



Research Article

Maintenance Policy as an Effective Tool for Enhancing Commercial Properties Performance in Greater Port Harcourt City, Nigeria

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Abstract: Maintenance policy has been a written statement that provides a clear direction for the maintenance activities on commercial properties. The study examined how effective maintenance policy could serve as an efficient tool for sustaining commercial properties performance. It identified the measurable values of maintenance policy of some selected commercial properties in Greater Port Harcourt Metropolis and to propose implementation strategies for efficient means of enhancing best property performance. In achieving these objectives, opinions of 77 out of 102 randomly sampled maintenance managers, owners and occupiers of some selected private commercial properties were collected using structured questionnaires and personal interviews. The 75% response rate from the collected data was analysed using descriptive statistic and content analysis as well. Data analysed indicates that >60% of the respondents agree that: (i) there are three (3) considerations for developing maintenance policy (property maintenance objectives, benefit and policies); without considering it, the property owner will be denied of efficient property performance. (ii) the maintenance strategy adopted in commercial buildings benefits in extending the life cycle of properties and its fittings/services. (iii) it optimized the performance of commercial properties which is crucial to maintenance success on commercial property performance in many ways; cutting costs by a certain amount or reduce spending/production of waste. (iv) Maintenance policy is concerned with maintenance strategy, standard and resources allocation which are categories of the major components for formulating maintenance policy. Conclusively, for commercial property performance to be enhanced through maintenance policy; the results should include adequate maintenance funding, agreement of the implementation of maintenance policy developed, and maintenance policy be considered based on maintenance objective sets to avoid errors, training of personnel and prompt response to repairs.

Keywords: Efficient, Enhancement, Performance, Commercial Property, Maintenance Policy.

INTRODUCTION

Enhanced maintenance policies and programmes are major component of achieving the goal of efficient property performance. It is clear that the total supply of properties is inelastic in the long-run and the only sustainable way for property performance at a particular period is through repairs and maintenance. It is also important to ensure efficient and equitable systems for management and maintenance of the existing property to performance. Historically, in both public and private sectors, maintenance was seen by many as an avoidable task, which was perceived as adding little to the quality of the working environment, and expending scarce resources that could be better placed (Adenuga, Olufowobi and Raheena, 2010). Since the last decade, the city of Port Harcourt has witnessed tremendous increase in the supply of commercial properties in Port Harcourt. The information above, clearly indicates that the commercial properties is growing in investment, as it plays a major role to the economy with the demand for office space in Port Harcourt.

However, to achieve excellence in property performance and yield maximum value on investment of commercial properties, it requires property maintenance policies (Emman and Syahrul, 2009). BS (2001) defines maintenance to be “the combination of all technical, administrative and managerial actions during the life cycle of an item intended to retain it in, or restore it to, a state in which it can perform the required function.” Nkpote and Frank (2019) defines maintenance policy as “a set of administrative, technical and managerial actions to apply during the life cycle of a property used to guide maintenance management decision-making towards retaining certain operation conditions of a property or dedicated to restoring the building to standard conditions.” Maintenance management refers to how well a property is maintained (Yahya and Ibrahim, 2011). Building maintenance management is an action which involves interacting or blend of technical, social, legal and economic elements that governs and manage the use of properties (Francis, Lee and Ng, 2001).

Commercial property maintenance cannot be undisputable undertaken without maintenance policies. One of the major problems confronting commercial property maintenance in Port Harcourt is the lack of consideration and poor integration of maintenance policy. Most of the recent maintenance policy procedures do not clearly link maintenance needs with property performance with respect to the building users who measure the performance of a building with various criteria which include the condition of the property (Nkpote and Wokekoro, 2017). An effective maintenance management requires an appropriate maintenance policy. Today, property performance has not been effectively measured due to lack of maintenance policy in Port Harcourt. A good property manager must be willing to admit the non-performance of properties and actively pursue of a solution of maintenance policy as means of enhancing the property performance. In spite of the millions of Naira spent on developing this property, maintenance policy is very important to preserve and enhance the life span of properties as well as its performance. With the maintenance policy, the property manager being proactive, disciplined and accountable would be able to manage and maximize available resources, manage based on information and give reports on production/operations and feedbacks from the report (Nkpote, 2017). It is necessary to adopt maintenance policy input into property management, that are rarely considered by property managers and may in turn affect the performance of such properties.

Commercial properties like the ones in Port Harcourt are relatively complicated in maintenance management and carrying out maintenance on these properties comes with serious problems and challenges to the property performance of such as high cost of maintenance, inadequate maintenance policy, framework, minimal or lack of input of experts of property managers during the design stages, etc. (Timilli, 2014; Omotehinshe, Dabara and Guymo, 2015). According to Shabha (2003), lack of proper building maintenance policies and strategies, budgets, skills and technology will lead to potential risk of non-performance of property during the maintenance stages of the commercial building. This research work would examine maintenance policy and how it would efficiently serve as means of enhancing property performance of our client using the commercial properties in Port Harcourt as a case study.

Scope of the Study

The study seeks to explore maintenance policy as an efficient tool of enhance property performance of commercial property. The study considers how property managers administer maintenance management on private commercial properties in Port Harcourt. This study has allayed the fears of occupiers in commercial properties; educating them about the essence of the study, which would in no way expose them to

imposition of levies, charges or any liability to the Rivers State Government. The emphasis of this study is limited to private commercial properties in Port Harcourt.

Aim and Objectives of the Study

The aim of this study is to examine how effective maintenance policy could serve as an efficient tool for sustaining commercial properties performance. The objectives of the study are to:

1. Assess the maintenance policy framework of commercial properties in Port Harcourt.
2. Examine the benefits of maintenance policy as an efficient means of enhancing property performance.
3. Identify the measurable values of maintenance policy towards best property performance.
4. Propose strategies for efficient means of enhancing property performance through maintenance policy.

LITERATURE REVIEW

Maintenance

Maintenance is defined as “work undertaken in order restore every facility, that is, in every part of site or building to an acceptable standard” (BSI, 2001). According to Wood (2003a), maintenance is defined as “work undertaken in order to keep, restore or improve every part of a building, its services and surrounds, to a currently acceptable standard, and to sustain the utility and value of the buildings. Maintenance is defined as the “combination of all technical and administration actions, including supervision actions, intended to retain an item in, or restore it to a state in which it can perform a required function” (BSI, 1991). Maintenance is defined as the effort in connection with different technical and administrative actions to keep a physical asset in, or restore it to a condition where it can perform a required function” (BSI, 1993). The development in maintenance definition has also been shifted from solely technical responsibility into the importance of the balance of both technical and management responsibility with time elapse.

Maintenance Policy

Maintenance policy is a tool for maintenance personnel to plan their appropriate maintenance strategies (Lee and Scott, 2008). According Nkpote and Frank (2019), maintenance policy is defined as “a set of administrative, technical, and managerial actions to apply during the life cycle of a building, used to guide maintenance management decision-making towards retaining certain operation conditions of a building or dedicated to restoring the building to standard conditions”. However, before a maintenance programme is prepared the maintenance manager/property manager and top management are required to agree on maintenance policy because it requires strategic directions, as well as resources that are involved in maintenance works. Therefore, without

defining maintenance policy, maintenance operation processes will be in a haphazard order. Lee and Wordsworth (2001) stated that maintenance policy consists of five major components, and different maintenance strategies involved in these components. And these major components will include; duration for maintaining facility for present use, life cycle considerations for the building materials and equipment, maintenance standard, reaction time and legal compliance, and decisions for maintenance policy and appropriate strategy (Lee and Scott, 2008).

Maintenance Policy Framework

Three considerations for developing maintenance policy are building maintenance objectives, benefits and policies. And the purpose of obtaining the benefits is with the integration of adequate maintenance policies, concerns with proper planning procedures for building maintenance activities (Nkpite and Frank, 2019). According to Yahya and Ibrahim (2011), the value of properties largely relies on the safety, quality and service of the standard of policy given and enforced in them. The various definitions of maintenance policy have been given as a system by which decision on maintenance are made, embracing varying type of maintenance strategy to guarantee that properties are adequately maintained (Lee and Scott, 2008). It implies that maintenance policy framework stands as document which officially indicate the parameters, procedure, guidelines in full description.

According to RICS (2013), the situations of maintenance management have no general acceptable suitable layout. But a format being used for a specific situation must be geared towards a specified need and programme of the host organization. The idea identified is that, maintenance policy has to guarantee the certainty of worth for money spent to attain and protect the asset and the resource value of the properties concerned. This was the assertion of Lee and Scott (2008), that the policy of properties maintenance standard should yield much profit on expenditure incurred on actions of maintenance. In the same vein, according to Yahya and Ibrahim (2011), the safe environment and benefit guarantee by the maintenance policy has made it much important to stakeholders; property managers/maintenance managers, owners, customers and tenants.

Property Maintenance Policy Framework in Context

RICS (2013); Lee and Scott (2008) explained that the costs sustained, and the sum benefit of properties maintenance results to substantial influence on end-user's welfare and output. Maintenance management in this context henceforth must be perceived to be a significant part advancing the objectives of the property investor. Consequently, maintenance policy has to include with the broader statement of the: mission, business strategy and the management's policy of the organization who oversee the properties management, be it a tenant, client,

property manager, or landlord. In effect, the management of the properties should accept and revise maintenance policy as an inclusion to total management strategy involving the property manager/maintenance personnel in the process (Mensah, 2015). The management of the property must be vigilant of the requirement of maintenance and make suitable available funds expected to guarantee performance of the property, and if funding is not adequate, it may lead to added expense as a result of maintenance undertaken not formerly planned; which means that planned maintenance is less expensive than corrective maintenance (Mensah, 2015). Where there are no maintenance policies, this may result to deficiencies in issues of maintenance works, requirement and funds showing as inappropriate move, misdirection and waste of resources. This will eventually lead to unlikely disturbance to end-users and tenants of the property creating less performance: health hazard, safety hazard, and depreciating asset and deficient value for money. According to RICS (2013), a maintenance policy is very vital requirement for an effective and efficient performance of properties with maintenance being engaged. The type of property will determine the kind of maintenance policy to be adopted, hence there is no one policy that is completely suitable for all types of properties (Lee and Scott, 2008).

Elements of Property Maintenance Policy Statement

Several issues are to be considered or addressed when developing and formulating property maintenance policy statement. Lee and Scott (2008) argues that there are three essential elements for consideration when formulating property maintenance policy statement, namely: maintenance strategy, maintenance standards, maintenance resources and technologies. RICS (2013) also argues that four main primary issues need to be addressed when formulating property maintenance policy statement are:

- The use trend and need of users of the facility
- The appropriateness of the facility for their purposive use
- The lawful structure of occupancy, and
- Environmental policy and sustenance

Maintenance policy requires combination of different approaches for formulating, but the choice of maintenance strategy is arguable. Understanding more about the organizational objectives helps to compromise a solution for improving the allocation of maintenance resources.

Need for Maintenance Policy in Enhancing Property Performance

According to Adenuga, Olufowobi and Raheem (2010), the forces that catalyze the growth of economic, social and technological advancement of any nation is the development of maintenance culture. Both public and private properties lack adequate maintenance care or attention, and it is a glaring fact that our properties

are in a very poor and deplorable conditions of structural and decorative disrepair. Poor maintenance practices are the result not so much on lack of resources as a “lack of workable strategies, methodologies and techniques for effective utilization of available resources in a systematic and methodical manner” (UNHABITAT, 2008). This general lack of maintenance culture has persisted in the country’s town mainly due to the fact that Nigeria does not have a statutory maintenance policy. Smith (2003) suggested that there should be a law dictating the minimum maintenance requirements necessary to ensure property performance in the area of safe and healthy buildings, services and surroundings. Also, there should be agents to ensure that the law is duly enforced that would be translated in the property performance. Best maintenance policy is actually defined in two distinct categories (Adenuga et al, 2010):

- Standards for measurable performance level of maintenance execution, and
- The methods and strategies that must be practiced in order to meet standards.

Property performance is measured by the effective maintenance policy used, generally to evaluate maintenance effectiveness (Iwarre and Lawal, 2011). The need of maintenance policy enhancing property performance arises in decisions whether to speed up the exiting service rate of each channels of maintenance working at the same rate as the present ones, or whether to provide extra channels ones working at the same rate as the present once, or whether even a reduction in service property can be contemplated. To this end, there is need to keep record on how these properties are being maintained, for proper decision and actions taken will enhance efficient performance of the property.

Need for Commercial Property Performance

There is growing recognition of the need to preserve the existing properties in the market as it has a critical role to play in addressing the need for affordable property (Windapo, 2005). Efficient and effective utilization of these properties is a contributing factor to the enhancement of property performance. The need for property performance can be realized by considering the adverse consequences of lack of effective maintenance policy. Lack of effective maintenance policy can contribute to loss of profit which hinder the realization of some property investment objectives (Nkpote and Frank, 2019). It is however necessary that property performance or its effectiveness is continuously evaluated to ensure optimal availability and utilization of maintenance policy to show the monetary value of the property.

Importance of Maintenance Policy

The following is the significance of the maintenance policy (Iwarre and Lawal, 2011):

- Ensures that equipment is always in ready and reliable condition. This ensures property

manager/maintenance manager is able to respond to any sudden change in demand.

- Ensures that equipment is always calibrated to provide good quality products and competitive advantage. This ensure that there are no sudden and frequent breakdown and reduce production of defective products.
- Ensures that there are no major breakdowns. This ensures that there is no loss of inventory or market share for investors following JIT philosophy
- Ensures that cost is always controlled
- Maintenance policy is particularly important in capital intensive investment.

If property investors are not able to implement an effective maintenance policy than it can result in the following results (Nkpote and Frank, 2019):

- Full capacity utilization may not be achieved
- Increase production cost as fixed labour cost cannot be reduced
- Reduction in product quality and increase in wastage
- Increase in maintenance cost as more spare parts are required.
- Safety of workers and operators in jeopardy.

If proper and regular maintenance policy is undertaken than production capacity can be maintained at a more or less same level which may enhance property features capable of its performance.

METHODOLOGY

The research design utilized in this study was a cross sectional survey design that involves a number of 138 functional commercial properties in Port Harcourt Rivers State including the maintenance managers, owners and occupiers of the buildings. For the purpose of carrying out a survey into maintenance policy and providing a strategic approach of efficient means for enhancing best property performance, interview was focused on some selected Estate surveying and valuation practitioners and the occupiers Simple random sampling technique was used to select a total 102 owners and occupier’s commercial properties. The utilized structured questionnaire and key informant interview to collect primary data from 77 respondents representing 75% response rate require was achieved. The primary data included the responses from personal interviews and field survey by the researcher. The secondary data comprised theories, research findings through internet, journals and books. Descriptive statistics including thematic and content analysis were utilized in analyzing data to identify the measureable values of maintenance policy towards best property performance.

DISCUSSION OF FINDINGS

The results and discussion of findings for the study are presented below.

Maintenance Policy Formulation

Table 1 showed that more than half of the respondents (55%) agree that choice of maintenance strategy, defining maintenance standard, allocation of maintenance resources and technology and technical knowledge are the essential elements for formulating maintenance policy. The study discovered that there are three (3) considerations for developing maintenance policy: property maintenance objectives, benefit and policies; without considering maintenance policy, the property owner will be denied of their efficient property performance. An in-depth interview revealed that previous property agent/manager did not consider maintenance policy formulation as an aspect that would efficiently and effectively serve as means of enhancing property performance. And these were the bone of contention between the landlord, tenants and lawyer

being the manager of the subject property. The main purpose of an efficient property performance as established in the study; is to obtain benefits with integration of adequate maintenance policies as well as proper procedures for planning maintenance activities. Maintenance work is carried out to maintain values of the physical assets (property) stock and quality including yield, turnover, operational expenditure, net operating income to determine it performance. However, apart from the value consideration, property/maintenance managers should be grounded by rules in the allocation of maintenance resources available to the property management. Maintenance policies are beneficial to the property performance, and performance must relate to the cost involve for getting maintenance funding.

Table 1: Essential Elements for Formulating Maintenance Policy (N = 77)

Essential Elements	SA(5)		A(4)		U(3)		D(2)		SD(1)	
	N	%	N	%	N	%	N	%	N	%
Maintenance Strategy	23	30.0	21	27.2	14	18.1	10	13.0	9	11.7
Maintenance Standard	22	28.5	20	26.0	15	19.5	10	13.0	10	13.0
Allocation of Resources	21	27.2	24	31.2	12	15.6	10	13.0	10	13.0
Technology/Technical Skill	16	20.8	13	16.9	13	16.9	13	16.9	12	15.6
Total	92	116	78	100	54	72	44	56	40	52
Average	23	30.0	19	25.0	13	18.0	11	14.0	10	13.0

Source: Author’s Field Investigation, 2020

Benefits of Maintenance Policy towards Property Performance

Table 2 indicated that >60% of the respondents identified asset performance, cost and spending, efficiency, safety and compliance, work order and inventory management, and downtime as the benefits derived from maintenance policy towards enhancing property performance. All these identified factors are group into three main indicators (asset, operational and inventory) as shown in the study. The findings showed that the maintenance strategy adopted in commercial buildings is to extend the life cycle of properties and its fittings/services. In the course of this study, it was observed that some maintenance personnel choose different maintenance strategies depending on the allocation of resources. And as formulated in maintenance policy, strategy is the integration of different approaches; corrective, preventive and condition-based maintenance. Also there are different interpretations among maintenance managers in different organizations about acceptable maintenance standards; higher or lower than the original standard, would depends on how much the maintenance resources

is employed. Although this standard is influenced by the available resources, which the maintenance personnel have to define maintenance standard by looking at the balance between the cost and resources of maintenance. In the course of this study, it is important to interpret the acceptable standard with different approaches because maintenance standard is a fundamental element to maintenance process. However, owing the economic downturn, property managers have pressure to reduce operation cost and staff level of the maintenance sub-units as to optimize the available constraint resources. Moreover, allocation of maintenance resources is often chaotic and risks associated with this disorganized maintenance resources have an impact on the efficient performance of the property in question. This was brought to the attention of our firm by the owner/tenants insisting that they have interest in maintenance policy to revolve around efficiency, costs and spending, safety and compliance, asset performance, downtime, work order management and inventory management as watch words of the importance of maintenance policy.

Table 2: Benefits of Maintenance Policy to Property Performance

Benefits of Maintenance Policy	Weigh: N = 77					Σfx	Σfx / Σf	%
	5	4	3	2	1			
Asser performance	15	16	12	8	8	184	3.34	67.0
Cost and spending	13	15	12	10	7	179	3.25	66.0
Efficiency	14	13	10	10	10	173	3.14	64.0
Safety and compliance	15	11	11	11	9	174	3.16	65.0
Work order management	14	13	10	10	10	173	3.15	63.0
Inventory management	14	13	10	10	10	173	3.15	63.0

Downtime	12	13	13	11	9	173	3.15	63-0
Average							3.20	64.4

Source: *Author’s Investigation, 2020.*

Measurable Values of Maintenance Policy towards Property Performance

Table 3 revealed that more than half of the respondents with relative importance index (RII >0.60) ranked consistent stream of income, occupancy rates, average arrears, tenant turnover, operational expenditure, yield, net income, repairs and maintenance costs, revenue growth, and management fees as the measureable values for property performance. The study indicated that optimizing the performance of commercial properties is crucial to maintenance success. From information received from key informants, maintenance policy performed can impact on commercial property performance in many ways; cutting costs by a certain amount or reduce spending/production of waste. Unfortunately, some property managers do not have control over maintenance operation and practical ways to improve property performance. Understanding the maintenance metrics; asset, operational and inventory each will help

connect the dots between maintenance actions and performance impact, as for one to make informed decisions on property performance? The best way to find balance in maintenance task and property performance is to clarify to investor’s goals and set the specific key performance indicators for those targets. As a property manager, vacancy rate, tenant turnover rate, yield, operational expenditure, net operating income, repair and maintenance cost, property management fees and revenue growth must be checked to ascertain how the property is performing. This is often not the case for some property managers, particularly those who work independently. In most cases too, property managers will be able to find cost savings to drive more growth in cash flow as well as the yield. Yield is an important way to measure commercial property performance from the current and future income on the investment through proper maintenance policy.

Table 3: Measureable Values of Maintenance Policy to Property Performance

Values of Property Performance	Weigh: N = 77					Σfx	Σfx / Σf	RII	Rank
	5	4	3	2	1				
Consistent stream of income	15	16	12	8	8	184	3.34	0.67	1 st
Occupancy rates	13	15	12	10	7	179	3.25	0.66	2 nd
Tenants turnover	14	13	10	10	10	173	3.14	0.64	4 th
Operational expenditure	15	11	11	11	9	174	3.16	0.65	3 rd
Increase Yield	14	13	10	10	10	173	3.15	0.63	5 th
Repairs and maintenance cost	14	13	10	10	10	173	3.15	0.63	5 th
Revenue growth	12	13	13	11	9	173	3.15	0.63	5 th
Net income	12	13	10	12	10	170	3.09	0.62	6 th
Average arrears	13	12	12	10	10	170	3.09	0.62	6 th
Management fees	8	17	14	9	9	168	3.05	0.61	7 th
Average							3.13	0.64	

Legend: 1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree.

Decision: <3.00 = Disagree, > 3.00 = Agree

Source: Author’s Investigation, 2020.

Propose Strategies of Maintenance Policy for Efficient Property Performance

The study demonstrated that maintenance policy is concerned with maintenance strategy standard and resources which is categories as the major components for formulating maintenance policy. These has always brought conflict between maintenance personnel and top management because it is a management tool to be agreed before implementation. It has also been difficult experiences in determining the maintenance strategy and standard because of the constraint of maintenance resources. Unfortunately, understanding the relationship between the top management at the strategic level and maintenance personnel at the operational level are to be considered important for better property performance through maintenance operation processes. In most cases as the study discovered, where property performance is enhanced through maintenance policy, the results include

adequate maintenance funding, agreement of the implementation of maintenance policy developed maintenance policy be considered based on maintenance objectives in relation to avoid errors, training of personnel and prompt response to repairs.

CONCLUSION

Efficient enhanced property performance and maintenance policy are the major component of achieving the goal in property investment. It is also important to ensure efficient and equitable systems for maintenance and management of commercial properties. This was provided in the study to ensure that maintenance policy as management tool be agreed upon between maintenance personnel and management before its implementation: this work analyzed the elements to be considered in formulating maintenance

policy: strategy, standard and resources that are partly affecting property performance.

The importance of maintenance policy as an efficient means of enhancing property performance is not receiving attention with a progressively and hastily varying nature of commercial properties, the responsibilities of its performance lies on property/maintenance managers, owners/tenants to improve their attitude towards maintenance policy thereby guaranteeing effective utilization of resources. Out of the six strategies and recommendations raised in the effort to achieve the objectives of the study, it is believing that the strategies outlined are very significant for maintenance policy of commercial properties, that is;

- After evaluation of maintenance policy framework of commercial properties; the property manager and property owner need to agree on issues of the maintenance policy framework before implementing them, and also the developing maintenance policy must be based on strategy, standard, resources and technology in relation to property performance.
- Generally, the identified measurable values of maintenance policy towards better property performance, as indicated in the study should include: calculations of yield, vacancy rate, tenant turnover, operational expenditures, net operating cost, maintenance services and management fees.

Therefore, the importance of maintenance policy, measurable values of maintenance policy as well as proposed strategies that will efficiently enhance multi-tenanted commercial properties in Port Harcourt, Rivers State; the way forward has been recommended.

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