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Asset Management and Financial Performance of Construction Companies in Greater Kampala Metropolitan Area

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Abstract: The financial performance of construction companies is increasingly dependent on effective asset management practices that enhance operational efficiency, reduce project delays, and strengthen long-term sustainability. Despite the construction sector's significant contribution to Uganda's economic development, firms within the Greater Kampala Metropolitan Area continue to experience weak profitability, high debt ratios, and cost overruns, partly attributed to poor asset management systems. This study examined the effect of asset management on the financial performance of construction companies in the region, focusing on three key dimensions: asset register accessibility, repair and maintenance scheduling, and budget tracking and forecasting. Guided by the Dynamic Capabilities Theory, the study adopted a cross-sectional survey design and collected data from 191 construction companies selected through proportionate sampling. Structured questionnaires were used to gather quantitative data, and instrument validity and reliability were confirmed through expert review and Cronbach's Alpha. Data were analyzed using descriptive statistics, correlation analysis, and hierarchical regression. Findings revealed that all three asset management practices were positively associated with financial performance. Asset register accessibility showed a moderate significant relationship with financial performance ($r = .313$, $p < .01$), while repair and maintenance scheduling demonstrated a weaker but significant association ($r = .273$, $p < .01$). Budget tracking and forecasting also exhibited a positive relationship ($r = .168$, $p < .01$). Hierarchical regression results further indicated that asset register accessibility contributed the largest increase in explained variance (9.4%), followed by budget tracking and forecasting (2.7%), while the contribution of repair and maintenance scheduling was positive but minimal and statistically insignificant in the final model. Overall, the models explained 15% of the variance in financial performance. The study concludes that effective asset management enhances financial performance, particularly when firms maintain accessible and up-to-date asset registers and implement robust budgeting and forecasting systems. It recommends that construction firms strengthen digital asset management systems, adopt preventive maintenance schedules, and integrate data-driven financial planning tools to improve profitability, ensure timely project delivery, and enhance financial resilience in an increasingly competitive construction environment.

Keywords: *Asset management, financial performance, asset register accessibility, maintenance scheduling, budget tracking, construction companies, Greater Kampala Metropolitan Area.*

1. Background To The Study

The construction industry is a key element in global economic performance, as it stimulates infrastructure development, employment, and technological advancements (World Bank, 2023; Deloitte, 2024). According to Lu & Ye (2022), the asset management process encompasses the stages of planning, acquisition, maintenance, and performance tracking of assets, which are crucial for smooth operations and the financial stability of construction firms. The building and construction market, for its part, is estimated at around 11.4 trillion US dollars in 2024, with an increase of up to 16–17 trillion US dollars expected by 2030 (Deloitte, 2024). According to Egbelakin et al. (2024), the total turnover for the top 100 global contractors increased by 14.1 percent to $ 1,819 billion in 2021, while their combined market capitalization rose by 13.3 percent to $ 662,460 billion. The building and construction sector accounted for 5 to 7 percent of global GDP and employed more than 174 million people worldwide, thereby contributing significantly to achieving sustainable development and economic progress (International Labour Organization [ILO], 2023; World Bank, 2023). Practices of asset management, such as digital transformation, resource tracking, and maintenance planning, are becoming increasingly crucial in supporting this growth by ensuring the efficient use of resources, reducing project delays, and facilitating better financial returns (PwC, 2023).

Across the African continent, the construction industry has consistently posted growth rates, making significant contributions to regional infrastructure and economic transformation (African Development Bank, 2023). The African construction market in 2022 was valued at 13 trillion US dollars, having grown from its initial size of 10 trillion US dollars. It is expected to reach 219.66 billion US dollars in 2024 and 232.08 billion US dollars by 2025 (Lopes & Banaitienė, 2024; Next Move Strategy Consulting, 2025). This industry accounts for approximately 6% of global GDP and employs more than 100 million people; thus, it is a significant factor in reducing poverty and promoting urbanization on the continent (International Labour Organization [ILO], 2023). Generally, in Africa, the state of asset management practices appears weak, characterized by poor maintenance systems, inadequate records, and outdated technologies (Maphosa, 2025). They create barriers to project delivery timeliness, cost efficiency, and financial sustainability in the long run (Soni & Smallwood, 2024). While there is increased adoption in some countries of advanced technologies such as Building Information Modeling and blockchain-enabled asset management systems, the pace of their adoption remains irregular across the continent (Ogunbiyi-Badaru et al., 2024). Therefore, it goes without saying that asset management frameworks should be developed to enhance performance and resource efficiency, thereby promoting competitiveness within the African construction landscape (Sarah & Probohudono, 2024).

It accounts for over 12 percent of the national GDP and lies at the heart of infrastructure development and employment creation in East Africa, particularly in Uganda (Hakizimana et al., 2024; Construct Uganda Expo, 2026). In Uganda, the GDP from construction decreased from Ugandan shillings 2256.74 billion in the third quarter of 2021 to Ugandan shillings 2190.60 billion in the fourth quarter of the same year, but it increased later to Ugandan shillings 2959.99 billion in the second quarter of 2025, hence a recovery and steady growth in the sector (Tukundane & Yang, 2024; Trading Economics, 2026). Despite that positive upward trend, construction companies in the Greater Kampala Metropolitan Area have continued to experience serious financial problems. These include profit margins ranging from 3 to 7 percent and high debt ratios, which signal instability and threats to sustainability (Aguome et al., 2024). Obicci (2024) confirms that poor asset management, characterized by limited access to asset registers, inconsistent scheduling for repairs and maintenance, and weak budget tracking systems, forms the primary basis for poor financial performance. Obicci et al. (2025) concluded that, as the country has invested heavily in infrastructure, asset management is no longer an option but a necessity for ensuring value for money, project sustainability, and improved financial performance in Kampala Metropolitan Area construction firms.

The financial performance of construction companies stimulates economic growth, infrastructure development, and employment opportunities in Uganda (Hakizimana et al., 2024). Notably, most construction firms have implemented various asset management practices to track project progress, optimize resource utilization, and ensure timely project completion within the set budget (Tukundane & Yang, 2024). Despite these efforts, the financial performance of most construction companies in Uganda remains low, with profit margins ranging from 3 to 7 percent (Aguome et al., 2024). The equity returns are minimal, and most firms retain a high proportion of debt, which puts them at risk regarding financial stability and sustainability (Obicci et al., 2025). If the situation persists, it is likely to affect the liquidity status, causing delays and compromising the quality of projects, thus eroding investor confidence and suppressing economic growth (World Bank, 2023). These situations have been linked to poor asset management, characterized by obsolete systems, inadequate project monitoring, and inefficient resource utilization, which exacerbates financial constraints (Obicci, 2024). Hence, this study has investigated the gaps between asset management and the financial performance of construction firms in Uganda, providing suggestions aimed at achieving sustainable growth, improved project deliverables, and enhanced financial resilience (Tukundane & Yang, 2024).

2. Literature review

Theoretical Review

The study is guided by the Dynamic Capabilities Theory formulated by David Teece, Gary Pisano, and Amy Shuen in 1997. It states that organizations realize sustainable competitive advantage through competence building, integrating, and reconfiguring internal and external competencies in response to changing environments (Teece, 2023; Teece, Pisano, & Shuen, 1997). It assumes that firms operate in dynamic markets where their success hinges on their ability to sense opportunities, seize them through appropriate resource allocation, and adapt their operations to maintain long-term performance (Mele et al., 2024; Teece, 2018).

Furthermore, the theory posits that learning, innovation, and flexibility are enabling processes for firms to adapt under uncertainty, thereby ensuring continued competitiveness (Ostadi et al., 2024; Eisenhardt & Martin, 2000). In the context of this study, Dynamic Capabilities Theory can be used to explain how construction companies can improve their financial performance by better managing assets, such as maintaining accessible asset registers, scheduling timely repairs and maintenance, and ensuring accurate budget tracking and forecasting. Such practices demonstrate a firm's propensity to adjust its physical and financial resources in response to fluctuating project demands and changing economic conditions, thereby ensuring efficient operations and long-term stability (Köhler et al., 2022; Mele et al., 2024; Teece, 2018).

Dynamic Capabilities Theory has been applied to the construction industry to understand how firms perceive and leverage technological advancements, their predisposition to digital transformation, and the impact of fluctuating market conditions. Wijayarathne et al. (2024) noted that construction firms with strong dynamic capabilities successfully integrate digital tools to improve project performance, asset management, and ultimately, financial outcomes. Similarly, Aghimien et al. (2023) identified how firms that capitalize on innovation, knowledge integration, and technological adaptability tend to be resilient and realize higher productivity in the era of the Fourth Industrial Revolution. Ostadi et al. (2024) further demonstrated how dynamic capabilities provide a strategic roadmap for integrating Industry 4.0 technologies and how these help firms reconfigure resources to enhance profitability. These various studies reveal how dynamic capabilities allow firms to manage asset utilization, reduce operational risks, and sustain financial growth in a dynamic environment. Some recognized limitations of this theory include difficulties with empirically measuring capabilities and the challenge of establishing a direct link between dynamic capabilities and short-term financial outcomes (Teece, 2023; Helfat & Peteraf, 2015). The theory, however, remains highly relevant to this study, as it provides a sound conceptual base for understanding how construction firms in the Greater Kampala Metropolitan Area can improve their financial performance through continuous development and strategic management of their asset-related capabilities.

Empirical literature review

Asset register accessibility and financial performance

Access to the asset register is a critical component in asset management, directly impacting the financial performance of a firm through the precise tracking, utilization, and control of resources. Studies on enterprise asset management systems indicate that firms with structured and accessible asset records are more effective in optimizing resource allocation, reducing downtime, and enhancing financial accountability (Hastings, 2021; Komonen et al., 2022). Research in engineering and infrastructure organisations demonstrates that digitalized asset registers enhance operational efficiency and profitability by enabling timely decision-making and lifecycle monitoring of assets (Aubry & Lavoie-Tremblay, 2022). These findings suggest that accessible asset records enhance operational efficiency and profitability, indicating that construction companies that can maintain up-to-date and easily retrievable asset registers can better monitor project costs and optimize investments. This insight is particularly relevant to the construction sector in Uganda, where inadequate asset tracking has led to the underutilization of resources and financial flow leakages. However, there is limited empirical evidence on how asset register accessibility affects the financial performance of construction firms in Uganda.

Further evidence is provided by studies on asset utilization and firm performance, which indicate that access to reliable asset information positively influences profitability and liquidity outcomes. Research examining firm-level asset management practices found a significant positive relationship between effective asset documentation and financial performance, including improved returns on equity and stronger liquidity positions (Al-Matari et al., 2023). Similarly, investigations within the utility and energy sectors underline that structured systems for managing asset data lead to better maintenance planning, timely replacement of worn-out assets, and reduced operational costs (Gavrikova, Volkova, & Latyshev, 2022). These findings collectively support the notion that accessible asset registers are not merely administrative tools, but strategic mechanisms that enable firms to align asset management with financial objectives, minimize risks, and enhance overall performance. In relation to the construction sector, this underlines that accessible and accurate asset records can provide managers with actionable insights regarding budgeting, resource deployment, and project planning. Nevertheless, most existing studies focus on non-construction sectors, leaving a limited understanding of this relationship in project-based construction environments.

Further illustration from the construction and manufacturing context emphasizes asset register accessibility. Studies within construction firms show that organisations with stronger asset information systems tend to produce higher-quality financial reporting and experience better financial outcomes due to improved transparency and accountability (Ofori & Toor, 2023). Bolhassan et al. (2022) in the Malaysian construction industry emphasized that digitally captured and accessible asset records are critical for verifying smart contracts, monitoring project progress, and improving transparency. Research on asset management reporting construction practices further indicates that firms with structured asset information are better positioned to forecast cash flows and budget effectively (Hashim, Mohd-Nawawi, & Ahmad, 2021). All of the above contributory works demonstrate that improved access to the asset register contributes to enhanced financial performance through better decision-making, increased accountability, and more effective resource management. This synthesis presents a compelling argument that enhancing asset register accessibility is of strategic importance to ensure profitability and operational efficiency in construction companies within the Greater Kampala Metropolitan Area. However, limited studies have examined this issue within Sub-Saharan Africa, particularly in Uganda, which justifies the need for this study.

Repair and maintenance scheduling and financial performance

Scheduling repairs and maintenance is, therefore, a crucial aspect of asset management, significantly impacting the operational efficiency and financial performance of organizations. Okan and Aksoy (2022) analyzed the effect of proactive maintenance scheduling at Turkish Airlines Technic. This systematic planning approach drastically reduced maintenance costs while increasing profitability. It was apparent from their work that preventing unplanned stoppages in production by timely repairs ensures resource utilization with minimum disruption to operations and long-term financial viability. Rediske et al. (2022) analyzed maintenance practices at photovoltaic plants and identified key performance indicators linked to efficient maintenance scheduling, including increased output and reduced operating costs. In this respect, the study emphasized that predictive and timely maintenance enables organizations to utilize resources effectively by anticipating repair needs and minimizing unexpected losses. Delays in equipment or structural element repairs in a construction context increase costs and extend project timelines, reducing overall financial performance. From these observations, repair and maintenance scheduling is a strategic measure that preserves asset value and enhances resource utilization to attain high financial outcomes. What emerges from these studies is that accessible and structured maintenance plans form the basis for financial resilience, showing that firms with scheduled repairs are better placed to control costs and maintain profitability in dynamic operational environments. However, limited empirical studies have examined how repair and maintenance scheduling influences financial performance in construction firms within developing countries such as Uganda.

In the construction industry, the scheduling of repair and maintenance is particularly relevant to project performance and cost management. Mohammadi et al. (2022) applied lean principles to planning and scheduling in road maintenance and found that integrating maintenance activities into project schedules reduces resource wastage and delays, thereby improving project delivery. Outcomes from their study indicated that systematic maintenance resulted in better utilization of labor, materials, and machinery, leading to reduced operational costs and improved financial performance. Karuga et al. (2024) reported that projects with structured maintenance and financial planning attained higher completion rates and improved profitability. Hameed et al. (2024) further demonstrated the role of key performance indicators in monitoring building maintenance performance, highlighting how regular and scheduled maintenance reduces operational inefficiencies, extends asset life, and enhances cost-effectiveness. These studies confirm that maintenance scheduling links operational processes to organisational objectives and serves as a strategic management tool beyond technical requirements. Construction firms that apply systematic maintenance protocols are less likely to experience unexpected expenditure, project delays, or declining financial performance, reinforcing the need for structured maintenance scheduling within organisational planning frameworks. Nevertheless, existing research largely focuses on infrastructure projects outside the Ugandan context, leaving limited evidence on how maintenance scheduling practices affect financial performance among construction firms in the Greater Kampala Metropolitan Area.

The impact of repair and maintenance scheduling on financial performance has been further strengthened with technological advancements, enabling predictive planning and real-time monitoring of assets. Hasanuddin and Abd Rahim (2024) examined the applications of technology in building facilities management. They

demonstrated that automated scheduling systems enhance maintenance timeliness, reduce human error, and lead to cost savings and improved profitability. Zhao et al. (2022) developed a conceptual framework for applying digital twin technologies to building operation and maintenance, demonstrating that real-time monitoring, combined with predictive maintenance, minimizes downtime and improves resource utilization. Abidi et al. (2022) applied machine learning techniques for predictive maintenance in Industry 4.0 environments, finding that data-driven scheduling reduces unplanned expenditures and supports long-term financial resilience. Dzulkifli et al. (2021) reviewed best practices in building maintenance management and concluded that organizations with scheduled maintenance experience fewer delays, lower operational costs, and improved asset utilization. These studies collectively indicate that integrating technology with repair and maintenance scheduling strengthens the relationship between operational efficiency and financial performance. Construction companies, especially in fast-developing urban environments, need predictive, data-driven, and technology-enabled maintenance strategies to control costs and sustain financial performance. However, there is limited empirical evidence on the adoption and financial implications of technology-enabled maintenance scheduling in construction firms within Uganda, which this study seeks to address.

Budget tracking, forecasting and financial performance

Budget tracking and forecasting are significant features of financial management practices that have a substantial impact on a firm's organizational performance by facilitating appropriate resource allocation, controlling costs, and informing strategic decisions. Studies on financial forecasting and budgeting in small and medium enterprises show that strategic budgeting and revenue projections improve liquidity management and overall financial resilience (Lavia López & Hiebl, 2021; Pavlatos & Kostakis, 2022). They indicate that firms embracing detailed forecasting and continuous budget monitoring are better able to identify cash flow gaps, reduce unplanned expenditures, and optimize resources. Similarly, research on structured budgeting practices demonstrates a positive relationship between formal budget management and improved financial performance, suggesting that firms with sound budgeting regimes support strategic investments and operational planning more effectively (Grosu, Socoliuc, & Hlaciuc, 2023). Recent literature on modern approaches to financial forecasting emphasizes that proactive budgeting enables firms to respond quickly to market fluctuations and reduce resource misallocation, thereby sustaining profitability (Kliestik et al., 2024). These findings demonstrate that effective budget tracking and forecasting enhance financial control and support informed managerial decision-making. This is especially critical to the financial success of construction firms, as it enables the monitoring of project costs and revenues to ensure profitability. However, limited empirical evidence exists on how budget tracking and forecasting influence financial performance among construction firms in developing-country contexts such as Uganda.

Empirical evidence also indicates that effective budgeting and forecasting practices enhance project and financial performance in the construction sector. Studies on construction project financial management reveal that firms applying systematic budget monitoring and accurate forecasting experience fewer cost overruns, higher completion rates, and better returns on investment (Olawale & Sun, 2022). Research on construction contractors in emerging economies further indicates that real-time cost tracking and predictive forecasting contribute to improved profit margins and stable cash flows (Amoah & Pretorius, 2023). Additional evidence from the Ugandan construction sector suggests that detailed budget planning and forward-looking financial forecasting enhance risk management and reduce financial instability in project delivery (Aguome et al., 2024). Collectively, these studies suggest that budget tracking and forecasting, as part of financial management practices, enhance resource management, risk handling, and long-term planning, ultimately leading to improved profitability. Nevertheless, most studies focus on general project management practices and provide limited specific analysis of budget tracking and forecasting as drivers of financial performance in construction firms within the Greater Kampala Metropolitan Area.

Budgeting, forecasting, and actual financial performance are intertwined, with their relationship further strengthened by technological tools and modern analytical methods. Studies show that effective budgeting and forecasting increasingly rely on historical data, predictive analytics, and business intelligence tools to improve financial control and accuracy (Appelbaum, Kogan, Vasarhelyi, & Yan, 2017). Research on time-series forecasting and business intelligence applications demonstrates that data-driven forecasting reduces uncertainty, improves budget adherence, and informs strategic decisions (Grosu et al., 2023). Similarly, organisations with integrated forecasting systems are able to model future cash flows, predict cost overruns,

and allocate resources efficiently, thereby improving financial outcomes (Pavlatos & Kostakis, 2022). The integration of technology, therefore, enhances the reliability and precision of budget tracking and forecasting, enabling projects to be delivered within budget while minimizing risk and maximizing profitability. Advanced budgeting and forecasting practices are consequently important for construction companies operating within the Greater Kampala Metropolitan Area in achieving operational efficiency, financial stability, and strategic growth within a competitive and resource-intensive environment. However, there is limited empirical research on the adoption and financial impact of technology-enabled budgeting and forecasting practices among construction firms in Uganda, which this study seeks to address.

3. Methodology

The study used a cross-sectional survey design to collect data on asset management practices and financial performance among construction companies. This design was appropriate because it allows for exposures and outcomes to be measured simultaneously, providing a time-efficient and cost-effective way to test relationships (Setia, 2016; Wang & Cheng, 2020). The study was conducted in the Greater Kampala Metropolitan Area, which comprises a total of 380 registered construction firms. Using Krejcie and Morgan's (1970) sample size table, a sample of 191 companies was selected. Managers and head accountants were chosen as respondents because they are most knowledgeable about asset management and financial performance. Proportionate sampling was used to ensure fair representation of firms across Kampala, Wakiso, Mukono and Mpigi, following guidance from Etikan and Bala (2017) and Taherdoost (2017).

Primary data were collected using structured, self-administered questionnaires. Separate questionnaires were designed for finance managers and for field staff to ensure clarity and relevance to their roles (Dillman, Smyth, & Christian, 2014). To ensure quality, the study assessed both validity and reliability of the instruments. Content validity was assessed by experts and evaluated using the Content Validity Index, as recommended by De Vet, Mokkink, Terwee, and Knol (2011). Reliability was tested using Cronbach's Alpha following Mugenda and Mugenda (2003).

Data analysis followed a quantitative approach. The data were first coded and cleaned. Descriptive statistics, including means, frequencies, and standard deviations, were used to describe the characteristics of the respondents and the study variables. Inferential statistics, including correlation and regression analysis, were used to examine the relationships between asset management practices and financial performance. Statistical software such as SPSS provided accuracy and reliability in the analysis (Field, 2018).

4. Study Findings

Correlation matrix

Variables	ARA	RMS	BBF	NPM	ROE	FP
Asset register accessibility (ARA)	1					
Repair & maintenance scheduling (RMS)	.667**	1				
Budget Tracking & Forecasting (BBF)	-.071	.039	1			
Net Profit Margin (NPM)	.260**	.104	.143*	1		
Return on Equity (ROE)	.162**	.098	.115*	.412**	1	
Financial performance (FP)	.313**	.273**	.168**	.797**	.726**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. The correlation is significant at the 0.05 level (two-tailed).

Asset Register Accessibility (ARA) and Financial Performance (FP): The correlation results indicate a positive and statistically significant relationship between asset register accessibility and financial performance ($r = 0.313$, $p < 0.01$). This suggests that any improvement in asset register accessibility is associated with a corresponding improvement in financial performance. This suggests that when construction companies

maintain updated, accurate, and easily accessible asset records, they are better able to control costs, allocate resources efficiently, and enhance profitability and overall financial outcomes.

Repair and Maintenance Scheduling (RMS) and Financial Performance (FP): The correlation results indicate a positive and statistically significant relationship between repair and maintenance scheduling and financial performance ($r = 0.273$, $p < 0.01$). This suggests that any improvement in maintenance scheduling practices is associated with a corresponding increase in financial performance. This indicates that firms that plan, schedule, and execute timely repairs minimize project delays, reduce equipment breakdown costs, and consequently achieve better profitability and financial stability.

Budget Tracking and Forecasting (BBF) and Financial Performance (FP): The correlation results indicate a positive and statistically significant relationship between budget tracking and forecasting, and financial performance ($r = .168$, $p < .01$). This suggests that any improvement in budget tracking and forecasting is associated with a corresponding enhancement in financial performance. This suggests that firms that consistently monitor expenditures, project future financial needs, and control budget deviations are more likely to maintain stable cash flow, avoid cost overruns, and enhance their overall financial performance.

Hierarchical Regression

Variable	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Constant	3.17	0.09		2.52	0.14		2.42	0.16		1.92	0.22	
Are you a Certified Constructor?	0.09	0.06	0.088	0.06	0.05	0.062	0.07	0.05	0.066	0.06	0.05	
Type of Commercial Construction Project	0.09	0.04	.119*	0.09	0.04	.121*	0.09	0.04	.118*	0.07	0.04	
Asset Register Accessibility				0.23	0.04	.308**	0.17	0.05	.233**	0.19	0.05	
Repair and Maintenance Scheduling							0.08	0.05	0.113	0.06	0.05	
Budget Tracking and Forecasting										0.14	0.05	
R		0.147			0.341			0.351			0.387	
R^2		0.022			0.116			0.123			0.15	
Adjusted R^2		0.015			0.107			0.111			0.136	
R^2 Change		0.022			0.094			0.007			0.027	
F Change		3.347			32.251			2.426			9.421	
Sig. F Change		0.036			0			0.12			0.002	

The results of Model 1 indicate that the control variables (certification status and type of commercial construction project) account for 1.5 percent of the variation in financial performance (Adjusted $R^2 = 0.015$). Among the two variables, only the type of commercial construction project is a significant predictor of financial performance ($\beta = .119$, $p < .05$). This indicates that firms involved in certain categories of commercial projects tend to achieve better financial outcomes. Certification status does not significantly influence financial performance, suggesting that being a certified constructor alone does not lead to improved financial results.

Model 2 shows that adding asset register accessibility increases the explained variance by 9.4% (R^2 change = 0.094; $F\Delta = 32.251$; $p < 0.001$). The results reveal a positive and statistically significant relationship between asset register accessibility and financial performance ($\beta = .308$; $p < .001$). This means that firms with updated, accurate, and accessible asset registers tend to perform better financially. The increase in explained variance indicates that asset record accessibility plays a significant role in enhancing profitability, resource utilization, and operational efficiency.

When repair and maintenance scheduling is introduced in Model 3, it increases the variance explained by only 0.7 percent (R^2 change = .007; $F\Delta = 2.426$; $p = .120$), which is not statistically significant. Although the coefficient for repair and maintenance scheduling is positive ($\beta = .113$), it does not significantly predict financial performance in the presence of other asset management practices. Asset register accessibility remains

significant, although its beta value decreases from 0.308 to 0.233, suggesting that its influence overlaps partially with maintenance-related activities.

Model 4 adds budget tracking and forecasting, contributing an additional 2.7% to the explained variance (R^2 change = 0.027; FΔ = 9.421; p = 0.002). The results reveal a positive and significant relationship between budget tracking and forecasting, and financial performance (β = .14; p < .01). This indicates that firms that consistently monitor budgets, track expenditures, and utilize financial forecasts tend to experience better financial performance. At this stage, asset register accessibility remains significant, while repair and maintenance scheduling is insignificant, indicating that budgeting practices play a more important role in predicting financial outcomes.

Overall, the four models explain 15% of the variation in financial performance (R^2 = 0.150). Of this total, control variables contribute 1.5 percent, asset register accessibility contributes 9.4 percent, repair and maintenance scheduling contributes 0.7 percent (insignificant), and budget tracking and forecasting contribute 2.7 percent. These results indicate that asset register accessibility is the strongest predictor of financial performance, followed by budget tracking and forecasting. Repair and maintenance scheduling shows a positive but weak and non-significant influence, suggesting that companies benefit more from strong asset record systems and effective budget management than from maintenance scheduling alone.

5. Conclusion and Recommendations

Conclusion

The hierarchical regression results indicate that asset management practices have a significant impact on the financial performance of construction companies in the Greater Kampala Metropolitan Area. Asset register accessibility emerged as the strongest predictor, explaining the largest increase in variance when introduced into the model. This suggests that firms with accurate, accessible, and well-maintained asset records are better positioned to achieve improved financial outcomes. Budget tracking and forecasting also demonstrated a positive and significant impact on financial performance, indicating that consistent budget monitoring and forward-looking financial planning enhance profitability and operational stability. Although repair and maintenance scheduling had a positive direction, it did not significantly predict financial performance when other asset management components were included, suggesting that maintenance scheduling alone may not generate substantial financial benefits without robust asset records and effective financial controls. Overall, the models explained 15% of the variation in financial performance, underscoring the importance of structured asset management practices in enhancing firm-level financial results.

Recommendations

Based on the findings, construction firms should place greater emphasis on improving the accessibility and accuracy of their asset registers, as this was the strongest determinant of financial performance in the study. Firms should also strengthen their budgeting, tracking, and forecasting systems to support better financial planning and resource allocation. Furthermore, while repair and maintenance scheduling alone did not significantly influence financial outcomes, integrating it with improved asset record systems and financial tracking may enhance its effectiveness. By prioritizing these areas, construction firms can build more efficient asset management frameworks that support profitability, reduce inefficiencies, and improve long-term financial performance across the industry.

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