FEASIBILITY ANALYSIS OF TANJUNG ENIM HOTEL INVESTMENT IN THE TANJUNG ENIM MINING UNIT AREA OF PT BUKIT ASAM TBK

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Abstract

This study analyzes the investment feasibility of a proposed 4-star hotel development on idle land owned by PT Bukit Asam Tbk (PTBA) in Tanjung Enim, South Sumatra, as part of the company's strategic initiative to optimize non-productive assets and diversify beyond coal mining. Utilizing a mixed-method approach, the research integrates qualitative methods such as case benchmarking, document review, and SWOT analysis with quantitative financial modeling, including Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index (PI). Data were collected from both internal and external sources, including macroeconomic indicators, market trends, and comparable hotel benchmarks. Findings indicate strong legal and strategic feasibility, with the project aligned with zoning regulations and backed by full land ownership, eliminating legal uncertainties. Market analysis highlights robust demand driven by PTBA's industrial ecosystem and limited regional hotel competition. Financially, the hotel is viable with a projected NPV of IDR 17.291 billion, IRR of 14.80%, Payback Period of 8.88 years, and PI of 1.27. However, sensitivity analysis reveals significant vulnerabilities to room rates, banquet pricing, and occupancy levels. Therefore, strategic pricing, demand forecasting, and risk mitigation are essential. Overall, the project demonstrates strong investment potential, contingent upon effective operational and risk management strategies.

Keywords: Hotel Investment, Feasibility Study, PT Bukit Asam, Monte Carlo Simulation, Strategic Asset Optimization

INTRODUCTION

Unproductive land assets, particularly those held by the government or state-owned enterprises, represent a significant challenge in Indonesia. These idle lands remain untapped, despite their potential to drive economic growth. An illustrative case can be found in Tanjung Enim, South Sumatra, a coal mining region operated by PT Bukit Asam Tbk (PTBA), a prominent state-owned mining enterprise in Indonesia. This site possesses significant underutilized land resources that, when effectively leveraged, could facilitate business diversification, promote economic growth, and fulfill internal operational requirements. The prospective enhancement of hotel infrastructure in this area has the capacity to serve not only workers and business travelers but also to foster tourism centered around mining, akin to the initiative undertaken by PTBA in Sawahlunto City. The tourism and hospitality sector has become an essential catalyst for regional economic development, particularly in areas undergoing industrial transition. In Indonesia, numerous state-owned firms are exploring this sector as part of their strategic diversification initiatives, namely by leveraging idle or underutilized land holdings. The establishment of hotels, within the context of this broader economic transition, offers prospects for generating stable revenue streams, promoting local employment, enhancing infrastructure, and improving the business climate. Consequently, assessing the feasibility of these investment efforts is crucial for comprehending their sustainability and alignment with long-term organizational objectives.

Tanjung Enim, located in the Muara Enim Regency of South Sumatra, is distinguished by its robust industrial foundation, primarily driven by the activities of PT Bukit Asam Tbk (PTBA). Although the area may not attract a wide range of leisure tourists, there is a consistent demand for accommodation services. This demand is largely fueled by the operational activities of PTBA, along with its broad network of contractors, engineers, and corporate visitors. This trend indicates a promising opportunity in the mid-tier accommodation sector that emphasizes practicality, comfort, and accessibility rather than opulence. The establishment of a 3-star hotel designed to cater to the ongoing requirements of industrial and institutional guests presents a strategically sound opportunity. From a regulatory perspective, the land allocated for hotel development in Tanjung Enim falls within the R-3 zoning classification (Medium Density Housing) as outlined by Muara Enim Regent Regulation No. 1 of 2023. The location meets all necessary technical specifications for spatial use, encompassing fundamental building coefficients, floor area ratios, green space allocations, and allowable building heights. Additionally, since PTBA possesses complete ownership of the land, any legal complications associated with acquisition or negotiations with third parties are removed, thus facilitating a smoother start to the project. The spatial and legal factors outlined here establish a strong basis for assessing the development viability of the proposed hotel project.

Initial findings suggest that market dynamics are defined by a captive demand primarily influenced by corporate and institutional clients associated with PTBA. This includes visiting executives, engineering personnel, project consultants, and commercial partners, all of whom require reliable short- to medium-term accommodation choices. Moreover, the development of new infrastructure in proximity, such as a hospital and a golf course, strengthens the justification for a hospitality institution aimed at catering to both professional and semi-leisure sectors. Given the little competition among higher-rated properties in Muara Enim, the planned hotel is positioned to attain a significant competitive

advantage in the market. In the development of industrial zones, forecasts for hotel performance must be undertaken with prudence and grounded in cautious estimations. The occupancy rate is projected to attain 71% in the inaugural year of operation, with a modest increase expected in the following years. This guarantees that the pricing plan stays competitive by evaluating the Average Room Rates (ARR) against those of similar regional businesses. The facility will feature dedicated banquet area to efficiently cater to the Meetings, Incentives, Conferences, and Exhibitions (MICE) sector. This plan aims to fulfill the unmet need for formal event venues in Tanjung Enim, while improving operational resilience and diversifying revenue streams.

From a financial perspective, assessing the feasibility of the proposed project is important due to its information being used as investor's interest. This research employs a thorough capital budgeting methodology that encompasses essential decision-making metrics such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index. Furthermore, sensitivity analysis and Monte Carlo simulation are utilized to address market and financial uncertainties, especially concerning variables like occupancy rates, pricing, cost volatility, and fluctuations in interest rates. These analytical instruments facilitate the measurement of risk levels and underpin data-driven suggestions for investment choices.

REVIEW OF LITERATURE

Feasibility Analysis

Feasibility studies serve as analytical frameworks that evaluate the technical, economic, financial, environmental, and strategic viability of proposed capital projects prior to substantial resource allocation. Project Management Institute (2021) outlines that feasibility studies include various analytical aspects: technical feasibility assessment, which evaluates engineering capabilities and technological requirements; economic feasibility analysis, which examines cost-benefit relationships and market conditions; operational feasibility evaluation, which assesses implementation capabilities and resource availability; and schedule feasibility analysis, which determines realistic project timelines and milestone achievements. Comprehensive evaluations equip decision-makers with in-depth insights into project viability, associated risks, and essential resource needs for informed investment decisions. A systematic examination of feasibility studies guarantees a comprehensive evaluation of all pertinent factors influencing project success, while offering consistent standards for the impartial comparison of different investment options.

Net Present Value

The Net Present Value (NPV) is an essential instrument for evaluating the feasibility of investments. The net present value represents the difference between the present value of expected cash inflows and outflows over the project's lifespan, modified by the company's required rate of return. A positive NPV indicates that the project is expected to generate additional value, making it an attractive investment option. Gitman et al. (2015) asserts that a positive NPV accompanied by substantial expected returns is fundamental to determining a project's financial viability. This approach is especially important in large-scale, capital-intensive projects, such as hotels, where expected income must be aligned with substantial upfront costs.

The Internal Rate of Return (IRR) complements the Net Present Value (NPV) by determining the specific discount rate that results in an NPV of zero for all cash flows. IRR measures the expected annual return rate of a project. When the internal rate of return exceeds the organization's minimum acceptable rate of return, usually indicated by the weighted average cost of capital, the investment is considered financially viable. Mackevièius & Senkus (2006) elucidate that inconsistencies may occur when IRR is utilized for projects exhibiting atypical or irregular cash flow patterns, potentially leading to misleading results, especially when project cash flows reverse direction multiple times over time. These constraints underscore the imperative of utilizing IRR alongside NPV, particularly in hotel investments, where income volatility and diverse expenditure patterns are prevalent. However, the internal rate of return may yield various results when addressing non traditional cash flows, necessitating careful analysis. The Payback Period (PBP) quantifies the duration needed for an investment to recoup its initial expenditure through net cash inflows. This serves as a clear measure of project liquidity and risk exposure, particularly in contexts marked by significant uncertainty or constrained capital resources. Although PBP does not take into account the time value of money, it is still effective in identifying short-term projects that yield quick returns. This approach holds significant importance in the realm of hotel investments, as the prompt recovery of capital can alleviate financial pressures and bolster the resilience of projects.

Alongside these metrics, the Profitability Index (PI) provides a ratio-based evaluation of a project's appeal. The calculation involves taking the present value of anticipated cash inflows and dividing it by the initial investment cost. PI is particularly useful when capital is rationed and managers must prioritize among multiple mutually exclusive projects. As described by Brigham & Ehrhardt (2016), PI offers a straightforward indication of capital efficiency, with a value greater than one signifying a project that is expected to generate net positive value. One of PI's key advantages lies in its consistency with NPV: both metrics will yield the same decision outcomes in independent project evaluations, although PI is more effective when ranking projects under capital constraints. The Weighted Average Cost of Capital (WACC) serves as the discount rate in the calculations of NPV and IRR. The weighted average cost of capital represents the typical expense associated with financing through equity and debt, adjusted according to their respective shares in the overall capital framework. According to Meneses Cerón et al. (2024), precise estimation of WACC is crucial as it directly impacts the results of financial feasibility assessments. The weighted average cost of capital represents the baseline return that a project needs to meet in order to fulfill investor expectations and address financial risk.

A sensitivity analysis is performed to assess the responsiveness of financial outcomes to variations in critical assumptions. This method entails a structured approach to altering key factors like occupancy levels, room rates, and interest rates in order to evaluate their impact on net present value or internal rate of return. Pandit et al. (2023) demonstrated that variations of up to fifty percent in critical input assumptions can significantly impact the anticipated financial viability of hotel projects. This discovery indicates that comprehensive scenario testing ought to be integrated into the initial stages of investment analysis. According to Pindyck & Rubinfeld (2018), sensitivity analysis enables decision-makers to prioritize risk factors and assess project resilience under varying market or technical conditions.

In addition to sensitivity testing, Monte Carlo simulation is employed to represent uncertainty within a probabilistic framework. This methodology conducts numerous simulations by allocating probability distributions to input variables, yielding a spectrum of potential outcomes instead of a singular deterministic result. Hertz (1964) illustrates that Monte Carlo simulations improve the precision of investment evaluations by uncovering downside risks and offering probability-weighted projections of financial outcomes. This approach offers investors a deeper insight into project risk amidst the fluctuations of the real world. Ultimately, a robust risk management framework is also an important thing for ensuring the sustainability of a hotel investment. This encompasses the recognition of risk origins, both qualitative and quantitative evaluations of risk scale, and the development of strategies for mitigation. The susceptibility of hotel investments to market fluctuations, regulatory changes, and operational inefficiencies. Consequently, it is essential for risk management to be integrated throughout all phases of project development, encompassing planning, budgeting, operations, and strategic positioning. Strategies like dynamic pricing, cross-functional workforce training, and cost monitoring play a vital role in achieving long-term sustainability.

RESEARCH METHOD

The first objective of this study is to evaluate the feasibility of constructing a 3 star hotel on idle land owned by PT Bukit Asam Tbk (PTBA) in Tanjung Enim, South Sumatra. This evaluation was conducted using a descriptive and quantitative approach. The primary data collection involved field observation and stakeholder interviews, complemented by secondary data obtained from company records, regulatory documents, and industry reports. The analysis covered regulatory compliance, site condition assessments, and alignment with regional spatial planning. These findings contribute to ensuring legal readiness and technical suitability for initiating the investment project. To address the second objective assessing the financial feasibility of the proposed hotel development capital budgeting techniques were applied, utilizing metrics such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PBP), and Profitability Index (PI). Cost of capital was determined using the Weighted Average Cost of Capital (WACC), which incorporated assumptions related to interest rates, inflation, and capital structure. Financial modeling was carried out using Microsoft Excel, with projections spanning a 20-year operational period. The analysis contributes by identifying the financial viability and investment return potential of the hotel project, which is critical to PTBA's asset optimization strategy.

The third objective focuses on understanding the sensitivity of the financial indicators to changes in key input variables and identifying investment risks that could impact project outcomes. This was achieved through two complementary methods: sensitivity analysis and Monte Carlo simulation. Sensitivity analysis explored how fluctuations in occupancy rate, room pricing, operating costs, and financing rates affect NPV and IRR, thereby highlighting the most critical financial variables. Monte Carlo simulation, provided probabilistic risk distributions based on a range of plausible input values. This dual approach ensures a more comprehensive understanding of the project's risk landscape and enhances the robustness of investment decisions. Finally, to provide a broader strategic perspective, qualitative risk mapping was employed. The analysis evaluated internal strengths and weaknesses alongside external opportunities and threats related to the hotel investment. Risk identification was then

classified into three levels critical, moderate, and low based on their potential impact on financial performance and market competitiveness. Appropriate mitigation strategies were formulated for each risk category, such as dynamic pricing policies, targeted marketing, and cost control initiatives. This component of the study contributes to managerial decision-making by providing a structured framework for anticipating and managing uncertainties throughout the hotel project's lifecycle.

RESULTS AND DISCUSSION

General Project Data

The study explores the strategic potential of idle land in Tanjung Enim, currently used as overflow parking, for development into a 4-star hotel. Located within a legally permitted residential zone and surrounded by key PTBA facilities such as the head office, hospital, schools, and a planned golf course the site is ideally positioned to serve both corporate and leisure markets. Regional attractions like the Bukit Asam Coal Museum and Klawas Waterpark, along with the anticipated golf course launch in 2025, further strengthen the location's appeal. Despite the dominance of non-star hotels in South Sumatra, the hospitality market is recovering post-pandemic, with rising occupancy and room rates, signaling renewed demand for quality accommodations especially in economically active regions like Tanjung Enim, which currently lacks any 4-star hotel options.

Benchmarking confirms limited supply in Muara Enim Regency, where business travel from the mining, agriculture, and government sectors drives stable demand throughout the year. The proposed hotel fills a clear market gap, with financial analysis supporting its viability. The project requires an investment of IDR 76.5 billion, financed through 60% equity and 40% debt, with a WACC aligned to PTBA's capital structure. Projections incorporate inflation, taxation, and regulatory factors over a 20-year horizon, confirming profitability under conservative assumptions. Beyond financial returns, the hotel is expected to enhance local economic development through job creation and tourism infrastructure growth.

Capital Analysis

WACC calculation in Indonesia, the commonly used tax rate is 22%. This refers to the applicable corporate income tax rate based on the Income Tax Law in Indonesia. Hotels in Indonesia generally operate as Limited Liability Companies subject to 22% Corporate Income Tax, including PTBA's hotel development plan. The average interest rate calculation result of financial institutions in Indonesia over the last 5 years for PTBA is 8,40%, The Risk Premium used is the Indonesian Equity Risk Premium obtained from Damodaran, January 9 2025 with a value of 6.87%. So, The Cost of Equity is 10,15%. In calculating the Cost of Capital for the feasibility of this investment, the Weighted Average Cost of Capital (WACC) is used, or the weighted average cost of capital. The formula used is as follows:

$$WACC = (WD \times CoD \times (1 - T)) + (WE \times CoE)$$

Description:
WD = Debt proportion
WE = Equity proportion
CoD = Cost of debt
CoE = Cost of equity

T = Corporate Tax rate (22%)
therefore:

$$WACC = \big(40\% \times 8{,}4\% \times (1 - 22\%)\big) + (60\% \times 10{,}15\%)$$
$$WACC = 8.71\%$$

For non-core investment projects (Not Investments in the Energy Sector), it is stipulated that the minimum Required Return that must be achieved is 3% above WACC. Therefore, for this hotel project in Tanjung Enim, the required rate of return (Required Return) is:

$$Required\ Return = WACC + 3\% = 11.71\%$$

This Required Return figure is the main reference in assessing the feasibility of the Tanjung Enim Hotel investment. So the Internal Rate of Return (IRR) of the project must at least match this figure so that the project can be considered feasible or reach break-even. The planned financing is intended to complete the construction of the hotel's 40% of the hotel's superstructure in the first year. In the second year, funding is needed to complete the construction of 60% of the superstructure, guidance license with associated fees. In the post-constructive period, the funding of capital expenditures is done through short term loans, which will then be funded through revenue generated from the Hotel after the construction is finished. The portion of each funding element for each year can be seen in the following. With this projection, the capital costs that must be incurred can be calculated using following equations:

$$CapEx_{2026} = (40\%\ x\ Building\ Cost)\ x\ (1 + VAT) + Capitalized\ Interest_{2026}$$
$$CapEx_{2027} = (60\%\ x\ Building\ Cost)\ x\ (1 + VAT) + Capitalized\ Interest_{2027}$$

Where:
$CapEx_{2026}$ = Capital Expenditure in 2026
$CapEx_{2027}$ = Capital Expenditure in 2027
Building Cost = Hotel building construction costs
Licensing Fee = Hotel licensing fees
VAT = Value-Added Tax

By using the two formulas above, the Capital Expenditure required for the construction of this hotel can be calculated using following equations;

$$CapEx_{2026} = \big((40\%\ x\ Rp\ 74{,}873{,}421{,}000)x\ (1 + 12\%)\big) + Rp119{,}797{,}474$$
$$CapEx_{2026} = Rp30{,}069{,}165{,}874$$
$$CapEx_{2027} = ((60\%\ x\ \ Rp\ 74{,}873{,}421{,}000)\ x\ (1 + 12\%)) + Rp1{,}538{,}878{,}413$$
$$CapEx_{2027} = Rp46{,}462{,}931{,}013$$

$$Total\ CapEx = Rp\ 30{,}069{,}165{,}874 + Rp\ 46{,}462{,}931{,}013$$
$$Total\ CapEx = Rp, 76{,}532{,}096{,}887$$

Based on capital expenditure calculations with 12% VAT inflation, the hotel project requires Rp 76,532,096,887 in investment. This amount comes from two key expenditure components across two fiscal years. The capital expenditure for 2026 is Rp 30,069,165,874, after fees and VAT. 40% of the building construction cost is allocated. In 2027, the remaining 60% of the building construction cost and company licensing costs will be paid. After fees and VAT, the capital requirement is Rp 46,462,931,013. This ensures that financial planning accounts for future cost escalations and regulatory tax responsibilities, making project funding estimates more accurate.

Feasibility Analysis

Benefit Cost Analysis (BCA) was performed to analyze this final project's feasibility. BCA compares benefits to costs to determine project or investment feasibility. BCA helps determine project viability. BCA measures all project benefits and expenses, converts them to monetary worth (typically present value), and compares them to assess project feasibility. Previous Cash Flow summation is used in Capital Budget Analysis (CBA). Net Present Value is essential to assess project feasibility.

$$NPV = \sum_{t=0}^{n} \frac{CF}{(1+r)^t}$$

Table 2. Present Value of Cash Flow 2026 - 2047

Year	PV of Cash Flow (in million)	Year	PV of Cash Flow (in million)
2026	(26,917.33)	2037	3,990.30
2027	(37,232.99)	2038	3,722.52
2028	4,112.43	2039	3,471.17
2029	7,034.13	2040	3,245.49
2030	6,428.64	2041	3,016.38
2031	6,063.71	2042	2,813.31
2032	5,671.16	2043	2,622.78
2033	5,273.34	2044	2,451.72
2034	4,920.78	2045	2,278.22
2035	4,589.71	2046	2,124.44
2036	4,292.45	2047	3,319.59

$$\boldsymbol{NPV = \sum_{t=0}^{n} \frac{CF}{(1+r)^t} = Rp\ 17,291,938,359}$$

The financial evaluation of PTBA's 3-star hotel project in Tanjung Enim confirms its economic viability and alignment with the company's diversification goals. From calculation we found that the projected IRR of 14.80% exceeds the required 11.71%, while the NPV of Rp 17.29 billion reflects strong profitability. Revenue streams are well-diversified room sales (50%), F&B (20%), and MICE activities (30%) supporting market adaptability. The Payback Period of 8.88 years indicates a reasonable capital recovery timeframe, reinforcing the project's financial resilience.

$$PP = n + \frac{a - c}{c - b} x\ 1\ year$$
$$PP = 10 + \left(\frac{44{,}579{,}216{,}278 - 6{,}536{,}416{,}333}{6{,}536{,}416{,}333 - (-38{,}042{,}799{,}945)}\ x\ 1\ year\right)$$
$$PP = 8.88\ years$$

The 8.88-year payback period ensures capital recovery within a reasonable timeframe, mitigating long-term financial risks.

Finally, the analysis also includes the Profitability Index (PI), which provides further insight into the

$$PI = \frac{PV\ Cash\ Inflow}{PV\ Cash\ Outflow}$$
$$PI = \frac{Rp\ 81{,}442\ (million)}{Rp - 64{,}150\ (million)} = 1.27$$

efficiency of the investment. The PI is calculated using following equation;

Based on the calculations above, the Profitability Index has a value of 1.27, which is greater than 1 and indicates the feasibility of the project.

Risk Management

Risk is an inherent aspect of any investment decision and cannot be entirely eliminated. In the context of hotel investment planning, effective risk management is crucial, particularly in addressing financial and market-related uncertainties. In this final project, the primary function of risk management is to systematically identify, evaluate, and mitigate potential risks that may impact the hotel's financial stability and competitive positioning in the market.

Risk Identification

Risk identification plays a critical role in managing capital-intensive projects like PT Bukit Asam Tbk's (PTBA) hotel development in Tanjung Enim, where early detection of financial and market risks is key to ensuring long-term sustainability. By identifying potential threats such as declining market demand, rising competition, or shifting consumer preferences, PTBA can proactively safeguard profitability and market relevance. Risk assessment for the project utilizes sensitivity analysis and Monte Carlo simulation to evaluate how changes in key variables affect financial outcomes, particularly Net Present Value (NPV). Sensitivity analysis, using a range of ±10–20%, highlights which inputs most influence project performance and supports data-driven decision-making, risk prioritization, and scenario planning. Together, these methods strengthen the project's resilience and provide a clearer risk profile for stakeholders and investors.

The analysis indicates that the most sensitive variable influencing the investment's NPV is the Price per Unit Realization for Hotel Rooms, followed by the Quantity Sold Realization for Hotel Rooms, and the Long Term Debt Interest Rate. The findings indicate that pricing strategy, sales volume, and financing structure are critical factors influencing the project's financial success. The visual depiction of this analysis is illustrated in the accompanying Spider Chart and Tornado Chart, which emphasize the comparative influence of each variable on overall project viability, as shown in the following figure.

Table 3. Descriptive Statistics of the Monte Carlo

Descriptive Statistics	
Min	(36,744.00)
Max	112,573.08
Mean	23,311.79
Standard Deviation	22,529.45
Median	21,268.06
Kurtosis	0.34
Skewness	0.53
Prob NPV<0	15.04%
Prob NPV>0	84.96%
Prob NPV> average	39.47%

Based on the Monte Carlo simulation results summarized in the descriptive statistics, the NPV simulation shows a wide range between the minimum of Rp -36,744 million (worst-case loss) and the maximum of Rp 112,573 million (best-case profit), indicating significant uncertainty in the project's financial outlook. The mean NPV is Rp 23,311.79 million and the median is Rp 21,268.06 million, with the gap suggesting a few high-value outliers are raising the average. There is an 84.96% probability of a positive NPV, while the chance of a loss is 15.04%. However, only 39.47% of outcomes exceed the mean, pointing to a positively skewed distribution. This is supported by a skewness of 0.53 and kurtosis of 0.34, suggesting moderate upside potential with a distribution close to normal.

In terms of risk, the most sensitive factors are hotel room rates, banquet pricing, and room occupancy. These should be managed through dynamic pricing, targeted marketing, customer segmentation, and careful debt planning. Medium-sensitivity risks, such as banquet sales volume, inflation, F&B pricing, and direct material costs require strategies like supplier negotiations and cost control. Low-sensitivity risks, including labor and material costs, have limited impact but should still be monitored to ensure profitability is maintained.

Critical Risk

To mitigate risks related to price per unit realization for hotel rooms, a comprehensive dynamic pricing model will be implemented. This model will adjust room rates based on real-time demand, competitor pricing, seasonality, and occupancy forecasts, ensuring competitiveness and revenue maximization. A real-time pricing dashboard will be integrated with booking systems, supported by weekly competitor pricing reviews and monthly revenue management strategy meetings. For banquet event pricing, various pricing packages will be created to suit key customer segments, including weddings, corporate events, and government functions. Seasonal offers and tiered pricing will add flexibility and boost booking rates. This will be supported by customized package development, early-bird and off-peak discounts, and specialized training for banquet sales staff in consultative selling.

Addressing the quantity of hotel rooms sold, the strategy focuses on enhancing digital marketing through OTAs, hotel websites, and social media. Seasonal campaign launches, SEO optimization, email marketing, and flash deals via OTA partnerships will drive traffic and improve occupancy levels throughout the year.

Medium Risk

To improve banquet event bookings, partnerships with local and regional event organizers will be established, offering volume-based incentives and packages for repeat clients. Incentive programs for event planners, venue showcases, and tiered discount schemes will support this approach. For inflation risk, forward-looking procurement strategies will be applied, such as securing long-term vendor contracts with inflation-linked price adjustment clauses. Procurement terms will be reviewed biannually to ensure stability and competitiveness.

To manage long-term debt interest rate exposure, the company will work with financial advisors to structure debt with fixed or capped interest rates. Annual loan reviews, refinancing opportunities, and maintaining a financial dashboard will ensure efficient debt servicing. To mitigate risks in F&B pricing, regular menu engineering will ensure item prices align with food costs, consumer preferences, and profit margins. Monthly food cost analysis, menu price adjustments, and the introduction of high-margin items based on customer feedback will be key tactics. For direct material costs in banquet events, vendor consolidation and standardized procurement processes will help control expenses. Inventory will be managed using real time tracking tools, and vendor performance will be evaluated quarterly. Regarding direct material for hotel rooms, detailed specifications and standardized procurement will be enforced. Competitive bidding and open tenders will be used to ensure both quality and cost-effectiveness, while monitoring inventory turnover to avoid obsolescence.

Low Risk

To improve F&B quantity sold, promotions will be aligned with peak hours and major events. Strategies such as bundled deals, loyalty programs, and upselling will be used. POS data will guide the selection of high-performing items, while guest feedback will be incentivized to improve service. For hotel room labor, staff schedules will be aligned with forecasted occupancy and events. Digital workforce tools will optimize scheduling and shift management, and monthly labor productivity reviews will ensure efficiency. On the direct material side for F&B, reliable local suppliers will be prioritized, and inventory closely monitored to avoid overstocking. Purchasing will be guided by demand forecasts and supported by automated inventory tracking systems. Lastly, for F&B labor, cross-training will enhance staff flexibility and reduce overtime reliance. Rotational programs during low seasons and monthly tracking of labor efficiency and cost savings will further optimize performance.

CONCLUSION

The proposed 4-star hotel in Tanjung Enim is legally and strategically feasible, aligned with the R-3 zoning regulations under Muara Enim Regent Regulation No. 1 of 2023, which permits hospitality businesses within medium-density residential areas. The site allows for favorable building specifications, and empirical precedents support the viability of a 3-floor structure. With full land ownership by PT Bukit Asam Tbk (PTBA), the project faces no legal risks regarding land acquisition, ensuring regulatory certainty and alignment with regional spatial planning. Market analysis indicates strong demand driven by PTBA's industrial presence, supporting infrastructure, and limited 4-star competition. Strategic location, favorable market positioning, and projected occupancy rates of up to 80% by the third year

reinforce the project's potential. Financial metrics, including a positive NPV of IDR 17.291 billion, IRR of 14.80%, Payback Period of 8.88 years, and PI of 1.27, confirm its strong investment viability. However, sensitivity analysis reveals that the project is highly susceptible to fluctuations in key variables such as room rates (ARR), banquet pricing, and room sales volume. These factors significantly impact the project's NPV, making profitability dependent on accurate demand forecasting, competitive pricing, and targeted marketing strategies. While other variables like labor and material costs pose lower financial risks, their operational importance remains.

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