studies, writers have been able to identify a number of factors that contribute to the increased costs associated with building maintenance. Several researchers have found a set of characteristics and factors that have an impact on decision-

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making and contribute to the high cost of building maintenance. These researchers include Ali (2015), Ali et al. (2010), and El-Haram and Horner (2020).

a) The current state of the buildings

The process of making decisions regarding the cost of maintenance is a multifaceted task (Ali, 2015). One potential approach to addressing this complexity involves conducting a comprehensive evaluation of the current conditions of the building by utilizing advanced technology. This method, in conjunction with physical inspections and surveys, allows for the acquisition of sufficient information required for effective decision-making regarding maintenance costs (Pitt, 2016; Lee and Scott, 2015; Ali, 2015).

b) Characteristics of Buildings

Building age, functions, levels, structural type, finishing, service, and material are some of the factors that affect a building's maintenance costs (Lateef, 2014; Skinner, 2015; Wong, 2020; Neve et al., 2016; Lam, 2018; Cheung and Kyle, 2016). According to El-Haram and Horner (2020), every facility has distinct features that require the distribution and allocation of maintenance costs in order to ensure its upkeep to a satisfactory standard.

c) Factors related to tenants

The tenants or users of the building consistently have an impact on the cost of maintenance through a variety of factors, including the occupants' expectations, use of the facility, damage caused by occupants, delays in reporting defects, failure to report defects, and access to the facility (Ali et al., 2010; El-Haram and Horner, 2020; Olubodun, 2018). The consideration of tenants' effects on the building is therefore crucial in the formulation of a maintenance budget (Yip, 2018).

Maintenance variables may be categorized into two major parts: technical considerations and administrative elements. These aspects have a significant impact on the overall cost of maintenance (Ali et al., 2010). It is evident that the effectiveness and efficiency of building maintenance costs are significantly impacted when technical factors, such as poor workmanship and low-quality spare parts and materials (Khalid et al., 2006; Al-Hammad et al., 2016), and administrative factors, including inadequate maintenance management, budget limitations, delayed execution of maintenance tasks, and inadequate budgetary control (Horner et al., 2016; Pascual et al., 2014; El-Haram and Horner, 2020; Narayan, 2019; Ali, 2015; Lee and Scott, 2015), are not given due attention (El-Haram and Horner, 2020).

Political factors

Political factors refer to the many elements within the political environment that may significantly influence the operations and outcomes of individuals, organizations, and societies. These variables include actions and decisions.

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Political issues may have an impact on maintenance costs, particularly when there are inconsistencies in government or local authority policy (Ali et al., 2010; El-Haram and Horner, 2020). One of the variables under consideration is the implementation of new health and safety regulations, which often result in the issuance of habitation certificates by local authorities. The absence or insufficient implementation of health and safety protocols poses a significant danger to both maintenance employees and occupants or users of the facility. Ali et al. (2010)

EFFECT OF BUILDING CHARACTERISTICS ON MAINTENANCE

The characteristics of a building have a significant impact on its maintenance requirements and costs. Different building features, materials, and designs can influence the ease and extent of maintenance (El-Haram and Horner, 2020). Here are some of the ways in which building characteristics affect maintenance:

Building Age: The age of a building is a critical factor in maintenance. Older buildings often require more frequent and extensive maintenance due to wear and tear, outdated systems, and materials that may have deteriorated over time.

Architectural Design: The design and layout of a building can affect maintenance. Complex and intricate architectural features, such as decorative moldings or unique roof designs, may be more challenging to maintain than simple, straightforward designs.

Materials Used: The choice of construction materials impacts maintenance significantly. Some materials, like brick and stone, require less maintenance than wood or metal. Additionally, the quality of materials used can affect maintenance needs. High-quality materials tend to be more durable and require less maintenance.

Roof Type: The type of roofing system, whether it's flat, sloped, shingle, metal, or other materials, affects maintenance. For example, flat roofs may be prone to water pooling, while sloped roofs may need shingle replacements.

Exterior Finishes: The type of exterior finish, such as stucco, siding, or brick, influences maintenance requirements. Different finishes may require periodic cleaning, repainting, or repairs.

Foundation Type: The foundation of a building can influence maintenance needs. A well-designed and constructed foundation is essential for preventing structural issues and minimizing maintenance.

Windows and Doors: The type and quality of windows and doors impact energy efficiency, security, and maintenance. For example, double-glazed windows may require less maintenance than single-glazed ones.

HVAC Systems: The size, type, and age of HVAC (heating, ventilation, and air conditioning) systems affect maintenance costs. Older and inefficient systems may require more frequent repairs and replacements.

Plumbing and Electrical Systems: The quality of plumbing and electrical systems can influence maintenance. Outdated or poorly installed systems may lead to leaks, electrical

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problems, and the need for repairs.

Understanding these characteristics and their influence on maintenance is crucial for building owners and managers to plan and budget for ongoing maintenance effectively. Additionally, it's important to consider these factors when designing and constructing new buildings to minimize future maintenance needs.

Improving Property/Facility Maintenance Management Strategies

For effective maintenance management of building properties, Lee and Scott (2014) suggested that maintenance policy needs to be agreed upon by maintenance personnel and top management before implementation and development. The development of maintenance policy should be based on the objectives of maintenance in consideration of the organization's objectives. This is to resolve misunderstandings and differences that often arise between maintenance personnel and top management on the technicalities and approach of maintenance and resource provision for maintenance. Effective property and facility maintenance management is crucial for preserving the value, safety, and functionality of buildings. To improve maintenance management, consider implementing the following strategies:

Establish a maintenance plan:

Develop a comprehensive maintenance plan that outlines the schedule, scope, and responsibilities for all maintenance tasks. This plan should cover routine, preventive, and corrective maintenance.

Prioritize safety and compliance.

Ensure that all maintenance activities prioritize safety and compliance with building codes and regulations.

Regular Inspections:

Conduct regular inspections to identify maintenance needs and address issues proactively. Inspections should cover all aspects of the property, including structural, electrical, plumbing, HVAC, and safety systems.

Use Technology:

Implement computerized maintenance management systems (CMMS) or facility management software to streamline maintenance workflows, track work orders, and schedule maintenance tasks efficiently.

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Budget Adequately:

Allocate a budget for maintenance and ensure that it covers routine and preventive maintenance as well as unexpected repairs. Regularly review and adjust the budget as needed.

Lifecycle Planning:

Develop a long-term maintenance strategy that includes planning for renovations, replacements, and upgrades based on the building's expected lifecycle.

Training and Education:

Invest in training and education for maintenance staff to ensure they have the necessary skills and knowledge to perform their tasks effectively and safely.

Vendor Management:

If outsourcing maintenance tasks, establish strong vendor relationships and hold them accountable for meeting service level agreements.

Energy Efficiency and Sustainability:

Implement energy-efficient systems and practices to reduce operational costs and environmental impacts. This may include upgrading lighting, insulation, and HVAC systems.

Documentation:

Maintain thorough and up-to-date documentation of all maintenance activities, including work orders, inspection reports, and equipment manuals.

Emergency Preparedness:

Develop and regularly review emergency response plans to address issues such as fires, flooding, and power outages.

Conclusion:

The appraisal of building maintenance practices among landlords and property managers is essential for understanding the state of property maintenance and identifying areas for improvement. Based on the assessment of these practices, several conclusions can be drawn:

The appraisal reveals a wide range of maintenance practices among landlords and property managers, with some demonstrating proactive and effective strategies while others are more reactive or neglectful in their approach.

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Effective building maintenance positively impacts property values and tenant satisfaction, while inadequate maintenance practices can lead to decreased property values, increased tenant turnover, and potential legal and safety issues.

Communication and Collaboration: Effective communication and collaboration between landlords and property managers are fundamental for successful maintenance. Clear roles, responsibilities, and expectations need to be established.

Involving tenants in the maintenance process by educating them on their responsibilities and encouraging them to report issues can contribute to more efficient maintenance practices.

Recommendations:

Based on the appraisal of building maintenance practices among landlords and property managers, the following recommendations are made to improve and enhance these practices:

Standardized Maintenance Plans: Develop standardized maintenance plans that outline routine, preventive, and corrective maintenance tasks. These plans should include clear schedules and responsibilities.

Budget Adequately: Allocate sufficient funds for maintenance activities. Regularly review and adjust the budget to account for unexpected repairs and long-term planning.

Implement Preventive Maintenance: Prioritize preventive maintenance to address common issues before they become major problems, extending the lifespan of building components and reducing overall costs.

Invest in Training: Provide training and education for property managers and maintenance staff to ensure they have the necessary skills and knowledge to perform their tasks effectively.

Engage Tenants: Encourage tenant involvement by educating them about their responsibilities and creating a system for reporting maintenance issues. Promote a sense of shared responsibility for property upkeep.

By implementing these recommendations, landlords and property managers can enhance their maintenance practices, increase property values, and create a safer and more efficient living environment for tenants. This, in turn, contributes to tenant satisfaction and long-term property value appreciation.

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