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ANALYSIS OF COST STRUCTURE ALLOCATION AGAINST FINANCIAL FEASIBILITY IN THE BUMI MUTIARA INDUSTRY IN PALU CITY

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ABSTRACT

Ground coffee, as a processed product of coffee beans, stands as an agricultural commodity with significant market prospects, driven by the proliferation of cafes, coffee stalls, and modern coffee beverage trends. The sales potential of this processed coffee offers attractive profitability, fostering the growth of the coffee processing sector, one example being the Bumi Mutiara Industry. This research focuses on evaluating the financial feasibility of the Bumi Mutiara Ground Coffee Industry in Palu City. The aspects reviewed include capital structure, financing composition, production techniques, raw material procurement strategy, and product marketing. The financial analysis results indicate a very promising outlook for this venture. The calculated Net Present Value (NPV) is a positive Rp187,500,267.00. The Internal Rate of Return (IRR) of 24% significantly exceeds the benchmark interest rate (24% > 12%). Furthermore, the Net Benefit-Cost Ratio (Net B/C) is 1.41, which is greater than 1. Concurrently, the Payback Period (PP) for the business is recorded at 3 years and 3 months. Based on all these financial feasibility indicators, it is concluded that the Bumi Mutiara Ground Coffee Industry in Palu City is financially viable for both continuation and future development.

Keywords: Financial Feasibilty, Coffe Powder, Bumi Mutiara Industry In Palu City.

INTRODUCTION

Indonesia is the fourth largest coffee producer in the world, following Brazil, Vietnam, and Colombia (Neilson, 2008). Approximately 67% of Indonesia's total coffee production is exported, while the remaining 33% is dedicated to meeting domestic needs. Plantation products possess good prospects for development through downstream industries. This downstream processing can create employment opportunities, increase farmers' income through higher sales value, utilize the extensive available land, and produce diverse processed products that meet community needs (Haryanto, 2012).

Coffee is a commodity with favorable market opportunities both domestically and internationally (Sitanggang, et al., 2013). Coffee plays a vital role in Indonesia's economy as a source of foreign exchange earnings, an employer, and a source of income for coffee farmers and other economic actors involved from processing to marketing (Fatma, 2011).

Central Sulawesi Province is one of the regions that supports the development and growth of agricultural commodities, particularly coffee plantations. Coffee has an extensive market share, both nationally and internationally, which directly impacts the improvement of community income and welfare, as well as overall regional revenue and development. This is evident from the values of area extent, production, and productivity of coffee plants in Central Sulawesi Province over the last five years, which show an average land area of 9,291.5 hectares, production of 2,876.524 tons, and productivity of 3.5033 tons/hectare, indicating a significantly large value in commodity development.

The empowerment of Micro, Small, and Medium Enterprises (MSMEs) in Central Sulawesi Province, particularly in Palu City, is highly strategic due to their significant potential in driving community economic activities. They serve as a vital source of income for the majority of the population, thereby improving welfare. MSME management is characterized as income gathering—aiming to increase revenue. These businesses are typically family-owned, utilize relatively simple technology, have limited access to capital (non-bankable), and lack separation between business capital and personal finances (Herlinawati, et al., 2017). Therefore, a financial feasibility analysis is crucial for business actors to understand internal and external challenges within the company and its products.

Business feasibility analysis involves research on a business plan that assesses not only the viability of the business but also its routine operational capacity to achieve maximum profit indefinitely (Winantara et al., 2014). Financial feasibility analysis guides entrepreneurs in planning future business development based on past conditions. It also serves as a reference for running the business and minimizing previously encountered risks (Joka et al., 2020).

The powdered coffee business and processed coffee products are agricultural commodities with strong market prospects and opportunities. This is evidenced by the high sales of coffee beverages in various formats, such as traditional coffea shops, modern coffee shops (warkop), canned beverages, and contemporary processed coffee drinks sold on modern platforms, proving the strong potential for processed coffee sales. The growth of the coffee processing industry aims to gain benefits, profit, or returns from the existing market share, one example of which is the Bumi Mutiara Industry.

The powdered coffee industry Bumi Mutiara began its development with self-owned capital in 1997, initially secured through a loan from Pegadaian by pawning the owner's wife's gold to raise Rp3,000,000. Further capital came from selling a garden (Rp15,000,000) and personal savings

(Rp6,000,000). As production remained low, Mr. Yosep, the owner, added capital from Bank BRI in 2007, amounting to Rp20,000,000, with an interest rate of 1.2% over a two-year loan period. In May 2018, additional capital was secured again from Bank BRI for Rp100,000,000 (12% interest for 3 years) and Bank Mandiri for Rp100,000,000 (12% interest for 2 years).

Problems arose during the loan period due to the 2018 natural disaster in Palu, Sigi, and Donggala, which halted the operational process of powdered coffee productivity. Furthermore, the subsequent pandemic caused a decrease in marketing and sales. However, both Bank BRI (for 2 years) and Bank Mandiri (for 1 year) provided incentives to ease the loan repayment process.

Despite the capital injection aimed at improving inputs, including investment in machine technology, the resulting production remained low: 1–5 tons (2007–2010), 6–10 tons (2011–2019), and 10–20 tons (2020–2021). The income generated also remained low compared to other industries in Palu City.

The efforts to increase capital input intended to improve and boost powdered coffee production resulted in relatively small productivity gains when considering the total investment made by the owner. This discrepancy motivates the authors to investigate and ascertain the underlying issues related to the capital input, specifically whether the financial management within the operation has been appropriately allocated or not. This research, titled "Analysis of Cost Structure Allocation on Financial Feasibility in the Bumi Mutiara Industry in Palu City," is expected to provide solutions to the existing business problems.

Based on this background of operational and financial challenges—particularly the discrepancy between significant capital injection and consistently low productivity—this study aims to investigate the internal financial management of the Bumi Mutiara Industry. Specifically, this research addresses two key questions:

1. How effectively has the acquired capital been allocated within the financing composition, considering aspects such as production technicalities, procurement of raw materials, and marketing strategies?
2. What is the financial feasibility level of the powdered coffee processing business at the Bumi Mutiara Industry?

The objectives of this study, based on the identified background and research questions, are:

1. To ascertain the effectiveness of capital allocation within the financing composition, focusing on the operational aspects of the Bumi Mutiara powdered coffee processing business, specifically in terms of production technicalities, raw material sourcing, and marketing strategies.
2. To determine the financial feasibility level of the powdered coffee processing business at the Bumi Mutiara Industry in Palu City.

RESEARCH METHODS

The study was conducted at the Bumi Mutiara Industry, situated at Jalan Palu Nagaya 2, No. 29–30, Palu City, Central Sulawesi Province. This site was selected purposively given its significance as a local coffee processing unit uniquely dedicated to a single, characteristic coffee product. The empirical research phase spanned from December 2022 to March 2023.

Respondents were also chosen using a purposive sampling technique. The sample included the owner, who holds full managerial responsibility, and four key employees responsible for critical operations within the Bumi Mutiara Industry. This specific respondent selection was made to ensure the collection of data highly relevant and accurate to the research objectives.

Data utilized comprised both primary and secondary sources. Primary data were gathered directly from the selected respondents via structured interviews using a detailed questionnaire. Secondary data were collected from relevant government institutions and a review of supporting academic literature pertinent to the research context.

Data Analysis

The data analysis for this study employed a financial feasibility analysis of the Powdered Coffee Processing Industry at Bumi Mutiara in Palu City. The analysis utilized several key financial criteria: Net Present Value (NPV) (Kasmir and Jakfar, 2003), Internal Rate of Return (IRR) (Elpawati et al., 2018), Net Benefit-Cost Ratio (Net B/C Ratio) (Yulianti, 2008), Payback Period (PP) (Elpawati et al., 2018). Data processing and calculations were performed using Microsoft Excel software. The specific methodologies used for the financial feasibility analysis are detailed below.

Net Present Value (NPV)

Net Present Value (NPV) is an analysis used to determine the value of an investment by considering the time value of money. Furthermore, the Net Present Value (NPV) represents the difference between the present value of the benefits (cash inflows) and the present value of the costs (cash outflows) (Rudianto, 2009).

The NPV method calculates the net difference between the present value of the net cash inflows generated from an investment and the initial capital required (Suratman, 2002). The formula for calculating the Net Present Value (NPV) is as follows:

$$\mathbf{NPV} = \sum_{t=1}^{n} \frac{(Bt - Ct)}{(1+i)^t}$$

Description:

Bt = Benefits or Revenues in year t (Cash Inflow)

Ct = Costs or Expenditures in year t (Cash Outflow)

I = Discount Rate or Cost of Capital

T = Time period (usually in years)

n = Economic life or Project duration (in years)

Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) is defined as the discount rate that equates the present value of the investment to the present value of the expected net returns throughout the operational life of the business. The IRR is specifically used to find the interest rate at which the Net Present Value (NPV) equals zero.The IRR informs the rate, expressed as a percentage (%), at which a project's cash flow is capable of recovering the investment. If the calculated NPV is positive, the IRR must be greater than the required rate of return. Conversely, if the NPV is negative, the IRR will be less than the required rate of return (Elpawati et al., 2018).The formula used to calculate the Internal Rate of Return (IRR) is as follows:

$$\mathbf{IRR} = i_1 + \frac{NPV_1}{NPV_1 - NPV_2} \mathbf{X} (i_1 - i_2)$$

Description:

NPV1 = Positive Net Present Value

NPV2 = Negative Net Present Value

i1 = Lower Discount Rate (Rate yielding the positive NPV1

i2 = Lower Discount Rate (Rate yielding the negative NPV1

Benefit Cost Ratios (B/C)

The Benefit-Cost Ratio (B/C Ratio) is used to determine the comparison between the total costs incurred and the benefits obtained. The Net B/C Ratio specifically represents the ratio between the sum of

positive present values and the sum of negative present values (Gray, 2005). The formula used for the Net Benefit-Cost Ratio is as follows (Yulianti, 2008):

$$\textbf{Net B/C} = \frac{z_t^n Bt / (i+1)^t}{z_t^n Ct / (i+1)^t}$$

Description:

Bt = Benefit or Revenue in year t
Ct = Cost or Expenditure in year t
i = Discount Rate or Cost of Capital
t = Time period (in years)

Payback Periode (PP)

The Payback Period (PP) is the duration required to recover the initial investment using the project's generated cash flow. It specifically represents the time needed to recoup the initial cash investment (expenditure) through subsequent net cash inflows (Umar, 2005). According to Jumingan (2009), the Payback Period (PP) is a method for calculating the time or period necessary to recover the money that has been invested, based on cash inflows. The formula used for the Payback Period (PP) is as follows (Kusuma et al., 2014):

$$\textbf{PP} = \frac{Investasi\ Awal}{Penerimaan\ Periode}\ \textbf{X 1 Year}$$

The feasibility criteria for the Payback Period (PP) are as follows:

1. If the payback period is shorter than the economic life of the business, the project is considered financially feasible (acceptable for development).
2. If the payback period is longer than the economic life of the business, the project is considered financially unfeasible (unacceptable for development).

RESULTS AND DISCUSSION

History of the Company Establishment

The Bumi Mutiara powdered coffee industry operates as a small-scale enterprise, tracing its origins to 1997 under the proprietorship of Mr. Yosep Monoarfa. Situated strategically at Jalan Palu Nagaya 2, No. 29 and 30, in the Tondo Sub-district of Palu City, Central Sulawesi, the business is intrinsically linked to the regional agricultural sector. Its core operation involves the transformation of locally sourced raw coffee beans into its final product: packaged powdered coffee marketed under the Sari Wangi brand.

The development trajectory of this industry was marked by initial self-reliance, with the business commencing operation solely on self-owned capital, independent of governmental support such as that from the Department of Industry, Trade, and Cooperatives (Dinas Perindagkop). Despite a competitive environment with similar enterprises in Palu City, the industry has successfully sustained and grown, establishing increasing popularity among Central Sulawesi's coffee enthusiasts. Critically, the primary raw material—coffee beans—is sourced from the Kulawi region, highlighting the industry's embeddedness within the local supply chain..

Initial Business Investment

Investment represents an alternative method for long-term business development, alongside management improvements. Investment property is defined as property (land or buildings, or both) held (by the owner or lessee through a finance lease) to generate rentals, capital appreciation, or both, and is not used in the production or supply of goods or services, or for administrative purposes, or for sale in the ordinary course of business (Yulianingsih et al., 2019).

The amount of capital invested in the production process is determined by comparing marginal productivity with the output rate obtained by utilizing one additional unit of capital in the production process. Investment continues as long as the productivity of the investment remains higher than the interest rate that would be received if the capital were lent out instead of invested (Suandi and Delis, 2020).

The capital structure of the business shows a significant reliance on debt financing. This began with an Rp20,000,000 loan from Bank BRI in 2007, followed by a substantial increase in May 2018 with two separate loans totaling Rp200,000,000 from Bank BRI and Bank Mandiri, both carrying a 12% annual interest rate over three and two years, respectively.

The initial owner's equity and working capital in 1997 amounted to Rp24,000,000, eventually contributing to the company's total assets of Rp461,150,000. Despite this large asset base built over the investment period, the resulting production capacity remains surprisingly low. This disparity strongly suggests that the root cause lies in ineffective management of investment fund allocation.

The initial investment for the powdered coffee business at the Bumi Mutiara Industry, established by Mr. Yosep Monoarfa in 1997, is presented in Table 1 below:

Although the business secured essential debt relief from Bank BRI (two years) and Bank Mandiri (one year) following operational interruptions, such high leverage requires rigorous cash flow governance. Erisanti and Albeta (2025) confirm that significant external debt, when unsupported by robust cash management, often becomes a critical barrier to growth for both MSMEs and industries. This financial weakness, particularly within Palu City's MSME context, frequently stems from inherent deficiencies in internal accounting and financial reporting practices, as discussed by Duryana et al. (2024).

Table 1. Initial Investment of Bumi Mutiara Powdered Coffee Industry

No	Item of Expenditure	Value (Rp)
1	Loan Capital / Debt Financing	220.000.000
2	Owner's Capital / Own Funds	24.000.000
3	Land and Building	46.000.000
4	Business Permit / Operating License	1.500.000
5	Diesel Engine	8.000.000
6	Roasting Machine	20.000.000,00
7	Grinder Machine / Milling Machine	8.000.000
8	Vehicle (Car/Truck)	105.000.000
9	Plastic Sealer / Press Machine	1.100.000
10	Dial/Platform Scale	300.000
11	Stainless Steel Sifter / Sieving Tool	500.000
12	Large Boiler	4.500.000
13	Medium Boiler	1.000.000
14	Sieving Equipment	50.000
15	Packaging	5.000.000
16	Cooling Media / Refrigeration Unit	15.000.000
17	Plastic Drums / Plastic Containers	1.200.000
	Jumlah	**461.150.000**

Source: Primary Data, Processed (2023)

Production

Production is defined as the final result of an economic process or activity utilizing various inputs. In essence, it involves combining several inputs to generate an output. A higher volume of products or output generally correlates with increased business revenue (Suartawan and Purbadharmaja, 2017).

In a firm's production activities, the producer converts factors of production into goods and services. Based on their relationship to the production level, factors of production are classified into fixed inputs and variable inputs. These factors are fundamental elements

required to sustain any company's production system. A deficiency or absence of any single factor will directly impact the resulting output quantity (Budiman, 2015).

At the Bumi Mutiara Industry, the production of robusta powdered coffee was managed by four employees from 2018–2019 and five employees from 2020–2022. The process was supervised and actively participated in by the owner, Mr. Yosep Monoarfa. In 2018, the company processed 11,250 kg of dry robusta coffee, with a monthly estimate of 1,250 kg. Production declined significantly in 2019 due to the impact of the Palu-Sigi-Donggala earthquake, which completely halted production for six months following the disaster on September 28, 2018. Consequently, only 7,000 kg of robusta coffee were processed in 2019, with a monthly estimate of 700–800 kg. Production experienced a relatively stable increase in the following years, ranging from 15,000 kg to 24,000 kg annually, with monthly production estimates ranging from 1,250 kg to 2,000 kg.

Fixed Costs

Fixed costs are defined as expenses whose magnitude does not depend on the volume of production (Harmoko, 2018). Fixed costs are constant and remain unaffected by the quantity of output generated. Fixed costs possess two main characteristics: they do not change across specific periods or activities, and the cost per unit is inversely proportional to changes in production volume. The fixed costs identified in this study include depreciation expense of equipment, property tax (PBB), vehicle tax, owner's salary, and permanent employee wages. These fixed cost components are detailed in Table 2.

Table 2. Fixed Costs of Bumi Mutiara Powdered Coffee Industry, 2022

No	Item of Expenditure	Value Per Month (Rp)
1	Depreciation Expense of Equipment	1.047.652
2	Land and Building Tax (PBB)	50.000
3	Vehicle Tax	559.167
4	Owner's Salary / Management Salary	4.000.000
5	Permanent Employee Wages / Fixed Employee Salaries	2.000.000
	Jumlah	**13.656.818**

Source: Primary Data, Processed (2023).

The accounting treatment for depreciation in this study addresses the gradual reduction in value of the tangible fixed assets essential for the industry's production chain. The core depreciable items include the diesel engine, roasting machine, grinding machine, company vehicle, plastic press sealer, platform scale, stainless steel sifting equipment, large and medium boilers, sieving tools, cooling apparatus, and plastic containers.

The depreciation expense, as quantified in Table 2, reflects the systematic allocation of the initial cost of these fixed assets across their useful economic lives. This methodology strictly adheres to the definitions set forth by Financial Accounting Standards (PSAK) No. 16 (2012). Under this standard, a fixed asset is characterized as a tangible item (1) held for use in the production, service supply, rental, or administrative function, and (2) expected to be utilized for longer than one fiscal period. Complementing this, Warren et al. (2015) describe fixed assets as permanent, long-term holdings acquired solely for operational continuity, not for subsequent resale.

Fixed assets are widely recognized as fundamental elements supporting business operations and ensuring long-term profitability (Pontoh, 2013). PSAK 16 (2012) further delineates their characteristics: (1) active use

in regular business operations, (2) an economic life extending beyond one accounting cycle, and (3) possession of a physical (tangible) form. Consistent with the Financial Accounting Standards (SAK) 2012, depreciation represents the amortized portion of the depreciable amount, distributed over the asset's beneficial lifespan during each accounting period, typically encompassing equipment, structures, and vehicles.

This research utilizes the Sum-of-the-Years' Digits Method to calculate fixed asset depreciation. This method is a scheme for calculating accelerated depreciation by multiplying the asset's cost base (cost minus salvage value) by a fraction that decreases annually. In the Sum-of-the-Years' Digits Method, the denominator of the fraction is the sum of the digits corresponding to the asset's useful life (e.g., for an 8-year life, the denominator is 1+2+3+4+5+6+7+8. The numerator starts with the largest digit in the first year and decreases by one each year (e.g., 8, 7, 6, ..., 1).

Variable Costs

Over the last five years, the Bumi Mutiara Powdered Coffee Industry incurred cumulative variable costs amounting to Rp. 2,026,408,550. The annual expenditure demonstrated clear volatility, directly reflecting external shocks and market recovery.

A distinct cost reduction was recorded in 2019, attributed primarily to the reduced production volume of raw materials. This downturn stemmed from the major operational disruption caused by the Palu natural disaster, which necessitated a complete cessation of production for a six-month period. Conversely, 2022 registered the highest expenditure in variable costs. This peak spending correlates with robust, stabilized sales and the expansion of local coffee demand within Palu City, a trend underscored by the noticeable proliferation of contemporary, processed coffee beverage outlets. This buoyant market environment spurred the company to aggressively scale up both its production volume and the procurement of dried robusta coffee raw materials.

It is well-established that variable costs are intrinsically contingent upon the level of production, with raw materials being the most prominent cost driver (Harmoko, 2018). The detailed annual breakdown of these variable costs over the five-year period is systematically presented in Table 3.

Profit

The Net Profit Before Tax (EBIT - Earnings Before Interest and Tax) achieved by the Bumi Mutiara Industry between 2018 and 2022 was characterized by notable annual fluctuations. These variations are systematically linked to yearly shifts in sales volume, selling price, operational costs incurred, and the annual inflation rate affecting raw material procurement. By definition, net profit before interest and tax represents the operating income prior to the deduction of financing charges and taxes, or fundamentally, the positive margin between the total revenue and total costs within a given reporting period. This crucial financial data is systematically documented in Table 3.

The observed volatility in the company's EBIT underscores the firm's significant sensitivity to both internal and external market dynamics. Internally, variations in the selling price and, critically, per-unit operational costs emerge as the dominant drivers of profitability swings. This finding aligns consistently with case studies involving comparable MSMEs in the coffee industry, where operational costs demonstrate a significant negative correlation with net profit (Chasanah and Hermawan, 2024). Given that net profit fundamentally represents the margin between total revenue and total costs (prior to statutory deductions), inadequate control over operational expenditures directly compromises the firm's bottom line. This empirical evidence powerfully supports the argument advanced by

Habibah and Jatiningrum (2024), who assert that achieving and sustaining optimal business profit hinges entirely on effective operational cost management and efficiency.

Cash Flow

Cash flow analysis is fundamentally employed to ascertain information concerning the sources, utilization, and changes in cash and cash equivalents throughout an accounting cycle, alongside the resulting cash balance on the reporting date (Tanjung 2009). This analysis serves as a critical tool for evaluating sustained operational performance and formulating strategic future investments. Furthermore, cash flow statements provide essential insights into a firm's capability to generate cash from its core operating activities, finance capital expenditures, and fulfill its financial obligations (Sembiring et al., 2021). Consistent with financial theory, cash generation and net profit generally exhibit a tandem relationship, where increased profitability typically drives a commensurate rise in cash balances (Nasution, 2011).

The net cash inflow for the robusta powdered coffee business at the Bumi Mutiara Industry is systematically presented in Table 4.

The data in Table 4 reveals that the net cash inflow at Bumi Mutiara Industry is characterized by annual fluctuations rather than consistent growth. This volatility stems from two primary issues: the high magnitude of operational costs and the inherent instability of the company's revenue stream. This prevents the cash flow from demonstrating reliable year-on-year increases. Another significant contributor is the influence of uncontrollable external factors, such as continuous fluctuations in market prices, directly causing variable expenditures for the company. Within this context, cash flow is conventionally determined as the net profit (Earnings After Interest and Tax) adjusted by adding back non-cash expenses, specifically depreciation.

Cash availability is pivotal, as it is the lifeblood for financing all corporate activities (Rudianto, 2009). A cash deficit can severely impede the company's ability to cover operating and investment requirements. Conversely, holding excessive cash beyond immediate needs can lead to suboptimal asset management when those funds could be more strategically employed to maximize profitability. As Munawir (2010) suggests, maintaining a relatively low cash balance often facilitates a higher cash turnover rate, which is subsequently linked to greater potential profit.

Financial Feasibility Analysis

Financial feasibility criteria are used to measure the viability of a business. According to Halim (2009), there are four primary techniques for business investment appraisal that fully integrate the concepts of NPV, IRR, Net B/C, and PP. Fahmi (2014) highlights that research in this aspect focuses on determining what expenditures will be incurred and the total magnitude of these costs. Among the various aspects of business feasibility, the financial aspect is critically important because financial decisions must be precise and cannot be arbitrary, as they carry both short-term and long-term consequences. Gustin et al. (2017) note that the financial aspect assesses overall financial health, clearly depicting matters related to company profitability.

Table 5 shows that the NPV for the powdered coffee business at the Bumi Mutiara Industry is Rp187,500,267. This figure signifies that the company is projected to receive a net benefit of Rp. 187,500,267 over a five-year period, measured in present value terms.

The result is deemed feasible (acceptable) because the NPV value is greater than zero (NPV>0). Therefore, the business is viable to operate and develop for the future. This positive NPV indicates that optimizing

production quantity will yield significantly greater returns, thereby increasing the profitability achieved by the company (as detailed in Table 5).

Internal Rate of Return (IRR): The calculated IRR of 23% is significantly higher than the presumed discount rate (or cost of capital) of 12%. This suggests a strong intrinsic profitability rate that well surpasses the financing cost.

Net Benefit-Cost Ratio (Net B/C): A ratio of 1.41 implies that for every unit of cost incurred, the business generates 1.41 units of benefit, confirming the project's economic efficiency.

Payback Period (PP): The investment is recovered in 3 years and 3 months, which is substantially shorter than the project's estimated economic life (usually 5 years or more), minimizing the risk of capital exposure.

Business feasibility analysis involves assessing a running business's viability to achieve corporate profit. It serves as a step for determining whether a business is acceptable or not, and measuring the benefits expected from the project. A project is defined as an overall activity utilizing resources to obtain benefits, or an activity where money is expended with the expectation of receiving a return in the future (Setyawan et al., 2016).

The financial aspect is a crucial pillar in feasibility studies, providing a quantitative basis for projecting long-term profitability and mitigating investment risk (Musyafa et al., 2025). Practically, optimizing production quantity will significantly enhance potential returns. This underscores that understanding the present value methods is essential for business owners to achieve sustainable investment decisions and increase future firm value (Pontoh and Budiarso, 2024). The text refers to Table 5, which should contain the detailed NPV calculation data.

Table 3. Net Profit Before Interest and Tax (EBIT) of Bumi Mutiara Powdered Coffee Business, 2018–2022

No.	Period (Year)	Revenue (Rp)	Total Costs (Rp)	Profit Before Interest and Tax (EBIT) (Rp)
1	2018	468.083.000	403.917.364	64.165.636
2	2019	289.740.000	246.401.750	259.174.477
3	2020	835.440.000	468.708.800	479.077.891
4	2021	510.636.000	550.452.000	558.417.455
5	2022	1.322.664.000	767.705.000	549.397.182

Source: Primary Data, Processed (2023).

Table 4. Net Cash Flow of Bumi Mutiara Powdered Coffee Industry, 2018–2022

No.	Period (Year)	EAT (Earnings After Tax) (Rp)	Depreciation (Rp)	Net Cash Flow (Proceeds) (Rp)
1	2018	47.995.896	22.186.364	70.182.260
2	2019	22.863.011	19.782.727	42.645.738
3	2020	222.127.658	17.379.091	239.506.749
4	2021	207.212.864	14.975.455	222.188.319
5	2022	410.949.092	12.571.818	423.520.910

Source: Primary Data, Processed (2023).

Table 5. Financial Feasibility Analysis Results of Bumi Mutiara Powdered Coffee Industry, 2018–2022

No	Investment Criterion	Analysis Result	Feasibility Benchmark	Description
1	Net Present Value (NPV) (Rp)	187.500.267	>0	Feasible
2	Internal Rate of Return (%)	23%	>12%	Feasible
3	Net Benefit-Cost Ratio (B/C)	1,41	>1	Feasible
4	Payback Period (Tahun)	3 Tahun 3 Bulan		Feasible

Source: Primary Data, Processed (2023).

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the analysis of financial performance and operational structure, the following conclusions address the research objectives:

1. Capital Allocation and Operational Efficiency: The study concludes that the capital structure was not effectively allocated within the overall financing composition. This misalignment resulted in a production output that was relatively small compared to the substantial input of loan capital and the available company assets, indicating a managerial gap in resource utilization. Raw materials are sourced from the Kulawi Village using a fluctuating ordering system, where procurement volumes are adjusted based on uncertain inventory levels and direct market demand for the coffee product. Distribution involves a diversified strategy utilizing local kiosks, souvenir shops, pre-order systems, and established suppliers across the Tondo area and Palu City.
2. Financial Feasibility: The robusta powdered coffee business (40g packaged product) at the Bumi Mutiara Industry is deemed financially feasible for operation and development. This conclusion is supported by favorable results across all investment appraisal criteria: Net Present Value (NPV): The positive value of Rp187,500,267 confirms a net benefit generation in present value terms. Internal Rate of Return (IRR): The calculated IRR of 24% significantly exceeds the assumed discount rate (24%>12%). Net Benefit-Cost Ratio (Net B/C): The ratio of (1.41> 1) demonstrates strong economic viability. Payback Period (PP): The investment is recovered quickly in 3 years and 3 months.

Suggestions

Based on the preceding findings and analysis presented in the conclusion, the following recommendations are proposed for both practical application and policy consideration, as well as for the direction of future research:

1. Enhance Operational and Marketing Management: The owner should immediately consider undertaking a management overhaul to align production output with the substantial capital and asset investments already made. This is crucial because the current investment scale warrants significantly higher productivity. Specific actions include: Increasing the workforce to effectively scale up production capacity; Modernizing product packaging to be more attractive and contemporary, thereby boosting market appeal; Diversifying the coffee product line to capture a broader consumer base; Expanding market access through modern channels, particularly by establishing a robust online sales platform. These steps are essential for ensuring the effective allocation of capital and maximizing productivity.
2. Sustained Strategic Business Development: Given the strong financial feasibility

demonstrated by the research results, the business is highly recommended to be actively continued and expanded. Since the study confirms the venture's profitability, the company should introduce complementary product variations to further stimulate consumer interest and drive incremental sales growth.

3. Policy Support for Raw Material Stability: Relevant government agencies and policymakers are urged to prioritize and secure the consistent availability of high-quality raw coffee beans. Such measures are paramount for ensuring the continuous, sustainable operation of the Bumi Mutiara Industry and other Micro, Small, and Medium Enterprises (MSMEs) within Palu City.

REFERENCES

Budiman. 2015. *Analisis Pengaruh Tenaga Kerja, Bahan Baku Dan Teknologi Terhadap Nilai Produksi Pada Industri Percetakan Di Provinsi Riau*. Jurnal Fekon,Vol.2(2):1-10.

Chasanah, N.I., dan Hermawan, A. 2024. *Pengaruh Biaya Operasional Terhadap Laba Bersih UMKM Kopikir Coffee di Kota Malang.* Jurnal Ilmiah Komputerisasi Akuntansi. Vol.17(2):366-373.

Duryana, Andanika, dan Arfah, D. A. 2024. *Studi Kualitatif Terhadap Faktor-Faktor Yang Mempengaruhi Manajemen Keuangan Usaha Mikro, Kecil Dan Menengah*. Jurnal Bisnis Net. Vol.7(2):888-895.

Elpawati, Nugraha, T. A., dan Shofiatina, R. 2018. *Kelayakan Usaha Ayam Boiler (Studi Pada Usaha Peternakan di Desa Cibinong)*. Journal of Sustainable Agriculture. Vol.2(33): 96-105.

Erisanti, L., dan Albeta, F. R. 2025. *Analisis Pengelolaan Keuangan Pada Usaha Mikro Kecil Dan Menengah (UMKM) (Studi Kasus Pada Usaha Konveksi Di Kecamatan Binawidya Kota Pekanbaru)*. Jurnal Publikasi Ekonomi dan Akuntansi. Vol.5(3):210-219.

Fahmi, I. 2014. *Studi Kelayakan Bisnis Dan Keputusan Investasi*. Jakarta: Mitra Wacana Media. Hal:145. Ed. 1.

Fatma, Z. 2011. *Analisis Fungsi Produksi Dan Efisiensi Usahatani Kopi Rakyat Di Aceh Tengah*. Tesis. Program Pascasarjana Institut Pertanian Bogor.

Gray, C. 2005. *Pengantar Evaluasi Proyek*, Edisis kedua. Jakarta: PT Gramedia Pustaka Utama. Edisi Kedua, Cetakan Kelima.

Gustin, R. I., Hadi, M. R., dan Dellaroswati, M. 2017. *Analaisis Kelayakan Pengembangan Usaha Budidaya Ayam Ras Petelur Maya Rolet*, Jurnal e-Proceeding of Engineering. Vol.4(2): 2409-2415.

Habibah, dan Jatiningrum, C. 2024. *Peningkatan Kinerja Umkm Melalui Analisis Biaya Produksi Dan Biaya Operasional Terhadap Laba Bersih*. JICN: Jurnal Intelek dan Cendikiawan Nusantara. Vol.1(4):5571-5584.

Halim Abdul. 2009. *Analisis Kelayakan Investasi Bisnis*. Yogyakarta: Graha Ilmu. Ed.1, Cet. Ke-1.

Harmoko, A. 2018. *Analisis Komparatif Tingkat Pendapatan Usaha Kuliner Penduduk Suku Jawa Dan Makassar (Studipada Usaha Warung Bakso di Kecamatan Rappocini)*. Tesis. Universitas

Islam Negeri Alauddin Makassar. Makassar. Hal: 1-104.

Haryanto, B. 2012. *Prospek Tinggi Bertanam Kopi.* Pustaka Baru Press.Yogyakarta. Ed. 1., Cet. Ke-2.

Herlinawati, Erna, dan Arumanix, R. E. 2017. *Analisis Pendapatan UMKM Sebelum Dan Sesudah Menerima Kredit Tunas Usaha Rakyat*. Jurnal Indonesia Membangun. Vol. 16(2):1-13.

Joka, U., Tasik, A., dan Fallo, Y. M. 2020. *Analisis Kelayakan Finansial Industri Rumah Tangga Pangan (Studi Kasus Usaha Tahu Alfaria, Kota Kefamenanu).* Jurnal Penelitian Pertanian Terapan. Vol.20(3):218-229.

Jumingan. 2009. *Studi Kelayakan Bisnis*. Jakarta: PT Bumi Aksara. Cet. Ke-2.

Kasmir dan Jakfar. 2003. *Studi Kelayakan Bisnis*. Prenadamedia Group, Jakarta. Cet. Ke-12.

Kusuma, W. W. T. P., dan Mayasti, I. K. N. 2014. *Analisa Kelayakan Finansial Pengembangan Usaha Produksi Komoditas Lokal:Mie berbasis Jagung.* Jurnal Agritech. Vol.34(2):194-202.

Munawir, S. 2010. *Analisis Laporan Keuangan*, Yogyakarta: Liberty Yogyakarta. Hal:158.

Musyafa, F., Gea, A. J., Maulana, M. I., Hafiz, M., dan Sihotang, M. K. 2025. *Peran Aspek Keuangan dalam Studi Kelayakan Bisnis Start-Up di Era Digital.* Jurnal Ilmiah Ekonomi, Akuntansi, dan Pajak (JIEAP). Vol.2(1):62-75.

Nasution, A. H. 2011. *Pengantar Akuntansi*. Medan: UNIMED. Hal:140.

Neilson, J. 2008. *Global Private Regulation and Value-Chain Restructuring in Indonesian Smallholder Coffee Systems.* World Development. Vol.36(9):1607–1622.

Pontoh, W. 2013. *Akuntansi Konsep dan Aplikasi*. Moeka.

Pontoh, W., dan Budiarso, N. S. 2020. *Keputusan Investasi Pada Usaha Mikro, Kecil, Dan Menengah.* The Studies of Social Science. Vol.2(1):27-32.

Rudianto. 2009. *Pengantar Akuntansi.* Jakarta: PT. Gramedia Widiasarana Indonesia. Hal:206.

Sembiring, W. M. K., Sayekti, W. D., dan Gultom, D. T. 2021. *Analisis Kinerja Dan Strategi Pengembangan Usaha Pada Rose Florist Di Bandar Lampung*. Journal of Agribusiness Science. Vol.9(3):381-385.

Setyawan, D., Saleh, A., dan Fitria, L. 2016. *Analisis Kelayakan Bisnis Peternakan Ayam Boiler di Kecamatan Mandau Duri-Riau.* Jurnal Online Institut Teknologi Nasional. Vol.4(2):91-101.

Sitanggang, J. T N., dan Sembiring, A. S. 2013. *Pengembangan Potensi Kopi Sebagai Komoditas Unggulan Kawasan Agropolitan Kabupaten Dairi.* Jurnal Ekonomi Dan Keuangan Vol.1(6):33-48.

Suandi, dan Delis, A. 2020. *Analisis Investasi Dan Kontribusi Sektor Pertanian Terhadap Perekonomian Kabupaten Merangin Provinsi Jambi Dengan Menggunakan Pendekatan Icor.* Jurnal Sosial Ekonomi Pertanian. Vol.13(2):112-124.

Suartawan, K.I. dan Purbadharmaja, B.I. 2017. *Pengaruh Modal Dan Bahan Baku Terhadap Pendapatan Melalui Produksi Pengrajin Patung Kayu Di Kecamatan Sukawati Kabupaten Gianyar*. E-Jurnal Ekonomi Pembangunan Universitas Udayana. Vol.6(9):1633.

Suratman. 2002. *Studi Kelayakan Proyek*. Jakarta: Gramedia. Ed. 1.

Tanjung, A. 2009. *Akuntansi Pemerintah Daerah*. Alfabeta. Bandung. Cet. Ke-3.

Umar, H. 2005. *Studi Kelayakan Bisnis: Teknik Menganalisis Kelayakan Rencana Bisnis Secara Komprehensif*. Jakarta: PT. Gramedia Pustaka Utama. Ed. 2.

Warren, C. S., Reeve, J. M., Duchac, J. E., Suhardianto, N., Kalanjati, D. S., Jusuf, A. A., & Djakman, C. D. 2016. *Pengantar Akuntansi* (25th ed.). Salemba Empat.

Winantara, I. M. Y., Bakar, A., dan Pusitaningsih, R. 2014. *Analisis Kelayakan Finansial Usaha Kopi Luwak di Bali*. Jurnal Online Institut Teknologi Nasional. Vol.2(3):118-129.

Yulianingsih, U., Haris, A., dan Hudzafidah, K. 2019. *Analisis Studi Kelayakan Pengembangan Bisnis Dalam Menentukan Keputusan Ekspansi Pada PT. Artaniaga Megah Gemilang Probolnggo*. Ecobuss: Jurnal Ilmiah Ilmu Ekonomi Dan Bisnis. Vol.7(2):24-34.

Yulianti, dan Sari, N. 2008. *Kelayakan Usaha Agroindustri Bawang Goreng Palu di Kabupaten Donggala*. Jurnal Agroland, Vol.15(3):216-222.