

# Financial Feasibility Analysis of the Asvara Resort Manuaba Ubud Development Project

I Gusti Ayu Wulan Krisna Dewi<sup>1</sup>, I Made Wahyu Pramana<sup>2</sup>, and I Komang Sudiarta<sup>3</sup>

1.2.3 Civil Engineering Department, Politeknik Negeri Bali, Bali, Indonesia wulankrisna@pnb.ac.id

**Abstract.** The competitive landscape in Bali's property market, characterized by the rise in the construction of hotels, villas, and resorts, along with the fluctuating tourist visitation rates over the past five years due to the pandemic, necessitates a reassessment of the investment feasibility for the Asvara Resort Manuaba Ubud project. This study seeks to evaluate the financial feasibility of investing in the construction of Asvara Resort Manuaba Ubud, aiming to determine whether the development remains profitable for investors. Additionally, the study explores how the benefits of the resort's development can extend to the government and local community, thereby supporting the welfare and economy of the Gianyar Regency. For financial analysis, cost and revenue data from contractors and operators are analyzed using parameters like Net Present Value (NPV), Benefit Cost Ratio (BCR), Payback Period (PP), and Internal Rate of Return (IRR). The market analysis reveals an increase in tourist arrivals and occupancy rates, which is expected to positively impact the resort's visitation. The technical analysis indicates that land utilization and allocation have been optimized for investment purposes. Financially, the project shows an NPV of IDR 16,706,385,995.27, an IRR of 19.67%, a BCR of 1.242, and a PP of 10 years. In a worst-case scenario, where revenues decrease by 8% and costs increase by 8%, the sensitivity analysis still yields a positive NPV of IDR 1.215.020,196.08, an IRR of 17.13%, a BCR of 1.018, and a PP of 13 years. Thus, the investment is concluded to be viable for investors.

Keywords: Financial Aspect, Investment, Resort

## 1 Introduction

As one of the most popular tourist destinations for both domestic and international visitors, Bali has long been a tourism magnet, renowned for its natural beauty, rich culture, and the hospitality of its people. According to BPS data from 2014 to 2019, the number of tourist visits, both domestic and international, consistently increased. However, like many other destinations around the world, Bali's tourism industry faced significant challenges due to the COVID-19 pandemic. The drastic decline in tourist visits during the pandemic period had a substantial economic impact on the Island of the Gods. BPS data shows that the growth rate of tourist visits plummeted by -56.41% for domestic tourists and -82.96% for international tourists in 2020, and in 2021, there

were no international tourist visits at all. The tourism sector, which is the backbone of Bali's economy, began to recover in 2022-2023. However, according to BPS data, the number of visits has not yet reached the levels seen before the pandemic (BPS, 2024).

The resurgence in tourist numbers has also influenced the growth of the property market in Bali. Property concepts such as resorts, hotels, condotels, and villas are being developed to attract investors seeking passive income through returns on their investments. Resorts often appeal to tourists looking for a quality vacation experience due to their comprehensive and exclusive facilities and services, including spa services, restaurants, concierge, kids' clubs, and various entertainment activities. Additionally, resorts are typically built in areas with strong tourism potential due to their natural beauty. Currently, one of the key areas for resort development is Ubud and Tegalalang in Gianyar Regency, Bali. This area is well-known as a tourist destination for its breathtaking natural landscapes, especially the terraced rice fields, which are popular among tourists for relaxing activities like yoga, trekking, and cycling. This appeal has drawn significant interest from investors to develop tourism accommodation facilities in the form of resorts.

Based on these factors, PT. Interprocom Aksari Real Estate, as the investor, is investing in the construction of Asvara Resort Manuaba Ubud, located in Desa Kendran, Tegalalang, Bali, a strategic location close to the Ubud tourist center. Asvara Resort Manuaba Ubud comprises 16 units of One Bedroom Bamboo Villas, 1 unit of Two Bedroom Bamboo Villa, a Spa Building, a Restaurant, a Public Pool, and an Office. To ensure smooth resort operations, PT. Interprocom Aksari Real Estate has appointed Ini Vie Hospitality Management, a professional and experienced hotel operator, to manage Asvara Resort Manuaba Ubud for 25 years. However, considering the intense property competition in Bali—marked by the increased construction of hotels, villas, and resorts—and the fluctuating growth rate of tourist visits over the past five years due to the pandemic, it is necessary to reassess the investment feasibility analysis of the Asvara Resort Manuaba Ubud development.

The proposed investment in the construction of Asvara Resort Manuaba Ubud aims to differentiate itself in a highly competitive market by integrating sustainable and eco-friendly practices in its development. While the tourism industry in Bali is rebounding post-pandemic, there is a noticeable shift in tourist preferences towards environmentally responsible and sustainable travel options. Therefore, Asvara Resort Manuaba Ubud introduces a unique concept of "Green Luxury", combining the opulence of high-end resort living with environmentally sustainable infrastructure and operations. This includes the use of locally sourced bamboo for the villa construction, implementation of rainwater harvesting systems, renewable energy solutions such as solar panels, and a comprehensive waste management system that aligns with Bali's "Plastic Free" initiative.

Moreover, this project aims to not only attract tourists but also to foster a deeper connection between visitors and the local community through cultural immersion experiences. This includes workshops on traditional Balinese crafts, farming, and wellness activities like yoga and meditation guided by local practitioners. The resort's approach goes beyond conventional luxury hospitality by promoting a model that respects and preserves the cultural and environmental integrity of the region. This not

only enhances the tourist experience but also provides a sustainable livelihood for the local community, aligning with the principles of regenerative tourism.

Given these factors, the feasibility analysis of Asvara Resort Manuaba Ubud becomes even more critical, as it will assess not only the financial viability but also the long-term sustainability and social impact of the project. This dual focus on profitability and community welfare is what sets this investment apart, positioning Asvara Resort as a pioneer in responsible and innovative tourism development in Bali. This investment analysis is crucial to determine whether the project remains profitable for investors and ensures that the benefits of this resort development contribute to the welfare and economy of the region, particularly Gianyar Regency.

# 2 Methodology

The research process is conducted through several stages. It begins with establishing the background of the study, followed by problem formulation, a literature review to develop the conceptual framework, and the identification of the research object. Data collection is then carried out, including both primary and secondary data, which are used to calculate costs and revenues. This is followed by an analysis of the feasibility from market, technical, and financial aspects, with the final stages involving conclusions and recommendations.

Data sources are determined based on the type of data and can be categorized into primary and secondary data. Primary data is information collected directly by the researcher from the source. This data is obtained through observation and recording of events directly experienced by the researcher. In this study, primary data was gathered through interviews with practitioners and consultants who are experts in their respective fields. Secondary data was obtained from government agencies such as the Bali Provincial Central Bureau of Statistics (BPS), as well as from similar properties in the Ubud and Tegalalang areas of Gianyar.

During the data analysis phase, all collected data is examined in-depth to derive specific insights or conclusions. Since the focus is on assessing the financial feasibility of the investment, the key parameter is the project's cash flow. The calculation of cash inflow comes from the initial capital provided by investors, while the calculation of cash outflow (or expenditures) includes all costs incurred during the planning, construction, and operational phases. Some cost elements considered in the cash outflow will be estimated using parameter estimation methods. The calculation of various financial feasibility parameters, such as Benefit-Cost Ratio (BCR), Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period, is influenced by the cash inflow and outflow calculations (Tandelilin, 2001). Each investment feasibility parameter has its criteria, and if all criteria are met, the investment in the project can be deemed financially viable.

A sensitivity analysis will be conducted on two critical investment parameters: costs and revenues. The sensitivity analysis aims to determine the extent to which changes and fluctuations in these factors can be ignored without altering the outcomes of the

previously made evaluation decisions. The sensitivity values for each investment parameter enable appropriate anticipatory actions to be taken in the field (Sutojo, 2000).

## 3 Result and Discussion

#### 3.1 Tourist Visit Data Result

A resort is a type of hotel that typically has a recreational theme, offering entertainment, sports facilities, or shopping venues. These resorts are usually built in locations where the natural scenery can be enjoyed. Therefore, many resorts are situated in areas with beautiful and significant natural potential. Resorts often come equipped with special facilities for relaxation and sports activities, including tennis courts, golf courses, spa rooms, jogging tracks, and similar amenities (Septiani, 2010). Tourism potential is a strength that prompts travel and short-term stays in a particular area. In other words, a region can attract tourists to come and enjoy its unique features (Nadiasa, 2006).

Asvara Resort Manuaba Ubud is situated on 8,477 square meter plot of land in the village of Kenderan, Tegalalang, renowned for its world-famous terraced rice fields. The design inspiration for this resort combines villas and hotels within one area, complete with public facilities that support a natural concept, promising comfort for its visitors. The financing components, which will be calculated as part of the budget plan for the development of this tourist object, are detailed in the table provided.

**Table 1.** The financing components calculated in the budget plan

No.	Financing component	Description
1.	Land costs	Land Procurement
2.	Preliminary costs	a. Design costs
		b. Licensing costs
3.	Construction costs	a. 1-Bedroom bamboo villa
		b. 2-Bedroom bamboo villa
		c. Parking area
		d. Staff room (Back of house)
		e. MEE room
		f. Storage
		g. Kitchen
		h. Restaurant
		i. Wedding chapel, yoga & spa area
		j. Gymnasium
		k. Shop & receipt area
		m. Lobby & lounge
		n. Office area
		o. Swimming pool
		p. Pool bar
		q. Landscape
4.	Pre-operational costs	a. Pre-Opening costs
		b. Operational equipment costs

Regarding the development of tourism potential, there are two types of tourists visiting Bali: domestic tourists and foreign tourists. The data of BPS shows that not only do foreign tourists consider Bali a favorite vacation destination, but domestic tourists also have a deep love for Bali as a holiday spot. The number of domestic tourists visiting Bali each year is higher than that of foreign tourists. However, despite the greater number of domestic tourists compared to foreign tourists, star-rated hotels in Bali are predominantly occupied by foreign tourists. One of the most important factors in hotel operations is the Room Occupancy Rate. The Room Occupancy Rate indicates the number of rooms occupied out of the total available rooms. Bali, as a region that promotes tourism as a key industry to drive its economy, demonstrates a good Room Occupancy Rate. This can be seen in Table 2.

Table 2. Percentage of room occupancy rates for star-rated hotels in Bali from 2016 to 2023

Year	Room occupancy rates for star-rated hotels
2023	53.05%
2022	54.55%
2021	13.00%
2020	15.62%
2019	59.57%
2018	65.13%
2017	62.89%
2016	61.71%

Table 2 above shows that during 2023, the average Room Occupancy Rate for starrated hotels in Bali was 53.05%. The highest occupancy rate over the past eight years was in 2018, at 65.13%.

## 3.2 Discussion

Asvara Resort Manuaba Ubud is built with a modern natural concept, incorporating Balinese cultural touches. The design of Asvara Resort Manuaba Ubud is developed to blend seamlessly with the luxury of the Ubud area, featuring modern Balinese architecture. Each building unit exclusively offers views of either terraced rice fields or beautiful cliffs. Equipped with public facilities that support social interaction and the opportunity to experience legendary Balinese hospitality. Currently, star-rated hotels are valued as luxury commodities and often represent an opportunity to purchase a desired lifestyle. Understanding the source of demand for quality, lifestyle, and even status—where function and design make Asvara Resort Manuaba Ubud appealing—can be presented in context. The concept offered by Asvara Resort Manuaba Ubud to compete with other hotels is the extra dimension of comfort that will be offered to guests. This resort offers a tranquil, cool, and green rural atmosphere while maintaining a luxurious and Instagrammable impression, which is currently a glamorous, fashionable, and exclusive lifestyle. To predict the future demand for hotel rooms, the average occupancy rate (TPK) of similar properties operating for ≤ 5 years was used

for the first three years of operation, and then from the fourth to the twenty-fifth year, forecasting was done using the Time Series method, resulting in the following table.

<b>Table 3.</b> Forecast of	occupancy rate at A	Asvara Resort M	1anuaba Ubud
-----------------------------	---------------------	-----------------	--------------

Operational Year	Occupancy rate
-	(TPK)
1	56.33%
2	50.37%
3	54.55%
4	52.57%
5	52.58%
6	52.58%
7	52.59%
8	52.59%
9	52.60%
10	52.60%
11	52.61%
12	52.61%
13	52.62%
14	52.62%
15	52.63%
16	52.63%
17	52.64%
18	52.64%
19	52.65%
20	52.65%
21	52.66%
22	52.66%
23	52.67%
24	52.67%
25	52.68%

The data shows that the forecasted occupancy rate decreases in the first three years, but in subsequent years, it increases, though not significantly. This indicates that the hotel has established a good network for marketing its products, leading to better performance in terms of occupancy rates each year. The financial aspect includes cost analysis and revenue analysis, where data processing analysis is conducted with the help of Microsoft Excel (Frederika et al., 2016). Every commercial project is expected to generate revenue. This revenue can come from rental income (per square meter per month) or hotel room rentals, hire purchases, typically for condominium or office projects, and sales (with or without installments), usually in condominium or office projects. The construction of a project usually involves both own capital and borrowed capital, so the building's revenue must be sufficient to cover the repayment of the loan principal along with its interest, corporate taxes, building depreciation, and operational costs (building maintenance, electricity, telephone, etc.) (Sari, 2009).

Every project has cash inflow and cash outflow, or in other words, money coming in and money going out. The inflow and outflow of money are depicted in a systematically and chronologically arranged list. Cash flow is not a company's profit or loss; instead, it is a financial report containing information on cash receipts and disbursements within a company over a certain period (Dewi, 2019). Net cash flow is the difference between the cash inflow from sales and other sources (such as selling old machinery) and the cash outflow for labor payments, raw materials, fixed expenses, and taxes. Typically, most cash inflows go out again immediately to pay bills like electricity, taxes, new machinery, building construction, etc. However, gross cash inflow is not only for daily expenses but also includes money to cover the decreased value of machinery and buildings due to wear and tear. This decrease, as we know, is called depreciation, and it is a non-cash expense included in the company's profit-loss statement, which, of course, reduces profit and taxes and serves as a way to avoid cash outflows (Irdhan et al., 2023).

Revenue calculations are performed on all revenue components projected to be obtained from operating Asvara Resort Manuaba Ubud, whether from room rentals, wedding packages, spa packages, yoga packages, or restaurant operations. Meanwhile, the cost components are analyzed based on all expenses to be incurred, both in the form of initial investments such as land provision, construction, and provision of other facilities, and all expenses that will be incurred during the operation of Asvara Resort Manuaba Ubud. The use of borrowed capital as one of the funding sources in the investment will result in additional cost components in the form of loan interest. The interest rate is based on the development of investment loan rates between 2023 and 2024, with the lowest rate at 4.66%, an average of 8.97%, and the highest at 16.92%. The prices and rates mentioned above are assumed to increase by 15% in the first year, 10% in the second year, and 5% in subsequent years up to 25 years.

Several parameters are used to assess the profitability of the investment plan, including Net Present Value (NPV), Internal Rate of Return (IRR), Benefit-Cost Ratio (BCR), and Payback Period (PP). The Net Present Value (NPV) is the difference between the present value of future net cash flows (Net Cash Flow / NCF) and the present value of the initial investment at a specific interest rate. If the NPV of a project proposal is positive, the project is considered acceptable; if the NPV is negative, the project is rejected; if the NPV is zero, it is neutral (Soeharto, 2001). The IRR (Internal Rate of Return) method generally seeks the equivalence of cash flow using the interest rate as the primary determining factor. The goal is to find the interest rate at which the NPV equals zero. Thus, the IRR method provides information related to the cash flow's ability to repay the investment, expressed as a percentage over time. In simple terms, it shows how capable the cash flow is in repaying the capital and what obligations must be met. This ability is called the Internal Rate of Return (IRR), while the obligation is called the Minimum Attractive Rate of Return (MARR). Therefore, an investment plan is considered feasible if: IRR ≥ MARR (Assoraya, 2021). Another analysis to assess project feasibility is the Benefit-Cost Ratio (BCR). This concept emphasizes the benefits (benefits) for the project's interests (Astrini et al., 2022). The Payback Period analysis primarily aims to determine how long (the period) it will take to recover the investment once the break-even point is reached. In this method, an investment plan is considered feasible if k < n and vice versa, where k is the payback period and n is the investment lifespan (Shaviera et al., 2023).

Based on the previous financing model, the next analysis is the feasibility analysis of the investment project using Microsoft Excel. The interest rate is based on the development of investment loan rates between 2023 and 2024, and the credit interest approach is taken at the highest rate, which is 16.92%. Therefore, the financing and revenue are discounted at that interest rate. The simulation results show that the Net Present Value (NPV) is IDR 16,706,385,995.27, which is greater than zero, so the investment plan for Asvara Resort Manuaba Ubud is considered feasible. The Internal Rate of Return (IRR) obtained is 19.67%, which is higher than the highest possible investment interest rate of 16.92%, indicating that this project is quite prospective in terms of investment interest rate development. Furthermore, the calculation of the Benefit-Cost Ratio (BCR) resulted in a value of 1.242, indicating that the investment is feasible as the value obtained is greater than or equal to one, showing that the project is quite prospective and profitable. The payback period for the Asvara Resort Manuaba Ubud investment is 10 years out of the planned 25-year investment lifespan, indicating that the capital recovery period is not too long.

Sensitivity analysis is needed to determine how much the pre-determined investment parameters can change due to situational and conditional factors during the investment lifespan, as these changes could significantly impact the decisions made (Aditrio & Oetomo, 2023). Investment parameters requiring sensitivity analysis include benefits/revenue and costs/expenses. Sensitivity analysis generally assumes that only one parameter changes (variable), while the other parameters remain relatively constant in one analysis equation. To determine the sensitivity of other parameters, a second, third, and subsequent equation is needed (Astuti W & Sri, 2017).

Sensitivity analysis is conducted to anticipate possible scenarios and to take appropriate steps to address potential issues and ensure that every investment plan is safe to execute. In this study, sensitivity analysis was conducted under the worst-case scenario, where revenue might decrease and/or operational costs increase. After several trials for the worst-case scenario, the sensitivity analysis results showed that the investment is still considered profitable if the revenue decrease is no more than 8% and the operational cost increase is no more than 8%, with the analysis results showing a Net Present Value (NPV) of IDR 1,215,020,196.08, which is greater than zero, thus the investment for Asvara Resort Manuaba Ubud is considered feasible. The Internal Rate of Return (IRR) obtained is 17.13%, which is higher than the highest possible investment interest rate of 16.92%, making the project quite prospective. Furthermore, the Benefit-Cost Ratio (BCR) calculation resulted in a value of 1.018, indicating that the investment is feasible as the value obtained is greater than or equal to one. Meanwhile, the investment's payback period will be achieved within 13 years.

# 4 Conclusion

From the research findings and discussions above, several conclusions can be drawn. The financial aspect analysis, Asvara Resort Manuaba Ubud provides profitable value. This is evident from the analysis results: the Net Present Value (NPV) is IDR 16,706,385,995.27, which is greater than 0, making the project feasible; the Internal

Rate of Return (IRR) is 19.67%, which, when compared to the highest possible investment interest rate of 16.92%, indicates that the project is quite prospective; the Benefit-Cost Ratio (BCR) is 1.242, showing that this investment is quite feasible to continue as the value is greater than 1. Meanwhile, the payback period is achieved in 10 years. Under the worst-case scenario, which is still acceptable for Asvara Resort Manuaba Ubud, assuming a revenue decrease of 8% and an increase in expenses by 8%, the NPV is IDR 1,215,020,196.08, which is greater than 0, and the BCR is 1.018, which is greater than 1. The IRR is 17.13%, which, when compared to the highest possible investment interest rate of 16.92%, suggests that the project is feasible to continue. The payback period in this scenario would be achieved in 13 years.

# Acknowledgment

I am deeply grateful to Politeknik Negeri Bali for sponsoring my research. Their financial support and resources have been invaluable. Special thanks to civil engineering departement for their encouragement and guidance. This work would not have been possible without their generous support.

# References

- Aditrio, M. S., & Oetomo, W. (2023). Analisis investasi pembangunan proyek Rumah Sakit Al-Arafah Kota Kediri. *Jurnal Taguchi: Jurnal Ilmiah Teknik Dan Manajemen Industri*, 3, 802–814. https://taguchi.lppmbinabangsa.id/index.php/home/article/view/86/87
- Astrini, K. D., Lestari, I. G. A. A. I., Diputera, I. G. A., & Kurniari, K. (2022). Analisis investasi pembangunan dupa villa di Desa Tibubeneng, Canggu, Kabupaten Badung, Bali. *Jurnal Ilmiah Teknik UNMAS*, 2(1), 2797-2992 ANALISIS.
- Astuti W, M. K., & Sri, F. H. (2017). Studi kelayakan investasi proyek pembangunan tower 5 Karawaci Tangerang Selatan. *Jurnal Ilmiah Indonesia*, *September*, 981–987. https://jurnal.uns.ac.id/matriks/article/download/36728/23954
- BPS. (2024). Bali dalam angka. https://bali.bps.go.id/subject/16/pariwisata.html#subjekViewTab3
- Dewi, I. G. A. W. K. (2019). Analisis Investasi Proyek Pembangunan Aksari Hidden Resort Ubud. Universitas Udayana.
- Frederika, A., Wiranata, A. A., & Kamajaya, I. B. G. A. P. (2016). Analisis investasi pembangunan dedari kenderan villas. *Jurnal Ilmiah Teknik Sipil*, 20(2).
- Irdhan, Lubis, F., & Yanti, G. (2023). Analisis kelayakan investasi pada pembangunan Perumahan Tanjung Residence 73 Kota Pekanbaru. *Jurnal Teknik*, *17*(2), 13–17.
- Nadiasa, M., Diputra, I. G. A., & Yansen, I. W. (2006). Analisis investasi pembangunan taman budaya Garuda Wisnu Kencana di Kabupaten Badung. *Jurnal Ilmiah Teknik Sipil*, 10(2).
- Sari, F. K. (2009). Evaluasi proyek perhotelan berdasarkan aspek ekonomi teknik (Studi Kasus Quality Hotel Solo). Universitas Islam Indonesia.
- Septiani, N. P. P. (2010). Analisis investasi pembangunan kondominium Hotel Grand Svasti di Kabupaten Badung. Universitas Udayana.
- Shaviera, S., Pamadi, M., & Savitri, A. (2023). Feasibility study of housing project investment

in Batam Center. Journal of Civil Engineering and Planning, 4(1), 146-154. https://doi.org/10.37253/jcep.v4i1.7844

Soeharto, I. (2001). Manajemen provek dari konseptual sampai operasional. Erlangga.

Sutojo, S. (2000). Studi kelavakan provek. PT Damar Mulia Pustaka.

Tandelilin, E. (2001). Analisis investasi dan manajemen portofolio. PT BPFE.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

