

**AN ASSESSMENT OF ADMINISTRATIVE BUILDINGS MAINTENANCE CULTURE
IN THE UNIVERSITY OF BENIN**

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CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND STATEMENT

Buildings according to Olanrewaju and Abdul- Aziz (2015) are the most significant resource of tertiary institutions apart from the faculty members. They offer much value to the general administration of the institutions, students, members of staff, parents and other users and stakeholders. Buildings are just like every other living objects that may die if not well taken care of. Death in the case of buildings may be in the form of deterioration and decays. Buildings should be taken care of by way of proper maintenance and management. The process of deterioration in both the physical and functional conditions of a building is complex, and is indicated by wears, tears and aging due to usage, degradation of equipment and construction material due to the environment, and the interaction of these mechanisms. However, in order to create conducive environment that supports and stimulates innovative research, teaching and learning, tertiary institution buildings require maintenance. In the same line of thought, Ogunoh (2018) asserted that the maintenance levels of these buildings are very crucial to educational effectiveness.

The concept of an administrative building refers to a structure specifically designed to house offices and facilities that support the administrative functions of an organization, institution, or government. Administrative buildings are central hubs where various management and support activities take place to ensure the smooth operation of the entity.

Administrative buildings can vary in size and design based on the nature and scale of the organization they serve. They are essential components of both public and private entities, providing a centralized space for managerial and administrative activities that contribute to the organization's success and functionality.

The Advanced Learners Dictionary defines maintenance as the process of protecting or preserving someone or something, or the process of keeping something in good condition. Culture, on the other hand, is a way of life, a lifestyle, customs, traditions, habits that portray the attributes of a person/people. Maintenance culture is an attitude which is sadly lacking in Nigeria, whether in the home, office, school or factory. Mbamali (2003) added that poor maintenance culture has become a widely recognized problem in Nigeria which has poorly affected the quality of public properties. Public property is property that is dedicated to public use and is a subset of state property. The term may be used either to describe the use to which the property is put, or to describe the character of its ownership (owned collectively by the population of a state). This is in contrast to private property, owned by an individual person or artificial entities that represent the financial interests of persons, such as corporations. State ownership, also called public ownership, government ownership or state property, are property interests that are vested in the state, rather than an individual or communities (Wikipedia, 2015).

Maintenance culture in Nigeria is one of the lowest around the world, especially, in our principal towns and cities where the majority of public properties are located. In the rural areas, the story is different and pleasant to hear. The traditional practice of communal clearing of community owned places such as market playground is in almost every village and in private homes. Also, it is customary to refurbish building interiors with mixtures of cow dung or natural red clay. The

end result is attractive and totally indigenous. According to Wahab (1995) the nation accords low priority to property management leading to neglect of public properties. Mbamali (2003) asserted that we have no maintenance policy and therefore no such culture exists.

Neglect of maintenance has accumulated consequences in rapid increase in the deterioration of the fabric and finishes of a building, accompanied by a harmful effect on the content's occupants Seeley, (1987). Inadequate maintenance culture is a peculiar feature of almost every public building in Nigeria. According to Rotimi and Mtallib (1995) is partly due to poor maintenance culture on one hand and partly due to the absence of an appropriate benchmark. Gurjit (1990) asserted that lack of proper maintenance culture brings the life of these public building last before reaching the total obsolescence state. The declining maintenance culture in Nigeria and its effect on public buildings and all other properties has become a major problem to the government at various levels. This study examines ways of improving maintenance culture and its effect on quality of hostel properties in Nigerian institutions. A great portion of a nation wealth is evident in the total value of its public properties and buildings; it is also an important factor in the production of the building to be preserved. A poorly maintained building in a decaying environment depresses the quality of live and contributes in some measures to anti social behaviour which threatens the socio-political environment it finds itself in According to Stephen (2002) public properties services rarely perform as well as desired. The causes emanate from deficiencies in design, construction, commissioning and maintenance, many researchers have also observed that the generators of maintenance problems could be looked upon has caused during the design stage or construction stage or initiated during the usage stage or the user's carefree attitudes (Bad maintenance culture) which will eventually deteriorate the

condition of the property. He further said that all these could be planned for during the design stage.

Maintenance problems though do manifest during the use of the building, their causes might be during the design stage. These made Dekker (2002) to assert that thinking on the maintenance should start in the design phase. According to Speight (2000), it is at the design stage that the maintenance burden can be positively influenced for better or for worse. Where the designer fails to make adequate consideration for minimizing maintenance problems, it always turns out to be a big problem when the building is eventually occupied for usage, the consideration for effective maintenance as one of the parameters for the building design. Seeley (1997) also said that a skilful design can reduce the amount of maintenance work and also make it easier to perform, since good maintenance begins on the drawing board.

1.2. PROBLEM STATEMENT

Building maintenance is an important activity to keep a building in good condition. Even though the building seems like it is in perfect condition, there is a lot of maintenance work needed to be done in order to maintain such condition. To preserve and prolong the life of a building, maintenance is necessary to be carried out.

Oladimeji (1996) further described maintenance of public properties as the combination of any continuous actions carried out to retain a property in or restore it to an acceptable condition. Onwuka (1989) stated that maintenance culture is concerned with the planning and control of construction resources to ensure that necessary repairs and renewal are carried out with

maximum efficiency and economy to enhance the quality of the property. However, this research is assessing maintenance culture of administrative buildings in the University of Benin.

Proper maintenance strategy plays an important role in the maintenance of a building. Proper maintenance strategy is able to affect the performance of maintenance. Good maintenance depends on the maintenance strategy used. Poor maintenance is also caused by using the improper maintenance strategy. Poor maintenance of public properties will lead to depreciation of property value, affect the condition of the building, make the users feel unsafe, cause inconvenience to the users, cause the building efficiency to drop and eventually cause the building to deteriorate rapidly.

1.3. AIMS AND OBJECTIVES

The aims and objectives of the analysis on the maintenance culture towards administrative buildings in Nigerian universities, with a case study of the University of Benin (UNIBEN), can be outlined as follows:

1. To examine the current state of maintenance culture towards administrative buildings in University of Benin.
2. To identify the factors that contribute to the poor maintenance culture of administrative buildings in University of Benin.
3. To assess the impact of poor maintenance culture on the state of administrative buildings and the living conditions of staff in University of Benin.
4. To analyze the approaches and strategies that can be adopted to improve the maintenance culture of administrative buildings in University of Benin..

5. To make recommendations based on the findings of the analysis that will enable UNIBEN and other Nigerian universities to improve their maintenance culture towards administrative buildings.

1.4. RESEARCH QUESTIONS

To further refine the aims and objectives, here are some possible research questions that can guide the analysis on the maintenance culture towards hostel properties in Nigerian universities, with a case study of the University of Benin (UNIBEN):

1. What is the current state of maintenance culture towards administrative buildings in Nigerian universities, and how does UNIBEN compare with other universities in Nigeria?
2. What are the factors that contribute to the poor maintenance culture of administrative buildings in University of Benin?
3. How does poor maintenance culture affect the state of administrative buildings and the living conditions of staff in administrative buildings in University of Benin?
4. What approaches and strategies can be adopted to improve the maintenance culture of administrative buildings in University of Benin?
5. What are the stakeholders' perspectives on the current maintenance culture of Administrative buildings and how can they be engaged in promoting a culture of maintenance in University of Benin?

These research questions can be used to guide the data collection, analysis, and interpretation of the study's findings, leading to more specific and actionable recommendations for UNIBEN and other Nigerian universities.

1.5. JUSTIFICATION

The assessment of administrative buildings maintenance culture in the university of Benin, is justified for several reasons:

1. Improving the living conditions of staff: Administrative building is a critical component of staff welfare in universities. However, poor maintenance culture can result in dilapidated and unsanitary living conditions that negatively affect staff's health, safety, and academic performance. Therefore, this study can help identify the root causes of poor maintenance culture and propose solutions that will improve staff's living conditions.
2. Economic benefits: Maintaining administrative property is cost-effective in the long run, as it reduces the need for costly repairs and renovations.
3. Sustainable development: Promoting a culture of maintenance is crucial for sustainable development. In the context of Nigerian universities, this involves adopting practices that reduce waste, conserve resources, and promote environmental sustainability. By investigating the maintenance culture towards administrative properties in Nigerian universities, this study can explore how sustainability can be integrated into maintenance practices.
4. Policy implications: The findings of this study can inform policy decisions aimed at improving administrative buildings in Nigerian universities. For example, the study can provide evidence-based recommendations for regulatory bodies, such as the National Universities Commission (NUC), on how to promote maintenance culture in Nigerian universities.

In summary, this study's justification lies in its potential to improve students' living conditions, provide economic benefits, promote sustainable development, and inform policy decisions.

1.6. SCOPE AND DELIMITATION TO STUDY

The scope of the assessment of the maintenance culture towards administrative buildings in Nigerian universities, with a case study of the University of Benin (UNIBEN), will focus on the following:

1. Maintenance culture towards administrative properties: The study will examine the practices, attitudes, and behaviors towards maintenance culture in UNIBEN and other Nigerian universities. This includes the approaches and strategies used to maintain administrative properties, the frequency and quality of maintenance activities, and the role of stakeholders in promoting maintenance culture.
2. Administrative properties: The study will focus on the maintenance of administrative properties, including the physical structures, plumbing, electrical systems, furniture, and other facilities within the campus.
3. University of Benin (UNIBEN): The study will use UNIBEN as a case study to examine the maintenance culture towards administrative properties in Nigerian universities. However, the findings of the study may be generalized to other universities in Nigeria.

The delimitations of the study include:

1. Time frame: The study will focus on the current state of maintenance culture towards administrative buildings in Nigerian universities, based on data collected from 2020 to 2022. Historical trends and changes over time may not be included.
2. Location: The study will focus on Nigerian universities, with a specific emphasis on UNIBEN. Maintenance culture practices in other countries or regions will not be included.

CHAPTER TWO

LITERATURE REVIEW

2.1. CONCEPT OF MAINTENANCE

Maintenance refers to the activities carried out to preserve or restore the condition, functionality, and safety of an object, system, or structure. In the context of hostel properties in Nigerian universities, maintenance includes a range of activities aimed at keeping the physical structures, facilities, and systems in good working order. These activities may include:

1. Preventive maintenance: This involves scheduled inspections, cleaning, lubrication, and adjustment of hostel facilities and equipment to prevent breakdowns and prolong their lifespan.
2. Corrective maintenance: This involves repairing or replacing damaged or faulty facilities or equipment to restore their functionality and safety.
3. Predictive maintenance: This involves using data analysis and monitoring systems to predict potential failures and plan maintenance activities before they occur.

4. **Planned maintenance:** This involves scheduling maintenance activities in advance to minimize disruption to hostel residents and ensure that maintenance activities are carried out efficiently.
5. **Emergency maintenance:** This involves responding to urgent maintenance issues, such as burst pipes or electrical faults, to prevent damage to property and ensure the safety of hostel residents.

Maintenance is an essential aspect of property management, as it helps to ensure that the physical assets are safe, functional, and able to serve their intended purpose. In the context of Nigerian universities, a culture of maintenance can help to promote sustainable development, reduce waste, and improve the living conditions of students.

2.1.1 TYPES OF MAINTENANCE

Types of Facilities Maintenance

Emergency maintenance

Action regarding school plant maintenance is taken only when there is an emergency situation or disaster (Ogunu, 2010). This type of maintenance is done haphazardly without a pre-determined plan. Ogunu further stressed that his approach has the fundamental weakness of being retroactive as it waits for serious maintenance problems to occur before action is taken to solve the problems. It is curative rather than preventive. This is very common in the management of school facilities in societies where maintenance culture is not well established. It takes place when a facility breaks down and urgent measures or steps had to be taken to remedy the situation (Taiwo, 2000).

In this regard, collective decision-making may not be possible because there may be limited time to bring together all the necessary individuals to make decisions. It is also expensive because due to lack of maintenance, the extent of damage may demand total replacement of the facility or high cost of repair. Ogunu highlighted that in some cases, the breakdown may cause injury or even death to staff and or students of the school. The resultant effect may be a high insurance premium or prevent the use of the facility for teaching and learning until repair had been affected (Sani, 2007). School head teachers should proactively develop and implement a facilities management plan for addressing facility needs.

Preventive maintenance

This type of theory is a well-planned pro-active and systematic maintenance approach that constantly checks and takes preventive measures before problems will arise (Ogunu, 2000). This is regarded in this paper as the best maintenance approach. This is a type of maintenance carried out on school facilities to avoid breakdown and ensure optimal performance of the facility (Sani, 2007). He further stressed that up to date information about the facility is required to serve as a guide for the maintenance team. This theory of maintenance saves cost and time. It is usually an integral part of the management practice in societies where maintenance culture is well established. Decisions on preventive maintenance are collectively made and implemented. Preventive maintenance includes regular inspection of the buildings and immediate repair of minor damages and deterioration (Uko, 2001). This is done to avoid breakdown and to ensure optimal performance of plants and equipment and saves cost and time (Ngoka, 2003).

Routine maintenance

Sani (20007) reported that routine maintenance is carried out periodically as scheduled by the school managers. He stresses that facilities may be serviced monthly, quarterly or even annually depending on the agreed schedule. Manufacturers guide provide information on nature and maintenance intervals. School managers comply with these guides to avoid breakdown of the equipment (Taiwo, 2000).

Predictive maintenance

This theory involves the use of computer software to predict equipment failure based on age, user demand and performance measures. With the frequency of maintenance tasks specified, cost data from cost guides are then used to predict the annual funding needs (Ottoman, Nixon & Lofgren, 1999). Moreover, with the increase in sophistication of various facilities, it has become a priority to provide information enabling an environment in facility management (Achoru, 2015). This is necessary to keep adequate records of facilities and monitor their performance. The application of computer software in this regard has made it easy to achieve effective and efficient maintenance of facilities.

Structural maintenance

Structural maintenance is carried out due to the structural needs of some plants and equipment such as refurbishing, refabricating or reshaping due to current requirements or new designs (Agenyi, as cited in Uko, 2015). Structural maintenance is needed to guarantee the long term functional stability of equipment.

Committee maintenance

This centres on giving maintenance responsibility to a constituted works committee comprising of teachers, students and supporting staff (Ogunu, 2000). The committee is in charge of fundraising, receiving complaints on damaged facilities, organising direct labour, collecting data and data on the condition of the school plant. School administrators need to delegate authority and provide necessary support to enable the committee to function effectively. The approach also helps to ensure collective responsibility.

2.2 ADMINISTRATIVE BUILDING

The concept of an administrative building encompasses a wide range of structures that serve the purpose of housing the administrative functions of an organization, institution, or government.

These functions can include:

- Management and oversight: Planning, coordinating, and controlling the activities of an organization.
- Financial administration: Budgeting, accounting, and financial reporting.
- Human resources: Hiring, training, and development of employees, as well as payroll and benefits administration.
- Information technology: Supporting the organization's technology needs, including hardware, software, and network infrastructure.
- Legal and compliance: Ensuring that the organization complies with all applicable laws and regulations.

- Public relations and communications: Managing the organization's image and communicating with stakeholders.

Administrative buildings can vary greatly in size, style, and function, but they typically share some common characteristics:

- Centralized location: Administrative buildings are often located in central or easily accessible areas to facilitate communication and collaboration with other departments and stakeholders.
- Functional layout: The layout of an administrative building is typically designed to optimize efficiency and workflow. This may include open floor plans, modular furniture, and centralized support services.
- Secure environment: Administrative buildings often contain sensitive information and data, so they typically have security measures in place, such as security cameras, access control systems, and alarms.
- Meeting and conference facilities: Administrative buildings often have meeting rooms and conference facilities to accommodate meetings, training sessions, and other gatherings.
- Amenities: Administrative buildings may also include amenities such as cafeterias, gyms, and break rooms to provide a comfortable and convenient work environment for employees.

Here are some examples of different types of administrative buildings:

- Corporate headquarters: The main office of a large corporation, typically housing senior management and executive functions.

Corporate headquarters administrative building

- Government buildings: Buildings that house government agencies and departments, such as city halls, courthouses, and federal office buildings.
- University administration buildings: Buildings that house the administrative functions of a university, such as the president's office, registrar's office, and financial aid office.
- Hospital administration buildings: Buildings that house the administrative functions of a hospital, such as the CEO's office, accounting department, and human resources department.

The concept of an administrative building is constantly evolving as organizations adapt to new technologies and work styles. However, the core purpose of these buildings remains the same: to provide a functional and efficient space for the administrative functions that keep organizations running smoothly.

2.3 FEATURES FOR DETERMINING FACILITY MAINTENANCE NEEDS

Montecrecy (1985) and Tolk (2007) conducted studies to determine various models which yielded substantially different results to determine facilities maintenance needs. The facility features their factor and the extent to which they factor them play a role in this. It is imperative to account for certain facility attributes in determining the maintenance needs for individual and portfolios of facilities. National Research Council (NRC) (1990) determined factors that can have a major influence on the appropriate level of maintenance and repair expenditures to

include: building size and complexity; types of finishes; current age and condition; mechanical and electrical system technologies; telecommunication and security technologies; historic or community value; type of occupants or users; climatic severity; churn (tenancy turnover rates); criticality of role or function; ownership time horizon; labour prices; energy prices; materials prices and; distance between buildings in facility inventory.

Another study conducted by Ottoman, Nixon and Lofgren (1999), identified facility maintenance and repair cost estimating criteria utilising substantial literature review. The determined criteria included: facility replacement value, age, size, type, location, type of construction, condition, lifecycle, climate and deferral penalty cost.

It has been observed that many school heads forget to realise that they have a duty to play towards the maintenance and upkeep of school plants (Lawanson et al., 2011). Nwagwu (1998), Ani (1997) and Nwogu (1997) in their separate studies have confirmed the roles of the school administrator towards the maintenance as:

1. The identification of plants that needs repair
2. The establishment of a repair inventors
3. The establishment of a maintenance workshop
4. Renovation of dilapidated school plant.
5. Repair and redecoration of the school plant.
6. Appointment of teachers to custodial duties.

7. Instruction to students on the careful use of the school plants, preventing students from damage or defacements through writing or drawings on the walls
8. Ensuring that school plants are adequate for students' population.
9. Supervising school custodial staff
10. Providing working materials for the custodial staff allocating un-accommodated buildings where applicable to staff as residential quarters since buildings deteriorate faster when they are not in use.
11. Reporting all major parts to the government on time.
12. Teaching students to treat plants as personal properties instead of government facilities.

2.4. CULTURE

Culture refers to the shared beliefs, values, practices, and behaviors of a group of people. It encompasses the customs, traditions, language, art, and social institutions of a society, and influences the way people perceive and interact with the world around them.

Culture is passed down from generation to generation through socialization and education, and is constantly evolving through interactions with other cultures and external factors such as technology and globalization. It plays a crucial role in shaping individuals' identities and worldviews, and can have a significant impact on social and economic development.

In the context of the maintenance culture towards hostel properties in Nigerian universities, culture refers to the shared attitudes, beliefs, and practices of students, staff, and other

stakeholders towards maintenance. It encompasses their perceptions of the importance of maintenance, their willingness to invest time and resources in maintenance activities, and the role they play in promoting and sustaining a culture of maintenance.

A positive maintenance culture can help to ensure that hostel properties in Nigerian universities are well-maintained, safe, and functional. Conversely, a negative maintenance culture can lead to neglect and disrepair, compromising the safety and quality of living conditions for students. Therefore, understanding and promoting a culture of maintenance is essential for ensuring the sustainable development and prosperity of Nigerian universities.

2.5. MAINTENANCE CULTURE

Maintenance culture refers to the shared attitudes, beliefs, and practices of individuals and groups towards maintenance activities. It encompasses the perception of the importance of maintenance, the willingness to invest time and resources in maintenance activities, and the role played in promoting and sustaining a culture of maintenance.

In the context of hostel properties in Nigerian universities, maintenance culture is essential for ensuring that the physical structures, facilities, and systems are well-maintained and functional. A positive maintenance culture promotes the regular inspection, cleaning, and repair of hostel facilities, reducing the likelihood of breakdowns, prolonging their lifespan, and ensuring the safety and comfort of residents.

A negative maintenance culture, on the other hand, can lead to neglect, disrepair, and safety hazards, compromising the quality of living conditions for students. It can result from a lack of understanding of the importance of maintenance, inadequate investment in maintenance

activities, or a lack of motivation or incentives for promoting and sustaining a culture of maintenance.

Promoting a positive maintenance culture requires a multifaceted approach that involves education, awareness-raising, incentive structures, and accountability mechanisms. It requires the involvement and collaboration of students, staff, administrators, and other stakeholders in developing and implementing maintenance policies and practices that prioritize safety, functionality, and sustainability.

2.6. BUILDING MAINTENANCE

Building maintenance refers to the activities that are carried out to ensure that a building remains functional, safe, and aesthetically pleasing. These activities can be classified into several categories, including preventive maintenance, corrective maintenance, and cosmetic maintenance.

Preventive maintenance involves the regular inspection, cleaning, lubrication, and adjustment of building systems and components to prevent breakdowns and prolong their lifespan. This includes activities such as routine cleaning, HVAC maintenance, plumbing inspections, and electrical system checks.

Corrective maintenance involves repairing or replacing damaged or faulty building systems and components to restore their functionality and safety. This includes activities such as roof repairs, plumbing repairs, electrical repairs, and structural repairs.

Cosmetic maintenance involves activities that improve the appearance of a building or its surroundings, without necessarily affecting its functionality or safety. This includes activities such as painting, landscaping, and exterior cleaning.

Building maintenance is essential for ensuring that buildings remain safe, functional, and aesthetically pleasing, and can prevent costly repairs or replacements in the long run. It is typically the responsibility of the building owner or manager to ensure that maintenance activities are carried out regularly and effectively, and that appropriate resources are allocated to support these activities.

2.5. IMPORTANCE OF BUILDING MAINTENANCE

Building maintenance is important for several reasons, including:

1. **Safety:** Regular maintenance helps to identify and address potential safety hazards in a building, such as electrical faults, structural weaknesses, and fire hazards, reducing the risk of accidents and injuries.
2. **Functionality:** Maintenance activities help to ensure that building systems and components, such as HVAC systems, plumbing, and electrical systems, are functioning properly, reducing the risk of breakdowns and prolonging their lifespan.
3. **Aesthetics:** Regular maintenance can improve the appearance of a building, making it more attractive to tenants, visitors, and potential buyers, and enhancing the overall value of the property.

4. Cost savings: Proactive maintenance can prevent the need for costly repairs or replacements in the long run, reducing overall maintenance costs and minimizing downtime or disruptions to building operations.
5. Compliance: Maintenance activities can help to ensure that buildings comply with relevant codes, regulations, and industry standards, reducing the risk of fines, penalties, or legal liabilities.

In the context of hostel properties in Nigerian universities, building maintenance is particularly important for ensuring the safety and comfort of students, promoting a positive living and learning environment, and maintaining the value and reputation of the university. Neglecting building maintenance can lead to disrepair, safety hazards, and poor living conditions, compromising the quality of life and academic performance of students.