

Influence of Management Strategies and Contextual Factors on the Performance of Public Commercial Real Estate Investments in Bauchi Metropolis

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Abstract- *Public commercial real estate investments are pivotal for urban development and revenue generation, yet their performance in the Nigerian context is often sub-optimal, attributed to inefficient management practices. This study assesses the influence of management strategies and contextual factors on the performance of public commercial real estate investments in Bauchi Metropolis, Nigeria. Quantitative research design was employed, utilizing a structured questionnaire administered to 169 tenants selected through a proportional stratified random sampling technique. Data were analyzed using descriptive statistics and multiple regression analysis. The findings revealed a statistically significant model where management strategies and influencing factors collectively explain 77.1% of the variance in performance. Management strategies emerged as the dominant predictor ($\beta = 0.946$), significantly outweighing the influence of contextual factors ($\beta = 0.622$). While strengths were noted in financial management and communication, critical deficiencies in maintenance, security, and tenant responsiveness were identified as major impediments to performance. The study concludes that a proactive, strategic, and tenant-centric management approach is paramount. It recommends an immediate overhaul of maintenance systems, enhanced security, the institutionalization of formal tenant feedback mechanisms, and the development of standardized performance monitoring frameworks to improve asset value and financial sustainability.*

Index Terms- *Public Commercial Real Estate, Management Strategies, Investment Performance, Bauchi Metropolis, Contextual Factors*

I. INTRODUCTION

Commercial real estate, encompassing assets such as office buildings, retail spaces, and industrial warehouses, constitutes a significant component of global economic activity and wealth creation (Pelletti, 2022; Byun & Oh, 2025). The performance of these investments is shaped by a complex interplay of macroeconomic conditions, demographic shifts, technological advancements, and localized market dynamics (Kiura, 2024). A comprehensive understanding of this performance, therefore, requires a perspective that considers these interconnected forces across different regions and property types (Sly & Greene, 2024). Within this global context, public commercial real estate (CRE) investments represent a distinct and crucial segment. In Nigeria, these publicly owned assets, which include government office buildings, public markets, and shopping complexes, are intended to play a vital role in urban development, catalyzing economic activity and enhancing service delivery (Nebolisa & Udobi, 2024). The success of these investments, which often involve substantial capital outlays, is contingent upon effective management strategies and is subject to a complex array of internal and external factors (Onyegbula & Nwoye, 2023).

Understanding the determinants that significantly influence the performance of public CRE investments is paramount for policymakers, public administrators, and investment managers (Ibrahim, 2022). Poorly performing public CRE assets lead to inefficient resource allocation, underutilized spaces, reduced revenue generation, and an ultimate failure to achieve their intended public benefits (Ibern & Abbey, 2024). Conversely, well-managed and high-performing

public CRE contributes substantially to economic growth, enhances public services, and improves the overall quality of life in urban areas (Nwosu, Amoke, Kinikanwo & Ikeotuonye, 2025). The strategies employed in managing these assets are critical in mitigating potential risks and maximizing returns, with effective asset management encompassing a spectrum of activities from property maintenance and tenant management to financial oversight and strategic planning (Sado, Jinanwa & Ndeche, 2025). Empirical evidence strongly supports the notion that proactive and strategic management, coupled with an understanding of key influencing factors, is essential for ensuring successful performance (Nebo & Ndukwe, 2023; Sandu, Varganova & Samii, 2023).

However, a significant challenge persists in the Nigerian context, where the performance of public commercial real estate is often sub-optimal. This underperformance is frequently attributed to inefficient management practices characterized by reactive maintenance, poor tenant relations, outdated leasing strategies, and a general lack of professional, market oriented asset management principles (Aluko, 2023). The consequences are severe, leading to underutilized assets, reduced rental income, high vacancy rates, and rapid physical deterioration, which ultimately defeats the public investment's purpose and places a financial burden on the government (Ibern & Abbey, 2024). Recent empirical studies, such as those by Ojo and Adewusi (2024) in Southwestern Nigeria and Mohammed and Okonkwo (2023) in Northern Nigeria, have consistently highlighted the persistent nature of this problem and the critical role of management practices. While these studies establish a general link between management and performance in their respective regions, a critical gap exists in the empirical literature. There is a scarcity of research that specifically investigates the nexus between management practices and the performance of publicly owned commercial real estate within the unique context of Bauchi Metropolis. The specific combination of management strategies employed, the precise performance levels achieved, and the local factors that most significantly influence performance in this region have not been thoroughly investigated.

Therefore, this study seeks to bridge this identified gap by assessing the influence of management strategies and contextual factors on the performance of public commercial real estate investments in Bauchi Metropolis, Nigeria. The aim is to provide a localized, empirical understanding of this relationship, offering data driven insights that can inform more effective policy formulation and management practices. By focusing on prominent public assets, this research will contribute to enhancing the operational efficiency and financial viability of public commercial real estate in the region, ensuring they fulfill their intended role in urban development and revenue generation.

II. LITERATURE REVIEW

2.1 Public Commercial Real Estate Investment and Performance

Public commercial real estate (CRE) investment represents a significant portfolio of government assets intended to generate revenue, spur economic development, and provide quality commercial spaces (Egbu & Waziri, 2022). In the Nigerian context, this encompasses the involvement of government entities at federal, state, and local levels in the ownership, development, and management of income-generating properties such as office buildings, public markets, shopping complexes, and industrial parks (Nebolisa & Udobi, 2024). The performance of these assets is not merely a financial concern but is intrinsically linked to broader urban development goals, economic activity, and public service delivery (Nwosu, Amoke, Kinikanwo & Ikeotuonye, 2025).

The conceptualization of performance in public CRE extends beyond simple financial returns to encompass a multi-dimensional framework. Key performance metrics include financial indicators such as occupancy rates, rental yield, and return on investment (ROI), as well as physical metrics like the condition of the property and its capital appreciation (Immanuel, 2023). Furthermore, performance is increasingly gauged through tenant satisfaction, which reflects the effectiveness of facility management and the quality of the tenant-management relationship (Anamelechi & Ekenta, 2024). The success of these investments is contingent upon a complex interplay of management strategies

and a multitude of influencing factors, where poor performance can lead to inefficient resource allocation, underutilized spaces, and a failure to achieve intended public benefits (Ibern & Abbey, 2024). Empirical studies within Nigeria have provided insights into CRE performance, though findings vary by location and property type. For instance, research in Calabar and Onitsha by Effiong and Iweh (2022) and Udobi, Onyejiaka and Nwozuzu (2019) found that commercial properties, particularly shops, often outperform other property types on the basis of return and risk. Conversely, other studies, such as that by Akpaenyi and Igwe (2025) in Enugu, suggest that while rental values may grow, the overall viability of investments can remain stagnant. This highlights that strong financial performance cannot be assumed and is heavily influenced by localized management practices and market dynamics.

2.2 Management Strategies and Influencing Factors

The strategies employed in managing public real estate assets are critical determinants of their performance. Modern public real estate management has evolved from a passive, custodial role to a strategic, value-creating function (Sandu, Varganova & Samii, 2023). Effective management encompasses several strategic domains. Financial management strategies involve setting fair market rents, ensuring transparent billing, and maintaining flexible payment processes, all of which build tenant trust and ensure steady revenue (Adetoro-Folorunso & Ogunbajo, 2023). Maintenance and facility management strategies are paramount, with a shift from reactive repairs to proactive and preventative maintenance being essential for preserving asset value and functionality (Mołęda, Małysiak-Mrozek, Ding, Sunderam & Mrozek, 2023). Communication and relationship management strategies, including clear, timely communication and responsive complaint handling, are vital for tenant retention and satisfaction (Wanxin, 2023). Finally, marketing and occupancy strategies, such as curating a complementary tenant mix and actively working to minimize vacancy periods, are crucial for maintaining a vibrant commercial environment (Aungkulanon *et al.*, 2024).

The performance of these assets is also subject to a wide array of influencing factors, which can be categorized as follows:

Tenant Related Factors: The financial health, reputation, and sales performance of tenants, as well as the synergy of the tenant mix, directly impact the stability of rental income and the overall attractiveness of the property (Miller & Fernandez, 2023).

Location and Accessibility Factors: The timeless real estate axiom of location, location, location remains relevant, with factors such as proximity to complementary businesses, accessibility to public transport, visibility, and foot traffic being fundamental drivers of value and demand (Shin & Woo, 2024).

Management Related Factors: The responsiveness, transparency, and professionalism of the property management team are increasingly recognized as critical factors that can either mitigate or exacerbate other challenges (Iweala & Schmidt, 2024).

Property Specific Factors: The physical attributes of the property, including the structural quality, adequacy of parking, functionality of utilities, modern security features, and aesthetic appeal, form the tangible foundation upon which performance is built (Property Council, 2025).

2.3 Theoretical Underpinning

This study is anchored in three complementary theoretical frameworks (location theory, institutional theory and property management theory) that provide a lens for understanding the performance of public CRE.

Location theory posits that the geographic and spatial context of a property is a primary determinant of its economic value and performance (Dębińska & Pałubska, 2021). The theory emphasizes that attributes such as accessibility, visibility, proximity to markets and amenities, and the quality of surrounding infrastructure create externalities that significantly influence a property's profitability and utilization (Mäntylä, 2025). This theory directly supports the investigation of location and accessibility as key influencing factors in the study's

framework. Institutional theory advocates that organizational behaviour and outcomes are shaped by the formal and informal rules of the institutional environment (Bolomope, Amidu, Levy & Filippova, 2022). For public CRE, this implies that management practices and investment performance are influenced by governmental policies, regulatory frameworks, stakeholder expectations, and the pursuit of legitimacy (Alsharari, 2022). This theory helps explain how isomorphic pressures can lead to the adoption (or neglect) of certain management strategies within the public sector. Property management theory focuses on the principles and practices required to operate and maintain real estate assets effectively (Autio, Pulkka & Junnila, 2023). It provides a direct theoretical foundation for the management strategies examined in this study, encompassing tenant relations, maintenance systems,

financial oversight, and operational efficiency (Wanxin, 2023). The theory establishes a clear link between proactive, strategic management and enhanced property value, occupant satisfaction, and investment returns (Anamelechi & Ekenta, 2024).

2.4 Conceptual Framework

The conceptual framework for this study, depicted in Figure 1, synthesizes elements from previous research (Musyoki, 2016; Mbogo, 2016; Comber, 2021) and integrates the theoretical perspectives outlined above. It posits that the performance of public commercial real estate investments is a function of the interplay between adopted management strategies and a set of influencing factors. Figure 1 displays the conceptual framework of the study

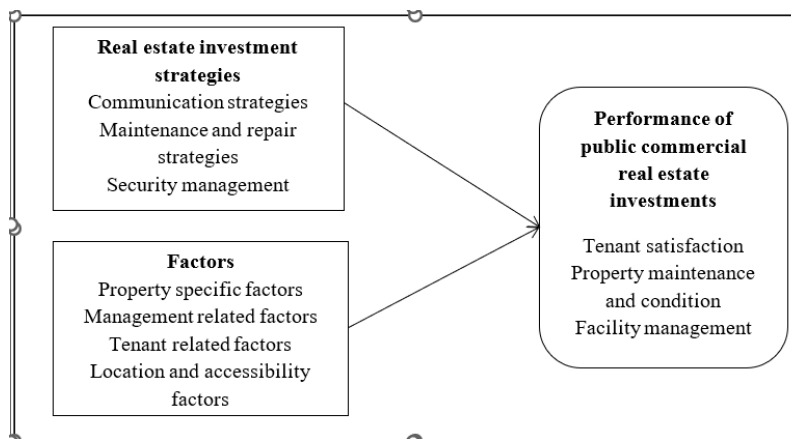


Figure 1: Conceptual framework of the study

The conceptual framework (Figure 1) posits that the real estate investment strategies including communication strategies, maintenance and repair strategies, security management, and tenant relationship management, along with several key factors such as property specific factors, management related factors, tenant related factors and location and accessibility factors, collectively influence the performance of public commercial real estate investments, which can be assessed through indicators like tenant satisfaction, property maintenance and condition and facility management in the study area.

III. METHODOLOGY

This study employed a quantitative research design to systematically investigate the influence of management strategies and other factors on the performance of public commercial real estate investments in Bauchi Metropolis, Nigeria. The quantitative approach was selected because it facilitates the collection of numerical data from a sizable sample, allowing for statistical analysis and the objective measurement of variables (Subbarayudu *et al.*, 2024). This design enabled the quantification of tenant perceptions, the assessment of performance levels, and the analysis of relationships between

management strategies, influencing factors, and property performance, thereby generating generalizable and reliable findings.

The study population comprised all tenants of the publicly owned commercial properties in Bauchi Metropolis, specifically targeting those from the Wunti Shopping Plaza and the Mustapha Katagum Shopping Plaza in the Government Reserved Area (GRA). This population was chosen because these tenants possess direct experience with the management practices and performance of the public commercial real estate in question, making them the most relevant source of data (Willie, 2024). The sample frame consisted of a total of 236 commercial property units (shops and offices) across these two complexes. The sample size was determined using the Yamane (1967) formula, considering a 95% confidence level and a margin of error of $\pm 5\%$. This calculation yielded a minimum sample size of 148. To account for potential non-response and damaged questionnaires, an additional 37 respondents were added, resulting in a final sample size of 185. A proportional stratified random sampling technique was employed to ensure fair representation from each shopping complex (Omair, 2025). This resulted in the selection of 56 tenants from the Wunti Shopping Plaza and 129 from the Mustapha Katagum Shopping Plaza. The primary instrument for data collection was a structured questionnaire, chosen for its ability to ensure uniformity in questions posed to all respondents, which facilitates easier coding, analysis, and comparison of data. The questionnaire was divided into four sections:

Section A collected demographic information from the respondents.

Section B assessed the strategies used in managing commercial public real estate investment using a 5-point Likert scale.

Section C evaluated the performance level of the investments, also using a 5-point Likert scale.

Section D analyzed the factors influencing performance, again employing a 5-point Likert scale.

The questionnaire was developed based on an extensive review of relevant literature and was meticulously aligned with the research objectives to ensure content validity. Furthermore, the instrument was subjected to expert review by the researcher's supervisors, who possess extensive expertise in real estate management and research methodology, and their feedback was incorporated to refine the instrument (Onyegbula & Nwoye, 2023). The internal consistency reliability of the questionnaire was quantitatively assessed using Cronbach's alpha coefficient. All key constructs recorded values significantly above the accepted threshold of 0.7, indicating a high level of internal consistency: Strategies for Management ($\alpha = 0.89$), Performance Level ($\alpha = 0.84$), and Influencing Factors ($\alpha = 0.91$). The method of data collection involved the direct administration of questionnaires. The researcher personally hand delivered the printed questionnaires to the selected tenants at the two shopping complexes. This method was chosen over postal or electronic surveys to ensure a higher response rate and to allow for immediate clarification of any questions (Pace, 2021). A total of 185 questionnaires were administered, of which 172 were returned. After data cleaning, 169 questionnaires were deemed suitable for analysis, resulting in a high analysis rate of 92.0% of the total returned.

The quantitative data collected were analyzed using the Statistical Package for the Social Sciences (SPSS) version 24. The analytical techniques were guided by the specific research objectives, employing both descriptive and inferential statistical methods. Descriptive statistics, including mean and standard deviation, were used to evaluate management strategies, assess performance levels, and rank influencing factors. The mean scores were interpreted using a decision rule interval adapted from Heo *et al.* (2022). To assess the collective influence of the identified strategies and factors on performance, multiple regression analysis was employed. This inferential technique was suitable for determining the predictive power of the independent variables (management strategies and influencing factors) on the dependent variable (performance of public commercial real estate investments).

The result for demographic information of respondents was presented in Table 1. The Table presents the attributes, options, frequency and percent of each result

IV. RESULTS AND DISCUSSION

This section presents the findings of the study, which sought to assess the influence of management strategies and key factors on the performance of public commercial real estate investments in Bauchi Metropolis. The results are presented in line with the research aim, followed by an integrated discussion that interprets the findings in the context of existing literature.

4.1 Demographic Profile of Respondents

Table 1: Demographic information of Respondents

S/N	Attributes	Options	Frequency	Percent
1	How long have you been a tenant in this commercial property	Less than 1 year	34	20.1
		1 - 3 years	46	27.2
		4 - 6 years	68	40.3
		Over 7years	21	12.4
2	What is the primary nature of your business	Retail trade (e.g., clothing, electronics, provisions)	43	25.4
		Wholesale trade	42	24.8
		Services (tailoring, barbing salon, pharmacy, restaurant)	48	28.5
		Office/professional services	36	21.3
3	What is your approximate monthly sales revenue	Below ₦100,000	28	16.6
		₦100,000 - ₦500,000	34	20.1
		₦501,000 - ₦1,000,000	58	34.3
		Above ₦1,000,000	49	29.0
4	What is the approximate size of your shop	Small (Less than 10 sq. meters)	43	25.4
		Medium (10 - 20 sq. meters)	78	46.2
		Large (Over 20 sq. meters)	48	28.4
5	What is your primary reason for choosing this particular property	Affordable rent	36	21.3
		Strategic location/high customer traffic	41	24.3
		Good condition of the building	39	23.1
		Reputation of the property management	36	21.3
		Lack of better alternatives	17	10.0

The demographic profile of the respondents provides crucial context for understanding the tenant base of the studied properties. The analysis revealed a stable tenant population, with a significant majority (40.3%) having occupied their properties for 4-6 years,

indicating a low turnover rate which is a positive indicator for consistent rental income (Nwosu & Kolawole, 2025). The businesses were diverse, dominated by service-based enterprises (28.5%) and retail trade (25.4%), suggesting a commercial

ecosystem that supports a variety of commercial activities. Financially, a combined 63.3% of tenants reported monthly sales revenues above ₦500,000, demonstrating that the properties host economically viable businesses, which is a direct contributor to the property's financial performance through consistent rental income (Adetoro-Folorunso & Ogunbajo, 2023). The primary reasons for tenancy were strategic location (24.3%), good building condition (23.1%), affordable rent (21.3%), and the reputation of the property management (21.3%). This strong link between tenancy and management reputation underscores that effective management is a key driver

of occupancy; however, the fact that 10.1% of tenants cited a lack of better alternatives indicates a competitive vulnerability that could be exploited if better-managed properties enter the market (Ibern & Abbey, 2024).

4.2 Influence of Strategies and Factors on Performance

A multiple regression analysis was conducted to determine the collective influence of management strategies and influencing factors on investment performance. The results, presented in Tables 2 and 3, indicate a very strong model fit.

Table 2: Effect of strategies and factors on the performance of public commercial real estate investments

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Mean Square	F	Sig.
1	.878 ^a	.771	.769	.37496	46.822	333.027	.000
					.141		

- a. Predictors: (Constant), Strategies, Factors
- b. Dependent Variable: Performance

Table 3: Coefficients of strategies and factors on the performance of public commercial real estate investments in the study area

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.141	.154		.913	.363
Strategies	.946	.052	.878	10.249	.000
Factors	.622	.064	.553	9.763	.000

The model yielded a multiple correlation coefficient (R) of 0.878 and an R Square value of 0.771. This indicates that the combined independent variables (management strategies and influencing factors) explain 77.1% of the variance in the performance of public commercial real estate investments. The model was statistically significant (F = 333.027, p = .000). Both predictors had a statistically significant positive influence. Management strategies were the dominant driver ($\beta = 0.946$, p = .000), indicating that a one unit improvement in strategic implementation leads to a 0.946 unit increase in performance. Influencing factors also had a significant, though weaker, positive effect ($\beta = 0.622$, p = .000). This finding underscores that proactive, high quality management is the most

powerful lever for enhancing performance, even within a given set of contextual factors (Newell & Lee, 2023; Clayton, Hanson, & March, 2024).

This finding underscores the paramount importance of strategic asset management. It aligns with contemporary research that emphasizes granular, property-level execution as a key driver of performance disparities (Clayton, Hanson, & March, 2024). Studies by Newell and Lee (2023) and Singh and Kagan (2024) corroborate that proactive management initiatives, including technological adoption and tenant experience programs, have a statistically significant impact on returns and serve as a crucial risk-mitigation tool. While influencing

factors remain foundational, their explanatory power is being surpassed by the alpha generating potential of strategic management, especially in complex market environments (Vargas & Peterson, 2025).

V. CONCLUSION AND RECOMMENDATION

The study conclusively demonstrates that the performance of public commercial real estate in Bauchi Metropolis is predominantly driven by the quality of its management practices, with financial and communication strategies showing strength, but critical deficiencies in maintenance, security, and tenant responsiveness significantly undermining overall asset performance. The research confirms a strong, statistically significant relationship where management strategies and influencing factors collectively explain over 77% of the variance in performance, establishing a clear, data-driven hierarchy of determinants. While the properties benefit from a stable tenant base, a complementary business mix, and a favorable location, these inherent advantages are insufficient to compensate for poor operational service delivery, particularly in maintenance systems and facility hygiene. The findings ultimately reveal a critical disconnect between procedural efficiency in back-office functions and the tangible, day-to-day tenant experience, highlighting that managerial action is the most potent lever for enhancing the value and returns of public commercial real estate assets in this context.

5.1 Recommendations

To elevate the performance of public commercial real estate, policymakers and asset managers should prioritize a fundamental shift from a reactive, administrative management model to a proactive, strategic, and tenant-centric approach. This entails an immediate overhaul of maintenance and facility management by implementing a digital, transparent issue-reporting system, establishing clear service level agreements for repairs, and conducting a comprehensive security audit to ensure robust safety provisions. Management must leverage its strengths in financial fairness and communication to build stronger tenant relationships by instituting a formal, time-bound complaint resolution protocol and conducting regular satisfaction surveys to create a continuous feedback loop. Furthermore, strategic

focus should be placed on enhancing the property's physical appeal and market positioning through a capital improvement plan for modernizing shop layouts, upgrading security, and improving exterior aesthetics, coupled with active marketing and tenant collaboration to boost customer footfall. Finally, public sector entities should institutionalize these findings by developing standardized performance monitoring frameworks based on the validated model to guide investment decisions, resource allocation, and professional development for property management teams.

5.2 Contribution to Knowledge

This study makes a significant theoretical contribution by empirically validating and quantifying a predictive model that establishes management strategies as the dominant driver of performance, thereby resolving a key ambiguity in real estate literature regarding the relative importance of managerial action versus external factors. It challenges conventional assumptions by revealing that operational strengths in financial management and core infrastructure do not compensate for failures in frontline service delivery, thereby enriching theoretical models of tenant satisfaction and stakeholder theory by demonstrating the non-compensatory and hierarchical nature of performance determinants. From a practical perspective, the research provides asset managers and policymakers with a validated, diagnostic framework for conducting holistic health checks of public real estate portfolios, identifying specific, actionable areas for improvement such as digital maintenance systems and tenant relationship management. The study ultimately bridges theory and practice by offering a robust, data-driven decision-making tool that enables a more strategic allocation of resources to enhance asset value, tenant retention, and the overall financial sustainability of public commercial real estate investments.

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