

Examining the impact of performance management strategies on the success of outsourcing maintenance management projects

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Abstract

The decision to outsource maintenance activities is usually driven by various factors, including cost considerations, lack of in-house expertise, the need to focus on core competencies, flexibility requirements, and access to specialized skills and resources. The aim of this paper is to examine the impact of performance management strategies on the success of outsourcing maintenance management projects with a view to understand the factors responsible for deterioration of properties Nigerian Tertiary Institution. The study developed and examined specify objectives such as, examining: effect of Poor maintenance management practice on academic activities, understanding the nature of maintenance, factors Inhibiting maintenance management activities, and factors responsible for deterioration of properties Nigerian tertiary institution. The study adopts the descriptive survey research design, the area of the study is Anambra State, South East of Nigeria. The nature and sources of data use in carrying out the study include both primary data and secondary data. The population of this study consists of 365 stakeholders involved in the maintenance management of six (6) tertiary institution buildings owned by Federal government and State Government in Anambra State. The sample size of 191 was judged to be representative of the total population and was selected using the proportionate random sampling technique. The data generated for this study was analyzed with appropriate statistical techniques. The techniques included frequency, percentages and mean score. Based on various findings from this study, the research therefore recommends that, institutions are encouraged to foster stronger collaboration and communication between decision-makers involved in outsourcing processes, business strategists, and those responsible for framework development and performance management. By aligning decisions with overarching business strategies and ensuring cohesive collaboration across these domains, institutions can create a more integrated and synergistic approach to outsourcing maintenance management, ultimately enhancing efficiency and effectiveness.

Keywords: Maintenance, outsourcing strategies, tertiary institution, construction projects and performance management strategies.

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I. Introduction

Maintenance is a combination of actions carried out to retain an item in, or restore it to an acceptable condition. But, Okolie, (2011), in his contribution, sees maintenance as a systematic supporting service on any device or equipment, to ensure the continued operation of the properties. In contrast, Lateef and Khamidi (2019) defined maintenance as the necessary processes and services commenced protecting, shield, improve and care for the building's fabrics and services to dish up their projected function all through their whole life span devoid of radically disconcerting of their basic features and functions. The goal of management is to achieve goals through people and ensure productivity or continuous improvement. It encompasses planning, organizing, staffing, leading, and controlling. Management applies to all types of organizations and managers at all levels. The focus is on creating surplus and maintaining effectiveness and efficiency. Management requires competence in problem-solving, administration, human resources, and leadership. Ultimately, management aims to guide resources and create an organization that achieves objectives with high morale and satisfaction. It involves planning, organizing, directing, and controlling to reach stated goals. It is the art and science of coordinating efforts towards specific objectives and utilizing nature's resources for human benefit. Overall, management

creates an internal environment where individuals can efficiently and effectively work together to achieve group goals. Maintenance management is an orderly and systematic approach to planning, organizing, monitoring and evaluating maintenance activities and their costs (Technical Information Document (Brandl, 2017). Outsourcing has become increasingly important in the business world, with potential benefits such as improved efficiency, cost reduction, and increased profitability. Organizations have realized that they can save resources by outsourcing activities that are not central to their vision and strategic goals. The concept of outsourcing in maintenance management refers to the practice of contracting out maintenance activities to external vendors or service providers, rather than keeping them within the organization. Instead of relying solely on in-house resources and personnel, companies or institutions opt to delegate their maintenance tasks to specialized external partners. The aim of this paper is to examine the impact of performance management strategies on the success of outsourcing maintenance management projects with a view to identify factors responsible for deterioration of properties in Nigerian tertiary institution .This was achieved by examining :the effect of Poor Maintenance Management Practice on Academic Activities ,factors Inhibiting Maintenance Management Activities and factors Responsible For Deterioration of Properties Nigerian Tertiary Institution

II. Literature Review

2.1 Effect of Poor Maintenance Management Practice on Academic Activities

Results emanating from previous studies in Nigeria reveal that maintenance management is often neglected, which leads to the eventual dilapidation of existing infrastructure. According to studies, dilapidated, unhealthy buildings in a decaying environment, as well as poor conditions in our surroundings, depress the quality of life and contribute in some measure to antisocial behaviour and learning behaviour, ultimately affecting the quality of learning outcomes. However, due to the strategic position of tertiary education in teaching practical and useful knowledge that society at large can model after and benefit from, the lack of an effective and efficient maintenance management practice at this level could have a negative effect on infrastructural maintenance operations in society at large.

Therefore, if school properties are not adequately maintained everything will be in disarray, but if properly and adequately maintained, the school building and equipment will be as neat as in their original state. Sadly, NAEAP (2005) observed that in Nigeria, maintenance culture is generally bad as it is easier for us to build new schools than to maintain existing ones. It further explained that the governments both at Federal, State and Local levels do not believe in maintaining existing school properties but in providing their own as per each regime that comes on board. The reason, the explanation went further, being that in Nigeria education is politicized. The issue being raised is that there appears to be inadequate maintenance of physical properties in Nigerian colleges of education. This is the true position as Nwagwu, Ehiametalor, Ogunu and Nwadiani (2001) lamented that billions of Naira have been spent in the construction of school buildings across the country, purchase of equipment, machines and furniture to enhance teaching and learning while only very little attention is ever given to maintenance. They also stated that school properties are usually considered to have perpetual and unpredictable wear and tear due to handling. Therefore, there is no gain saying the fact that, the importance of maintenance cannot be over emphasized, as it is not only essential component in the life cycle of properties, but also, to the life cycle of the users. This implies that, there is need to ensure that both the interior and surrounding environment of a building are cleaned and maintained regularly. This is in conjunction with the Biblical saying that, 'Cleanliness is next to Godliness'.

2.2 Understanding the Nature of Maintenance

According to Son and Yuen, (2013), maintenance of building covers many aspects of work which may be divided into four categories and thus:

- a. **First:** Planning, execution and cleaning of day-to-day maintenance which includes such activities as servicing and cleaning, and inspection of properties and components. For example, floors are usually swept daily and polished weekly, and painting done every 3 to 5 years.
- b. **Secondly:** Rectification work may be needed quite early in the life of the building because of design shortcoming, inherent faults in the use of materials or faulty construction. Those short comings often affect the performance of the component.
- c. **Thirdly:** There is the need to consider the replacement of costly items in building thus, the flat roof coverings to an apartment block may be re-laid or air-conditioning system in a hosted may be replaced every 10 years.
- d. **Finally:** Maintenance may also embrace aspect of retrofitting or modernization. This sector of the market concerned with alteration, addition and enhancement to existing building on both small and large. Retrofitting work includes all work designed either to expand the capacity of a properties or to enable the maintenance to perform some new function.

Obiegbu, (2013) equally observed that housing maintenance could take any of the following forms:

- a) **Decoration:** Painting and decorating, internal and external of building
- b) **Fabric:** The regular maintenance of the structure of building including foundation, walls (external and internal), floors, fittings and fixtures, internal finishes other structural items.
- c) **Service:** Plumbing and internal drainage, heating and ventilation, light and escalators, electric power and lighting, other mechanical and engineering services cleaning.

Consequently, building maintenance can also take the following:

1. **Servicing:** This is to maintain and repair machinery or cleaning operation under taken at regular intervals of varying frequency. For example, floors of buildings are usually swept daily and polished weekly. Painting for decoration and protection can be done every 4 years or more.
2. **Rectification:** Rectification means to put right or to correct a fault in a building as a result of poor design, faulty construction and damages of building materials and components in the transit. Typical examples include dampness in building walls as a result of wrong plumbing work. Wrongly done electrical wiring, painting failure of joint between slabs etc.
3. **Replacement:** Due to the fact that service conditions cause materials and component of buildings to decay at different rates. Therefore, much replacement work arises from deterioration of appearance than from physical breakdown of materials of elements. For instance, a rusty corrugated iron roofing sheets coverings to a building may be replaced, peeled PVC floor tiles, broken window louver blades, door keys etc.
4. **Renovation or Retrofitting:** This is to restore to good condition of existing building on both small and large scale. These include all work designed either/to expand the capacity of a maintenance or to enable the maintenance to perform some new functions and changing of old and absolute part of property to a more modern form. It is known as modernization. For example, some old existing residential building in our big towns are being converted to commercial buildings such as banks, hotels, office blocks. Furthermore, louver windows, jealousy windows are being replaced with aluminium sliding windows and casement windows.

2.3 Factors Inhibiting Maintenance Management Activities

The existence of poor maintenance cannot be said to be a natural problem and certainly has been driven by a number of factors. These factors can be noticed in several aspects of an organisation set up which might be stemmed from a number of negligent attitudes on the part of management. A study conducted by Jusoff, Syed, Bin and Adnan (2018) in Malaysia brought to the fore that poor maintenance management can be traced to low priority placed by an organisation on maintenance management. The researchers established that maintenance management is not considered as a major component of overall management due to the inability of management to appreciate and recognise the importance of undertaking all-inclusive maintenance management as part of an organisation's core functions.

1. **Lack of Professional and Technical Expertise:** The researchers also opined that poor maintenance management in Malaysia is pervasive because of the lack of local professionals with technical knowledge and specialised training in conducting maintenance management. Similarly, Yusof (2017) identified that the failure of organisations to make maintenance management one of the top priorities coupled with the lack of professionals with technical expertise in the area is the greatest recipe for the poor maintenance management in Africa. Keith as cited in Wuni,. (2018) also established that lack of maintenance management professionals is a cause of poor maintenance management and indicated that maintenance management is a new discipline in most part of the developing world with fewer institutions training professionals in that regard. Pretty much the same is evidenced in Ghana since maintenance management is yet to be introduced in the traditional and technical universities as well the various levels of education (Wuni, 2018). The absence of ready local expertise to timely responses to the poor state of repairs is considered a major reason for poor maintenance management.
2. **Ineffective Regulatory Maintenance Associations:** Jusoff, Syed, Bin and Adnan (2018) also identified that poor maintenance management is prevalent because most institutions do not have comprehensive management guides to regulate the conduct of maintenance management services and described maintenance management in Malaysia as 'not having standardised practice and implementation mechanisms. They identified that poor maintenance management in Malaysia can be traced to the non-existence of regulative maintenance management association which monitors the practice of maintenance management by property management consultants in Malaysia. This claim by the researchers might survive in Malaysia but in Ghana, there are disciplines with well-established associations regulating their practices and yet their services and products are still performing below expectation (Wuni et al., 2018).
3. **Inadequate Funds :**Yusof (2017) identified that a major cause of poor maintenance management can be attributed to insufficient funds and human resources (technical expertise) in the form of lack of maintenance managers for some organisations. This asseveration is, however, context-specific because organisations including institutions that train property experts have been known to have poor building outlook which are conspicuous signs of poor maintenance management.

Similarly, it has been corroborated and validated by Kamarazaly, (2013) that inadequate funding and technical expertise is the greatest recipe for poor maintenance management among public institutions. They posited that even if a public institution has a designated in-house maintenance manager and there are insufficient funds to undertake timely response to maintenance management demands, poor maintenance and poor maintenance outlook is to be expected. Budget restrictions on the amount to be expended on maintenance, lack of property maintenance knowledge by maintenance managers and the attitude of deferred maintenance by maintenance owners and managers have also been identified as some of the causes of poor maintenance management among institutions (Keith as cited in Wuni et al., 2018). This is rather most applicable in the Ghanaian situation because the institutions that train property professionals are few comprising two universities and a polytechnic. These professionals are employed in other institutions and consequently, fewer professionals would be available for employment as quasi-maintenance managers in the rather many public institutions.

4. Poor Building Design and Construction :Waziri (2016) opined that poor building design and constructions expose building to excessive demands for unplanned maintenance which contributes greatly to poor maintenance management in most public institutions. This mixed design study conducted in Nigeria using questionnaires revealed that even at the advent of the current technological advancement, maintenance of buildings is not factored into the building design and construction stage rendering them susceptible to frequent faults and damages; and the inability of management of such buildings to routinely respond to these maintenance concerns translates into the poor maintenance management in Nigeria. Similarly, earlier studies by Adejimi and Chohan as cited in Wuni et al. (2018) also established that poor maintenance management in public institution could be attributed to the inability of construction professionals to incorporate maintenance and maintenance management at the design and construction stage of a building life cycle. These defects at the design stage are also mostly preceded by poor constructions and the result is a frequent breakdown of properties during post-occupancy surveys (Adejimi as cited in Wuni, 2018).

5. A Low Priority in Capital Budgeting :Wordsworth as cited Wuni et al. (2018) rather identified that maintenance as part of maintenance management is given a lower priority in capital budgeting and to a great extent some institutions have no funds earmarked for maintenance, repairs and major renovations. Similarly, Hinks (2014) re-echoed that most public institutions do not earmark funds for maintenance and maintenance management because maintenance activities are viewed as ‘responsive’, discretionary and hence deferrable. The results of this low priority on maintenance have manifested in poor maintenance management. Blair (2014) also observed that poor maintenance management could be traced to inadequate maintenance management planning and funding. Most institutions defer maintenance until further deterioration and the nature of weather elements in tropical Africa rather speed up the decay and deterioration of the properties. When this derelict state of repairs is accompanied by long-deferred maintenance, poor maintenance management outlook is expected (Weidner, 2019). It was also established that some organisations rather place emphasis on the future capital needs of their movable assets and without similar planning for properties (non-current asset) leading to poor maintenance management in public institutions. This particular with those who see maintenance management to be more skewed to the management of physical workplace with a greater emphasis on the human resource than the buildings and infrastructure (Woodward, 2002; Blair, 2014).

6. Inadequate Planning :Blair (2014) also observed that poor maintenance management could be traced to inadequate maintenance management planning and funding. Most institutions defer maintenance until further deterioration and the nature of weather elements in tropical Africa rather speed up the decay and deterioration of the properties. When this derelict state of repairs is accompanied by long-deferred maintenance, poor maintenance management outlook is expected (Weidner, 2019). It was also established that some organisations rather place emphasis on the future capital needs of their movable assets and without similar planning for properties (non-current asset) leading to poor maintenance management in public institutions.

7. Good Leadership :Good leadership in the development of a framework for outsourcing maintenance management of tertiary institution buildings involves several key qualities and actions. Here is an explanation of how good leadership can be applied to this topic:

a. Vision and Direction: A good leader provides clear vision and direction for the development of the outsourcing framework. They have a deep understanding of the goals and objectives of outsourcing maintenance management and communicate this vision effectively to the team. They inspire and motivate others to work towards the shared goal.

b. Collaboration and Inclusivity: A good leader fosters a collaborative and inclusive environment where different perspectives are valued and incorporated into the framework development process. They actively seek input from various stakeholders, including maintenance staff, administrators, and external service providers. By involving relevant parties, the leader ensures that the framework reflects the needs and priorities of all involved.

c. Strategic Thinking: Good leadership involves strategic thinking and the ability to analyze the broader context in which the outsourcing framework will operate. A leader considers factors such as the institution's long-term goals, financial implications, market trends, and potential risks. They evaluate different options and make informed decisions for the benefit of the institution.

d. Effective Communication: Communication is vital in the development of the outsourcing framework. A good leader ensures clear and transparent communication throughout the process, keeping all stakeholders informed and engaged. They explain the rationale behind decisions, address concerns and questions, and provide regular updates on the progress.

5. Change Management: Outsourcing maintenance management represents a significant change for the institution and its staff. A good leader acknowledges the potential challenges and resistance that may arise and implements effective change management strategies. They help employees understand the benefits of outsourcing, provide necessary support, and address concerns to ensure a smooth transition.

e. Flexibility and Adaptability: Good leadership involves being flexible and adaptable in response to changing circumstances. A leader recognizes that the maintenance management outsourcing framework may need adjustments over time based on feedback, lessons learned, and evolving needs. They are open to making necessary modifications and continuously seek opportunities for improvement.

f. Continuous Improvement: A good leader understands the importance of continuous improvement in the outsourcing framework. They encourage a culture of learning and innovation, promoting regular evaluation and feedback loops to identify areas for enhancement. They promote a mindset of continuous learning and encourage the implementation of best practices.

By demonstrating these qualities and taking appropriate actions, a good leader can successfully guide the development of a framework for outsourcing maintenance management of tertiary institution buildings. Their leadership creates a positive and productive environment that supports the institution's objectives and ensures the successful implementation of the outsourcing initiative.

2.4 Factors Responsible for Deterioration of Properties Nigerian Tertiary Institution

The deterioration of properties in Nigerian tertiary institutions can be attributed to factors such as insufficient funding, ineffective management, lack of maintenance culture, inadequate infrastructure planning, and security challenges. These issues have been analyzed and discussed by various authors, highlighting the complexity of the problem. Insufficient funding is a significant factor hindering maintenance and upgrades of properties. Ineffective management and governance, including corruption and bureaucratic bottlenecks, also contribute to the deterioration. The lack of maintenance culture and inadequate infrastructure planning lead to poor maintenance conditions. Unrest and security challenges, such as student protests or external attacks, further exacerbate the situation. To address these issues, experts propose increased funding, improved governance structures, enhanced maintenance practices, better infrastructure planning, and increased security measures. Implementation requires cooperation from all stakeholders, including the government, university administrations, students, and staff. Addressing these factors is crucial for the development and revitalization of Nigerian tertiary institutions.

III. Methodology

The study adopts the descriptive survey research design, the area of the study is Anambra State, South East of Nigeria. The nature and sources of data to be used in carrying out the study include both primary data and secondary data. The population of this study consists of 365 stakeholders involved in the maintenance management of six (6) tertiary institution buildings owned by Federal government and State Government in Anambra State. The sample size of 191 was judged to be representative of the total population and was selected using the proportionate random sampling technique. The data generated for this study will be analyzed with appropriate statistical techniques. The techniques included frequency, percentages and mean score.

IV. Results and Discussions

4.1: Impact of effective performance management strategies on the success of outsourcing maintenance management projects in tertiary institutions in Anambra State

Table 4.1: Impact of effective performance management strategies on the success of outsourcing maintenance management projects in tertiary institutions in Anambra State N= 150

S/N	ITEMS	SA	A	U	SD	D	X	std
1.	Situational leadership that adapts to changing circumstances and needs of outsourcing initiatives	100 (66.7)	49 (32.7)	1 (0.7)	0	0	4.6600	0.48921
2.	Authoritative leadership that provides clear guidance and direction to outsourcing initiatives	48 (32)	100 (66.7)	1 (0.7)	0	1 (0.7)	4.2933	0.55013
3.	Visionary leadership that outlines a clear vision for outsourcing maintenance management and inspires others to follow	42 (28)	106 (70)	1 (0.7)	0	1 (0.7)	4.2533	0.53328
4.	Transactional leadership that establishes clear expectations and rewards based on performance metrics	50 (33.3)	98 (65.3)	0	1 (0.7)	1 (0.7)	4.3000	0.57638

5.	Charismatic leadership that energizes and inspires all stakeholders involved in outsourcing management.	52 (65.3)	98 (34.7)	0	0	0	4.3467	0.47750
6.	Empathetic leadership that demonstrates understanding and compassion for the challenges faced by all parties involved in outsourcing maintenance management.	97 (64.7)	51 (34)	1 (0.7)	1 (0.7)	0	4.6133	0.59963
7.	Encouraging collaboration and communication between outsourced vendors and institutional management teams	78 (52)	70 (46.7)	0	0	1 (0.7)	4.4400	0.58482
8.	Facilitating regular review sessions to assess performance and identify areas for growth and development.	51 (34)	95 (63.3)	1 (0.7)	2 (1.3)	1 (0.7)	4.2867	0.61673
9.	Collaborative leadership that empowers all stakeholders involved in outsourcing management	70 (46.7)	78 (52.0)	1 (0.7)	1 (0.7)	0	4.4467	0.55001
10.	Participative leadership that encourages input and feedback from all stakeholders in the outsourcing relationship	71 (47.3)	79 (52.7)	0	0	0	4.4733	0.50096

Source: Researcher Field Survey, (2023)

From table 4.6 above presents data related to different leadership styles and their effectiveness in the context of outsourcing initiatives were measured, where item 1 revealed that situational leadership that adapts to changing circumstances and needs of outsourcing initiatives is one of the impact of effective performance management strategies on the success of outsourcing maintenance management projects, this was discovered as a result of 66.7% of respondents strongly agree, 32.7% agree, and 0.7% are undecided or disagree with this item. The mean score is 4.66, indicating a high level of agreement with the effectiveness of situational leadership in adapting to changing circumstances. Item 2 equally revealed that authoritative leadership that provides clear guidance and direction to outsourcing initiatives were supported by 32% strongly agree, 66.7% agree, 0.7% are undecided, and 0.7% disagree. The mean score is 4.29, suggesting a generally positive perception of the effectiveness of authoritative leadership in providing guidance and direction. Item 3 revealed that visionary leadership that outlines a clear vision for outsourcing maintenance management and inspires others to follow was supported by opinion of 28% strongly agree, 70% agree, 0.7% are undecided, and 0.7% disagree. The mean score is 4.25, indicating a generally positive perception of the effectiveness of visionary leadership in outlining a clear vision and inspiring others. However, Item 4 suggested that transactional leadership that establishes clear expectations and rewards based on performance metrics: 33.3% strongly agree, 65.3% agree, 0% undecided, 0.7% disagree, and 0.7% strongly disagree. The mean score is 4.3, suggesting a generally positive perception of the effectiveness of transactional leadership in establishing expectations and rewards.

In item 5 it was revealed that charismatic leadership that energizes and inspires all stakeholders involved in outsourcing management was supported by 65.3% strongly agree, 34.7% agree, and 0% are undecided or disagree. The mean score is 4.35, indicating a high level of agreement with the effectiveness of charismatic leadership in energizing and inspiring stakeholders. In item 6 empathetic leadership that demonstrates understanding and compassion for the challenges faced by all parties involved in outsourcing maintenance management were supported by 64.7% strongly agree, 34% agree, 0.7% are undecided, 0.7% disagree, and 0% strongly disagree. The mean score is 4.61, suggesting a high level of agreement with the effectiveness of empathetic leadership in demonstrating understanding and compassion.

Further, item 7 Encouraging collaboration and communication between outsourced vendors and institutional management teams, this was the opinions of 52% strongly agree, 46.7% agree, 0% undecided, 0% disagree, and 0.7% strongly disagree. The mean score is 4.44, indicating a high level of agreement with the effectiveness of encouraging collaboration and communication. In item 8 facilitating regular review sessions to assess performance and identify areas for growth and development was revealed that 34% strongly agree, 63.3% agree, 0.7% are undecided, 1.3% disagree, and 0.7% strongly disagree. The mean score is 4.28, indicating a generally positive perception of the effectiveness of facilitating regular review sessions, and item 9 revealed that collaborative leadership that empowers all stakeholders involved in outsourcing management which was indicated by 46.7% of our respondents strongly agree, while 52% agree, 0.7% are undecided, 0.7% disagree, and 0% strongly disagree respectively. The mean score is 4.44, suggesting a generally positive perception of the effectiveness of collaborative leadership in empowering stakeholders. In conclusion, item 10 measured that participative leadership that encourages input and feedback from all stakeholders in the outsourcing relationship was supported by the opinion of 47.3% strongly agree and 52.7% agree, where 0% are undecided or disagree. The mean score is 4.47, indicating a high level of agreement with the effectiveness of participative leadership in encouraging input and feedback.

By Implication, the majority of respondents agree or strongly agree with the effectiveness of different leadership styles in the context of outsourcing initiatives, indicating positive perceptions and support for leadership approaches that adapt to changing circumstances, provide clear guidance, outline visions, establish expectations, inspire stakeholders, demonstrate empathy, encourage collaboration and communication, facilitate reviews, empower stakeholders, and encourage input and feedback.

V. Recommendations

Institutions are encouraged to foster stronger collaboration and communication between decision-makers involved in outsourcing processes, business strategists, and those responsible for framework development and performance management. By aligning decisions with overarching business strategies and ensuring cohesive collaboration across these domains, institutions can create a more integrated and synergistic approach to outsourcing maintenance management, ultimately enhancing efficiency and effectiveness.

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