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INVESTMENT APPRAISAL AND FINANCIAL PERFORMANCE OF THREE-STAR RATED HOTELS IN NAIROBI COUNTY

BY

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Abstract

Investment appraisal techniques are drivers of financial performance by supporting informed capital allocation, profitability assessment, liquidity planning, and risk evaluation. This study examined the influence of investment appraisal techniques on the financial performance of three-star rated hotels in Nairobi County, Kenya. The study used an explanatory sequential research design that targeted 65 three-star-rated hotels. For the study,the finance officers from these hotels were used in the collection of quantitative data. The data was collected using structured questionnaires. Instrument validity, reliability, and pilot testing were carried out before data collection. For the data analysis, SPSS was used to carry out descriptive statistics, Pearson correlation, and multiple regression analysis. The results from the analysis showed that the Internal Rate of Return ($\beta = 0.468$) had a significant influence on the financial performance of three-star-rated hotels in Nairobi County, Kenya. From this study, it was concluded that appraisal techniques enhance the financial performance and sustainable growth of hotels.Based on the findings, it is recommended that three-star rated hotels in Nairobi County should adopt IRR as a primary tool for evaluating long-term investments.

Keywords: Financial Performance, Investment Appraisal Techniques, Internal Rate of Return, Three-star rated hotels, Nairobi County.

Introduction

Investment appraisal techniques enable businesses to assess the viability of prospective projects by weighing costs, risks, and expected returns, hence bolstering financial health and long-term sustainability (Kaoma et al., 2025). In the context of three-star rated hotels in Nairobi County, these techniques, when applied well, enhance the financial health and long-term sustainability of the hotel business, in addition to maximizing investor wealth. In order to enhance the wealth of its shareholders, a hotel company should always be evaluating potential long-range investment projects that could contribute to the fulfilment of its objectives such as wealth increase, survival, and expansion (Adhikari, 2022). There is a consensus that the behaviour of financial decision-makers, i.e. CFOs, influences the choice of a particular IAT approach, which in turn may influence the financial outcome of the decision (Ogbulu et al., 2025). Pupung Purnamasari &Adriza (2024) recommend for financial managers (CFO) and hotel owners to begin to learn and acquire knowledge and skills on more advanced investment appraisal methods such as the Internal Rate of Return (IRR), along with operational zing these techniques to maximize financial performance.

The IRR provides a single intuitive percentage that equates the present value of a project's discounted inflows with its outflows, making it easy to compare with hurdle rates, cost of bank loans, or required equity returns (Hazen &Magni, 2021). For the three-star hotel sector in Nairobi, IRR is commonly used as the rationale for energy-efficiency retrofits, technology-based or incremental service improvements generating rapid cost-savings or revenue uplifts with the deepest percentage returns. Yet IRR has a number of internal conflicting elements that make it difficult to interpret. It assumes that cash flows obtained in the interim are reinvested at the project's own internal rate, which is frequently unrealistic because similar investment opportunities may not be available and thus it may exaggerate compounded value (Xie& Chen, 2021). Projects that feature non-traditional revenue patterns, such as refurbishments that result in negative cash flow during closure periods until recuperation, can lead to multiple IRRs and confuse decision making. Moreover, IRR's percentage focus can incorrectly rank mutually exclusive projects by favouring a smaller, high-percentage initiative over a larger project with a lower IRR but superior absolute Net Present Value and strategic relationship (Wangchuk, 2022).

The hotel industry in Kenya is a key sector of the tourism industry, which accounts for about 10.4 percent of the national GDP and 1.6 million people (Kenya National Bureau of Statistics, 2023). The rise in international and domestic tourism, business travel, and government incentives to the hotel sector have driven the growth of Kenya's hotel industry. Ezema&Okeahialam (2025) postulate that large hotel chains and five-star hotels have been using NPV and IRR as investment appraisals, but three-star rated hotels have lagged in this respect because they lack financial expertise and capital constraints.Nairobi County accounts for about 40% of Kenya's hotel revenue (KNBS, 2023) and hosts roughly 150 three-star rated hotels catering to business travellers, local tourists, and mid-range international guests (Nairobi City County Tourism Report, 2023). However, capital wastage and unstructured asset evaluation lead to the underperformance of these hotels financially.

1.2 Statement of the Problem

Findings by the Kenya National Bureau of Statistics (KNBS)show that the performance of many three stars rated hotel within Nairobi County has been stagnating, this is a reflection of other sectoral issues that lie within Kenya's hospitality sector. Reports by KNBS reveal that hotel bed occupancy rates are yet to gain much traction, standing at 28.9% in 2024, a slight improvement from 26.2% in 2023, slowly bouncing back with the industry under using capacity. Though the subsector registered an increase in tourism revenue in the years 2023 to 2024 which was KSh 377.49 billion to KSh 452.20 billion respectively, the growth has not been consistent for all hotel categories, with mid-tier hotels performing below par. Variances in occupancy, revenue patterns and performance within city hotels are further underscored in reports by the Tourism Regulatory Authority and Kenya Tourism Board (2022). These challenges are further exacerbated by poor levels of adoption of structured investment appraisal methodologies, poor financial management capabilities, and restricted access to formal finance, as also highlighted by the Kenya National Chamber of Commerce and Industry (2023). Therefore, three-star hotels still report low profit margins, high-cost structures and limited growth.

There exists, however, a critical knowledge gap as to the extent to which investment appraisal methods, in particular Internal Rate of Return, affect the financial success of Nairobi-based three-star hotels.While global and regional studies emphasize tools such as Internal Rate of Return, most focus on large or high-end hotels, with limited empirical evidence on mid-range establishments. This study therefore seeks to examine how the application of Internal Rate of Return affects profitability, financial performance, and competitiveness of three-star rated hotels in Nairobi County.

LITERATUREREVIEW

The research was based on the resource-based view (RBV) proposed by Birger Wernerfelt in 1984 and further elaborated by Jay Barney in 1991 (Lubis, 2022). The concept is that the sources of a firm's competitive advantage is its ability to acquire internal resources which are valuable, rare, cost to imitate, and non-substitutable (VRIN). RBV framework states that businesses that anticipate to achieve success in the long-term should manage its unique internal resources, which will drive businesses to the right strategic choices for sustainable growth (Freeman et al., 2021). The ultimate reason for the RBV theory is to get a base that can support learning about how firms can use their internal strengths for the betterment of financial performance and for having a strategic advantage in the market.

Resource-based view theory is important in this study because it gives a strategic approach to how three-star rated hotels, especially three-star rated hotels in Nairobi County, can utilize internal resources to enhance financial performance. Given the limitations on resources that three-star-rated hotels within the hotel industry often face, the use of financial and operational resources is important for strengthening competitiveness. Investment appraisal techniques such as IRR are useful strategic instruments for three-star rated hotels to evaluate the monetary gain from investments, and guarantee that assets are allocated among projects following formal aims. IRR helps three-star rated hotels calculate the efficiency of investments, by determining the rate of return that will result from the present value of future cashflows compared to the initial capital employed. This fits in line with the RBV's focus on utilizing internal resources to incorporate value-added in the marketplace.

Empirical literature has also investigated the connection between organizational financial performance and IRR.Cherono (2019) did a study where she investigated financial appraisal techniques using a cross-sectional survey with descriptive and inferential statistics, which found that IRR is the main tool in making financial decisions to mobilize resources to profitable projects as well. The study showed that this precision in investment choices directly allowed for a better financial performance in terms of financial performance, as it helped avoid risky ventures, and this was the case as the study showed that there was not a substantial amount of cash flows in lower-tier hotels to support their management. Yet the acceptability of all-star ratings blunts its specificity to the three-star rated establishments that face distinct financial issues, like smaller budgets and that lie in the middle ranks of the market. However, this lack of specificity, in addition to the lack of consideration of how the Nairobi-specific economic or tourism factors affect the implementation of IRR in the three-star segment, makes the study inapplicable in the three-star segment.

Ndung'u and Kavinda (2019) used a descriptive approach with regression analysis to find out the practice of strategic management in Nairobi's three-star rated hotels and confirmed that IRR influenced financial performance with a view to improving profitability and operational financial performance by promoting projects with measurable goods like upgrades of the facility. Although resource constraints of the typical three-star rated hotel limited the opportunity to use IRR, not only was IRR used strategically to enhance precision and make decisions, but managerial oversight also was used to ensure that IRR was consistent with hotel goals. Although the study attains a targeted focus on three-star rated hotels, it is based on a single-point survey, which precludes longitudinal insights into IRR's sustained relationship on performance—crucial as Nairobi's economic condition and tourism are notoriously volatile and need long-term evaluation.

Kariuki et al. (2023) examined the strategic competencies of the star-rated hotels in Nairobi using a mixed methodology of interviews and surveys and found that IRR contributed to financial decision-making that supported operational expansion and financial success. Finally, the study linked IRR to outcomes in improved financial performance; capacity growth and/or service quality, and managerial competence had a contextual effect in ensuring effective implementation of IRR.

RESEARCH METHODOLOGY

This study used explanatory sequential research design. The target population based on Tourism Regulatory Authority (2024) was 325 three-star rated hotels in Nairobi County.

This design is appropriate for the study’s objectives as it focuses on establishing cause-and-effect relationships between variables, particularly how investment appraisal techniques influence financial performance (Taherdoost, 2022).The study targeted 325 financial officers who possess relevant knowledge and technical expertise and serve as key decision-makers within three-star rated hotels in Nairobi County. To achieve the study objective, the study utilized simple random sampling as its primary sampling strategy. The study sampled 20% of the three-star rated hotels, representing 65 hotels. Kasiulevičius et al. (2023) recommend that a sample size between 10% and 30% of the target group is sufficient for reliable representation, balancing statistical accuracy and practical considerations.The data were collected by means of structured questionnaires administered to the finance officers.The questionnaires included closed and open-ended questions that captured both measurable and explanatory responses. Descriptive data like means and standard deviation and inferential statistics like regression analysis were used to analyse the results of the quantitative data.

The multiple regression analysis model was then employed to analyze the impact of investment appraisal methods on the financial performance of the three-star hotels through the regression model: $Y=a+b_1X_1+\varepsilon$

Where:

Y=Financial Performance.

X_1= Internal Rate of Return

a= regression coefficient

b_1= Slope

ε= error term

RESULTS AND DISCUSSION

For this study, the response rate from the respondents was first presented to establish the adequacy and reliability of the data. Out of the 65 questionnaires administered to financial officers in the sampled three-star-rated hotels, 63 were completed and returned. This represents a response rate of 96.92%. Important demographic characteristics were then presented. This includes the age of the respondents, level of education, and years of experience working in three – star-rated hotels. From the data collected, most (52.4%) of respondents were aged between 36 and 45 years, 46.0% held bachelor's degrees, and 47.6% had three years of experience. These attributes indicate that the respondents were well-educated and experienced enough to confidently comment on the practices of investment appraisal.

Diagnostic tests were conducted to verify the appropriateness of the regression model. The Shapiro-Wilk and Kolmogorov-Smirnov significances of the normality test were greater than 0.05. The results of the Breusch-Pagan test was p-value = 0.834, indicating homoscedasticity, the tolerance values for IRR was 0.823 and the VIF value was 1.194, indicating no multi-collinearity concern. The questionnaire was reliable since all the Cronbach's Alpha coefficients were above 0.70 with IRR having the highest reliability coefficient value of 0.890, suggesting good internal consistency.

The findings revealed that participants considered IRR to be a useful investment appraisal tool with the minimum and maximum means of 3.79 to 3.98 and a total average mean was close to 3.91. Using IRR with Net Present Value (NPV) in investment appraisal was rated very important (M = 3.98, SD = 0.975), and then IRR could help to screen out those projects that generate more than the required rate of return (M = 3.97, SD = 1.107). The competence of the finance personnel to understand and utilise the IRR was also rated highly (M = 3.95, SD = 1.069). Respondents concurred that IRR contributed to the enhancement of hotel financial performance (M = 3.94, SD= 1.148) and was one of the tools for analyzing investments (M = 3.94, SD= 1.120). However, its usefulness in comparing projects of differing scale was rated the lowest, even though the level of consensus was high (M = 3.79, SD = 1.109).

These [results] indicate that the managers of three-star-level hotels consider the IRR to be an effective instrument when comparing the projects, evaluating the levels of profit- ability, and making investment treatments. The results are consistent with Brealey et al. (2019), who advised that IRR is helpful in measuring investment efficiency. Ross et al. (2021) who also recognized that IRR is a good complement to NPV, since it is an easy to understand and express as a percentage-based figure. Enz (2020) argued the synergy effect of combining IRR and NPV on investment eliciting within hotel projects, whereas Keng'ara (2019) associated best use of IRR with optimized cash-flow, enhanced risk assessment and improved financial performance.

The results indicated that the respondents agreed in considering IRR as a significant factor affecting the financial performance of three-star hotels in Nairobi County, with a grand mean of M =3.91 and SD = 1.082. The means on the survey items were from 3.79 to 3.98, indicating a strong consensus for agreement. Use of IRR was the top-rated (M = 3.98, SD = 0.975), followed by find projects that are higher than the required rate of return (M = 3.97, SD = 1.107), and employees to accurately interpret and use IRR (M = 3.95, SD = 1.069). To compare apples and oranges was the lowest ranking, but it still had influence (M = 3.79, SD = 1.109). The results are in line with Brealey et al. (2019), who confirmed that IRR can be used to compare investment projects of different scale and length of time. Ross, Westerfield, and Jaffe (2021) also stated that using IRR in conjunction with NPV results in better investment decisions. In the same vein, Keng'ara (2019) revealed that IRR enhances optimal cash-flow potential, risk evaluation and financial performance in service industries. The positive correlation between IRR and financial performance (r

= 0.639, p = 0.036) and its significant beta coefficient (β = 0.468, p = 0. 001) implies that IRR is the substantial factor for financial performance in the case of the three-star hotels.

Results from Regression Analysis

This study sought to examine the impact of Internal Rate of Return on financial performance of three-star hotels in Nairobi County. The analysis employed regression to test the impact of internal rate of return on financial growth of three-star hotels in Nairobi County. Financial performance was the dependent variable (DV) and the internal rate of return was the independent variable (IV).IRR was calculated by using forecasted rates of return and discounted cash flow, by comparing investment projects, by detecting those projects that are above the r, as well as by using it together with NPV in investment evaluation.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.620	0.380	.350	.674

The correlation analyses of the analysed data demonstrated R = 0.620, which suggested a moderately strong positive association between the financial performance of three star rated hotels and the combination of investment appraisal methods. The R^2 = 0.350 adjusted means that the IRR explained 35.0% of variance in financial performance after the number of predictors were controlled for.Besides, the estimated standard error of 0.674 shows predicted values of financial performance deviated on average from their corresponding observed values by that amount. Muchiri and Njenga (2020) came across comparable findings with those of this study when they concluded that investment appraisal methods, and IRR in particular, enhance profitability and operational efficiency in hotels in Nairobi. They also back the findings of Kariuki et al. (2023) that IRR enhances financial decisions and financial results. The findings therefore confirm prior evidence that formal appraisal systems, IRR based ones in particular, improve resource allocation and overall hotel financial performance (and sustainability).

FINDINGS

Correlation analysis showed that IRR positively associated with financial outcomes (r = 0.639, p = 0.000) and was the significant predictor of financial performance (β = 0.468, p = 0.001). This means that increased and effective application of IRR was associated with improved financial performance among the surveyed hotels.These findings show that hotels that consistently use IRR in evaluating investment alternatives, comparing projected returns with the required rate of return, and identifying financially viable projects are more likely to achieve improved financial results. The findings agree with Ndung'u and Kavinda (2019), who established that IRR improves financial performance by directing resources towards projects with measurable returns. They are also consistent with Kariuki et al. (2023), who found that IRR contributes to effective financial decision-making, operational expansion and improved financial performance in the hospitality sector. Therefore, IRR is an important investment appraisal technique for strengthening profitability, resource allocation, and the long-term financial performance of three-star-rated hotels in Nairobi County.

CONCLUSION

This study is important because it calls for the need to have sound investment decision-making among three-star-rated hotels in Nairobi County, where financial sustainability depends greatly on the ability of managers to identify projects capable of generating adequate returns. Hotels operate in a capital-intensive environment that requires substantial investment in accommodation facilities, technology, equipment, renovations, service improvement, and operational expansion. Poor evaluation of such investments may lead to inefficient allocation of resources, weak cash flows, reduced profitability, and difficulty sustaining operations. Therefore, having a better understanding of how the Internal Rate of Return influences financial performance is important because it ensures that limited financial resources are directed towards viable and profitable projects. Without structured investment appraisal practices, three-star-rated hotels may approve projects that fail to meet the required rate of return, expose the business to unnecessary financial risks, and weaken its long-term competitiveness and sustainability.

By examining the Internal Rate of Return among investment appraisal techniques, the research brings to light a significant financial management tool that affects the performance of three-star hotels. Previous research has focused on investment appraisal methods in various industries; however, how IRR specifically influences the financial performance of 3-star hotels in Nairobi County is hardly dealt with. It was found that financial officers view IRR as a useful and dependable method in assessing anticipated returns, for investment alternatives, that they can reject projects that have an IRR less than the required rate of return, and that the IRR can be used as a decision-making aid together with NPV. The mean value of 3.91 indicates that the participants were strongly in agreement that IRR is an important factor in investment evaluation and financial performance. The positive and significant relationship between IRR and financial performance also supported the previous finding that greater use or more effective use of the methodology leads to better financial results. These results demonstrate that financial performance is thus a function not only of investment resources but also of the techniques used to evaluate and spend those resources.

The implications of this study are also of interest to owners of hotels, financial directors, investors, and policymakers in the hospitality sector. The result can be used as an incentive to increase implementation of formal investment appraisal practice among three-star hotels. The IRR should be applied consistently in financial managers' reviews of investments and while they are looking at the returns from projects to see whether they are acceptable financially. Nonetheless, the IRR should be applied in conjunction with the NPV and other appraisal methods, particularly when used for comparing projects that differ in size or cash flow patterns. The ability of the hotel finance officer should also be upgraded by training on discounted cash flow analysis, IRR result interpretation, risk evaluation and input to investing. Application of IRR technique in hotel industry Roos (2002) stated that through better application of IRR, hotels may avoid losing investments, maximize return on cash flows, adequately allocates resources, and choose projects which lead to operation growth and profits. In the final analysis, the study advances financial management, organizational sustainability and competitiveness by establishing that stronger use of the Internal Rate of Return as a tool for investment appraisal is a driver of financial performance of three-star-rated hotels in Nairobi County. The result of the regression analysis shows a strong positive relationship between the IRR and the financial performance as shown by the coefficient of determination ($R^2 = 0.68$) implying that 68% of the variation in the financial performance is explained by IRR. The remaining 32% may be due to different variables that have not been captured in this study. Further research could also investigate liquidity management, capital structure and macroeconomic conditions to extend the understanding of organisational performance.

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