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Feasibility Analysis of UMKM Bakso Mas Eko and Rawasikut Karawang Swimming Pool

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ABSTRACT : *This study uses the Quantitative Descriptive method, sample selection is carried out by purposive sampling method, namely the researcher chooses MSMEs Bakso Mas Eko Rawasikut Karawang. The purpose of this study is to know, analyze, calculate and explain how the business feasibility of Bakso Mas Eko Rawasikut Karawang MSMEs and how the business feasibility of the Rawasikut Karawang swimming pool. Data was collected through observation, interviews and documentation. The results of this study show that Bakso Mas Eko and Rawasikut Karawang Swimming Pool MSMEs are declared feasible, because the results of the NPV calculation are positive and the Profitability Index value is PI>1. In the business feasibility of MSMEs Bakso Mas Eko Rawasikut and Rawasikut Karawang*
Swimming Pool, the results of the analysis show that it is more feasible to develop between Bakso Mas Eko Rawasikut and Rawasikut Swimming Pool, namely Bakso Mas Eko Rawasikut through the calculation of its financial feasibility.

Keywords: Business feasibility, MSMEs, Swimming Pool

1. INTRODUCTION

Bakso gained popularity in Indonesia in the early 20th century, especially after World War II. This food was readily available at affordable prices, especially in urban areas. In addition to being a food, bakso is a component of a rapidly growing culinary culture. The taste and ingredients of bakso vary by region, as does the way it is served.(Wibisono, 2024)

Meatball cuisine is becoming more and more so that small industrial companies compete in processing fast food called meatballs. In addition, this cuisine is very popular among Indonesian people. Because Indonesians are very creative, various types of meatballs served in various countries have many unique touches. Beef, fish, chicken, and other meat mixtures can be used to make meatballs. There are several types of broth such as Solo meatballs which have clear broth and Malang meatballs which are full of fat.(Umami, 2022)

The high interest in consuming meatballs has made many UMKM and even companies create businesses and compete to produce meatballs in various variations of meatballs. Because there are so many variations of meatballs in each region, tourists often focus their culinary tours on local specialties. Not only to spend money, but also to enjoy the unique taste of each recipe.(Jenderal Kementerian et al., 2019)

The Central Statistics Agency (BPS) released the results of the 2022 cost of living survey (SBH). The report shows that there are several commodities that have experienced an increase in meatball consumption by the Indonesian people, even Indonesians spend the most money on meatball snacks, because the taste is savory, fresh, not too filling and not too snacky either, so the portion is just right and also practical. In addition to the delicious meatballs themselves, Indonesians do like spicy food because most of them want to eat meatballs when they are stressed from studying or working because meatballs are usually combined with spicy sauce and chili sauce and sweet soy sauce.(Ayu Ningrum, 2023)

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Business feasibility analysis is an activity to assess how much profit can be obtained in carrying out a business activity. The results of this analysis are used as a consideration in making decisions, whether to accept or reject a business plan. The definition of feasibility in this study is a possibility of a business plan that will be implemented whether it is feasible to develop or not. (Suhartati, 2021)

One of the meatball UMKM that has been established for quite a long time, approximately 24 years, namely from 2000 to 2024 now, which is located on Jl. Raya Syeh Quro, Talagamulya, Kec. Telagasari, Karawang, which is called UMKM Bakso Mas Eko Rawasikut. During the Covid-19 conditions, Bakso Mas Eko Rawasikut Karawang did not run the company's operations for 3 years, in order to maintain the business, what was done was to expand the business, namely adding a swimming pool business. Now, Bakso Mas Eko Rawasikut has grown from initially selling around until now it has added a swimming pool business. You can see below which contains the number of visitors to UMKM Bakso Mas Eko Rawasikut.

Table 1. Number of Visitors and Revenue at UMKM Bakso Mas Eko and Rawasikut Swimming Pool

Meatball Income			Swimming Pool Income	
Year	Average Number of Visitors	Income (Rp)	Average Number of Visitors	Income (Rp)
2022	35,400 people	4,002,000,000	34,968 people	2,202,900,000
2023	53,400 people	4,591,000,000	52,920 people	2,431,920,000
2024	57,000 people	4,883,000,000	56,784 people	2,474,940,000

Source: Results of interviews with the owner of the UMKM Bakso Mas Eko Rawasituk Karawang, processed by the author in 2024

Table 1 shows that there is an increase in meatball income of 14.72% from 2022 to 2023, and 6.36% from 2023 to 2024 with an average number of visitors per year. Then there is an increase in swimming pool income of 10.40% from 2022 to 2023 and 1.76% from 2023 to 2024. From these data, it can be seen an increase in the number of visitors to meatballs and swimming pools and income each year at UMKM Bakso Mas Eko and Kolam Renang Rawasiku. The increase in the number of visitors above is what makes UMKM Bakso Mas Eko and Kolam Renang Rawasiku able to survive their business until now.

As one way to increase income by adding a culinary business in the form of a swimming pool tour. However, adding a culinary business requires a cost analysis and to see the sustainability of the business, one thing that must be taken into account is a deeper business feasibility study of the business. This includes estimates of construction, maintenance and operational costs as well as projections of possible revenue increases and calculations used to determine whether a business can be said to be feasible or not. This analysis is important to ensure that the investment made can provide benefits and sustainability for MSMEs.

Based on the results of previous studies, there is a research gap with various findings related to the relationship between business feasibility. According to research (Nurhalimah, 2023) it shows that the Bangkit lesehan food stall business in Central Java with the results of its financial feasibility analysis can be declared feasible and (Fatoni, 2023) in analyzing the feasibility of Becrow *shoes clean* business investment reviewed from the results of data processing to assess the level of business feasibility using data analysis tools such as Payback Period (PP), Net Present Value (NPV), Portability Index (PI), Internal Rate of Return (IRR), Average Rate of Return (ARR). So it can be concluded that Becrow *shoes clean business investment* is feasible to continue.

Thus, this study aims to analyze the feasibility of the business of developing swimming pool tourism in UMKM Bakso Mas Eko Rawasituk Karawang. The results of this analysis are expected to determine the feasibility of UMKM businesses in planning more effective and sustainable business development strategies. This study can also be a reference for other UMKMs who want to diversify their products and increase competitiveness in the market.

Research purposes

To find out, analyze, calculate and explain (1) how the business feasibility is at the Bakso Mas Eko Rawasikut Karawang UMKM and (2) how the business feasibility is at the Rawasikut Karawang swimming pool.

2. LITERATURE REVIEW

Financial management

Financial management is the most important concept or part of an organization's business process. (Hariyani, 2021)All activities of obtaining, using, and managing cash to optimize the efficiency and value of the company's activities are also known as financial management. (Asri Jaya, 2023)Financial management involves a series of decisions that include the management of assets, debts, working capital, and investment decisions with the aim of achieving financial stability and sustainable growth in accordance with predetermined financial goals. (Wayan Susrama, 2024)Corporate financial management serves as a decision-making tool for stakeholders and aims to achieve income comparable to that which the company has established. (Sandi et al., 2023)

Business Feasibility

A study known as "business feasibility" is a specific effort, activity, or business that will be carried out to assess the feasibility of a business, which focuses on specific tasks or efforts that will be completed to determine whether the business is feasible or not (Jahrizal et al., 2024) The business idea will be reviewed, researched, and investigated from various aspects to see whether the requirements for growth are met or not. (Apriliawan et al., 2023) In other words, business feasibility is carried out to determine whether the business being run will generate more profit than business expenses. (Kamaroellah, 2024) . Business Feasibility Indicators include Payback Period (PP), Net Present Value (NPV), Profitability Index (PI), Internal Rate of Return (IRR),
and Average Rate of Return (ARR). (Meiria & Prasetyowati, 2020)

Payback Period (PP), the payback period criteria depend on the age of the business and the size of the project investment, if the payback period is not too long then the business can be run. Net Present Value (NPV): If the NPV is greater than 0, then the investment is acceptable and feasible to continue, but if the NPV is less than 0, then the investment is rejected or not feasible to continue. Profitability Index (PI) must be greater than one if PI> 1, because if PI is less than one, the business cannot be continued.

The maximum interest rate that a project can earn for the resources used is indicated by the Internal Rate of Return (IRR). The eligibility criteria for the Internal Rate of Return (IRR) method are as follows: if the IRR is greater than the MARR (minimum rate of return/applicable interest rate acceptable for investment) then the method is feasible to implement; if the IRR is less than the MARR, then the method is not feasible to implement. and Average Rate of Return (ARR), also known as the Accounting Rate of Return, to calculate the expected profit or income from investment results. Therefore, the ARR indicates the amount of money that will be returned to investors from an investment. If the ARR is greater than the MARR (minimum attractive rate of return/minimum rate of return or applicable interest rate acceptable for investment), then the investment is feasible to implement. If the ARR is less than the MARR, then the investment is not feasible to implement. (Nurhalimah, 2023)

FRAMEWORK

Several studies conducted related to the feasibility analysis of the Baso Mas Eko UMKM business and the Rawasikut Karawang swimming pool can be used as a research paradigm as follows:

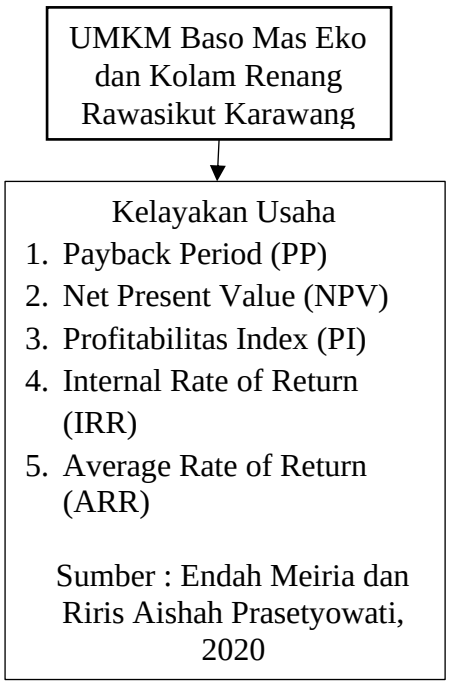

Figure 1. Research Paradigm
Source: Endah Meiria and Riris Aishah Prasetyowati, 2020

3. RESEARCH METHODS

The research used is a type of quantitative descriptive research through observation, interviews, documents, books, and relevant journals. The locus of this research was carried out at the Bakso Mas Eko Rawasikut Karawang UMKM located on Jl. Raya Syeh Quro, Talagamulya, Kec. Talagasari, Karawang. This research was conducted from September 2024 to December 2024. The sample selection was carried out using the purposive sampling method, namely the researcher chose the Bakso Mas Eko Rawasikut Karawang UMKM to focus on this research with the aim of examining the Business Feasibility of the Bakso Mas Eko UMKM and the Rawasikut Karawang Swimming Pool. The type of data taken in this study is primary data. This primary data is taken or obtained directly through observation, interviews and documentation of related parties from which conclusions can be drawn. This secondary data is obtained from third parties in the form of written information and documentation related to the problems studied, such as cost data from 2022-2024, income data obtained from the addition of culinary tourism, and other information related to the research.

Formula according to (Meiria & Prasetyowati, 2020) :

a. Payback Period = $\frac{Investasi}{Kas\ Bersih}$ x 12 bulan

b. Net Present Value = Total Kas Besrsih - Investasi

c. Profitability Index = $\frac{Kas\ Bersih}{Investasi}$ x 100%

d. Internal Rate of Return = $I_1 + \frac{NPV_1}{NPV_1 - NPV2} \times (i_2 - i_1)$

e. Average Rate of Return = $\frac{Rata-rata\ EAT}{Rata-rata\ Investasi}$

4. RESULTS AND DISCUSSION

Research result

Micro, Small and Medium Enterprises (MSMEs) in Karawang Regency in the Meatball food sector and swimming pool tourism located on Jl. Raya Syeh Quro, Talagamulya, Kec. Talagasari, Karawang, which is commonly known as Bakso Mas Eko and Kolam Renang Rawasikut, the owners of this MSME are Mr. Sukasdi and Mrs. Siti Romlah who tried to sell Meatballs in Karawang in 2000. Where at that time it was Mr. Sukasdi's expertise in processing meat into appetizing ready-to-eat Meatballs. With an initial capital of IDR 5,000,000 and an income of IDR 8,000,000 until now it can reach IDR 30,000,000 with a sales production of 40 to 1,000 portions per day, with the addition of culinary tourism swimming pools with an initial capital of IDR 1,000,000,000, and an income of IDR. 2,202,900,000 with the number of visitors increasing every day from 100 visitors per day to 1,200 visitors per day which makes his business survive until it is successful now.

Feasibility of UMKM Business of Bakso Mas Eko Rawasituk Karawang

The data obtained from the UMKM Bakso Mas Eko Rawasituk Karawang related to the feasibility of the UMKM Bakso Mas Eko business is as follows:

A. Fixed Costs

The following is a table of fixed costs for the Bakso Mas Eko Rawasituk Karawang UMKM:

Table 2. Fixed Costs
UMKM Meatball Mas Eko Rawasituk Karawang

Pre-Investment Fee	Rp. 55,000,000
Land purchase cost (750 m)	Rp. 375,000,000
Gazebo 4 pieces	Rp. 80,000,000
1 toilet	Rp. 5,000,000
1 prayer room	Rp. 25,000,000
2 large pans	Rp. 480,000
10 dozen bowls	Rp. 960,000
Spoons 10 dozen	Rp. 140,000
10 dozen forks	Rp. 140,000
3 vegetable ladles	Rp. 144,000
10 dozen glasses	Rp. 308,000
6 teapots	Rp. 150,000
1 cart	Rp. 15,000,000
Table of 6 pieces	Rp. 2,400,000

24 chairs	Rp. 1,200,000
1 refrigerator	Rp. 3,000,000
5 fans	Rp. 3,000,000
1 cash register	Rp. 2,500,000
Salary Cost	Rp. 238,800,000
Electricity cost	Rp. 48,000,000
Amount	**Rp. 856,222,000**

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Table 2 above shows the fixed costs incurred by UMKM Bakso Mas Eko Rawasikut in running its business. There are several needs required by UMKM Bakso Mas Eko Rawasikut in opening its business, with a total fixed cost of Rp. 856,222,000.

B. Variable Costs

The following is a table of fixed costs for the Bakso Mas Eko Rawasituk Karawang UMKM:

Table 3. Variable Costs
UMKM Meatball Mas Eko Rawasituk Karawang

No	Bulan	Daging	Tepung	Sayur	Bumbu	Mie	Kecap	Saos	Jumlah
1.	2022	2.840.000.000	41.500.000	24.000.000	35.000.000	41.500.000	14.800.000	14.750.000	3.011.550.000
2.	2023	3.300.000.000	58.000.000	46.000.000	41.500.000	52.500.000	16.100.000	15.600.000	3.529.700.000
3.	2024	3.540.000.000	71.000.000	48.000.000	48.000.000	71.000.000	17.650.000	16.780.000	3.812.430.000

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

In table 3 variable costs from 2022 to 2024 there are different costs each year. The cost in 2024 is the highest cost because in 2024 the raw materials needed by MSMEs experienced an increase in price. Even so, MSME Bakso Mas Eko Rawasikut maintains the quality of taste so that it does not change and the price remains affordable for all groups from school children to adults.

C. Investment requirement costs

The following is a table of investment cost requirements for the Bakso Mas Eko Rawasituk Karawang UMKM:

Table 4. Investment Cost Requirements
Mas Eko's Meatballs Rawasiku Karawang

1. Pre-Investment Fees	Rp. 55,000,000
2. Purchase of fixed assets	
a. Land purchase costs (750 m)	Rp. 375,000,000
b. Building and infrastructure costs	
Gazebo 4 pieces	Rp. 80,000,000
1 toilet	Rp. 5,000,000
1 prayer room	Rp. 25,000,000
c. Equipment purchase costs	
2 large pans	Rp. 480,000
10 dozen bowls	Rp. 960,000
Spoons 10 dozen	Rp. 140,000
10 dozen forks	Rp. 140,000
3 vegetable ladles	Rp. 144,000
10 dozen glasses	Rp. 308,000
6 teapots	Rp. 150,000
d. Inventory	
1 cart	Rp. 15,000,000
Table of 6 pieces	Rp. 2,400,000
24 chairs	Rp. 1,200,000
1 refrigerator	Rp. 3,000,000
5 fans	Rp. 3,000,000
1 cash register	Rp. 2,500,000
Amount of investment required	**Rp. 569,422,000**
Own Funds	**Rp. 569,422,000**

Source: Results of an interview with the owner of the UMKM Bakso Mas Eko Rawasituk Karawang, processed by the author 2025

Based on table 4 above, the investment cost requirements for UMKM Bakso Mas Eko Rawasikut Karawang show the costs incurred to purchase fixed assets, including the cost of purchasing land with an area of 750 m2 at a price per meter of Rp. 500,000, supported by the cost of purchasing other fixed assets such as building costs, equipment purchase costs, and inventory from Bakso Mas Eko Rawasikut itself.

D. Income

Income refers to payments made to all factors involved in the production process. (Mulyadi et al., 2024) The following is a table of profit and loss reports for the Bakso Mas Eko Rawasituk Karawang UMKM:

Table 5. Income
Mas Eko's Meatballs Rawasiku Karawang

Year	Income (Rp)
2022	4,002,000,000
2023	4,591,000,000
2024	4,883,000,000

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2024

Based on table 5 above, there is income from the Bakso Mas Eko UMKM, the highest income is in 2024 because more and more people know about the Bakso Mas Eko Rawasiku Karawang UMKM which has increased the income of Bakso Mas Eko Rawasiku Karawang.

E. Net profit

Revenue must be greater than expenses in a period. When costs incurred are greater than income, the difference will result in a loss, the following is the formula for calculating profit:

$$\pi = \textbf{Total Revenue(TR)} - \textbf{Total Cost (TC)}$$

The following is a profit analysis of the Bakso Mas Eko Rawasituk Karawang UMKM :

Table 6. Net Profit
Mas Eko's Meatballs Rawasiku Karawang

Year	Income	Expenditure	Net Profit of the business
2022	Rp. 4,002,000,000	Rp. 3,885,282,000	Rp. 116,718,000
2023	Rp. 4,591,000,000	Rp. 4,406,377,000	Rp. 184,623,000
2024	Rp. 4,883,000,000	Rp. 4,690,567,000	Rp. 192,433,000

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2024

Based on Table 6, the Bakso Mas Eko Rawasituk Karawang UMKM has recorded its income and expenses. It can be seen from the data above that every month there is an increase and decrease in the income.

F. Income statement

The following is a table of profit and loss reports for the Bakso Mas Eko Rawasituk Karawang UMKM:

Table 7. 2022 Income Statement
Mr. Eko's Meatballs Rawasiku Karawang

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	4,002,000,000
	Income outside business	0
		4,002,000,000
2.	**Costs**	
	Fixed costs	856,222,000
	Variable costs	3,011,550,000
	Non-business expenses	0
		3,867,772,000
3.	**Net profit before tax**	**134,228,000**
4.	**Tax 0.5%**	**17,510,000**
5.	**Net profit after tax**	**116,718,000**

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Table 8. 2023 Income Statement
Mas Eko's Meatballs Rawasiku Karawang

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	4,591,000,000
	Income outside business	0
		4,591,000,000
2.	**Costs**	
	Fixed costs	856,222,000
	Variable costs	3,529,700,000
	Non-business expenses	0
		4,385,922,000
3.	**Net profit before tax**	**205,078,000**
4.	**Tax 0.5%**	**20,455,000**
5.	**Net profit after tax**	**184,623,000**

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Table 9. Profit and Loss Statement 2024
Mas Eko's Meatballs Rawasiku Karawang

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	4,883,000,000
	Income outside business	0
		4,883,000,000
2.	**Costs**	
	Fixed costs	856,222,000
	Variable costs	3,812,430,000
	Non-business expenses	0
		4,668,652,000
3.	**Net profit before tax**	**214,348,000**
4.	**Tax 0.5%**	**21,915,000**
5.	**Net profit after tax**	**192,433,000**

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Based on the profit and loss report table for 2022 to 2024 above, it can be seen that the income earned by the Bakso Mas Eko Rawasikut Karawang UMKM has increased from IDR 4,002,000,000 to IDR 4,883,000,000 with an increase in net profit after tax as well. This shows that the Bakso Mas Eko Rawasikut business can maintain its business until now.

G. Trend Analysis

A trend is a long-term upward or downward movement that results from the average change over time. Both increases and decreases are the average changes of a value. It is called a good trend or uptrend if the average change is increasing. Conversely, if the average change is decreasing, it is called a downtrend or negative trend.

The following is a table of trend analysis on the Bakso Mas Eko Rawasituk Karawang UMKM.

Table 10. Trend Analysis
UMKM Meatball Mas Eko Rawasituk Karawang

			Income (Y) (Rp)	X	XY (Rp)	X^2
2022	1	1	1,939,000,000	-2.5	-484,750,000	6.25
	2	2	2,063,000,000	-1.5	-3,094,500,000	2.25
2023	1	3	2,319,000,000	-0.5	-1,159,500,000	0.25
	2	4	2,272,000,000	0.5	1,136,000,000	0.25
2024	1	5	2,366,000,000	1.5	3,549,000,000	2.25
	2	6	2,517,000,000	2.5	6,292,500,000	6.25
Amount			13,476,000,000	0	1,876,000,000	17.5
2025	1	7	2,621,200,000	3.5	9,174,200,000	12.25
	2	8	2,728,400,000	4.5	12,277,800,000	20.25
2026	1	9	2,835,600,000	5.5	15,595,800,000	30.25
	2	10	2,942,800,000	6.5	19,128,200,000	42.25
2027	1	11	3,050,000,000	7.5	22,875,000,000	56.25
	2	12	3,157,200,000	8.5	26,836,200,000	72.25
2028	1	13	3,264,400,000	9.5	31,011,800,000	90.25
	2	14	3,371,600,000	10.5	35,401,800,000	110.25

Source: Suharyadi & Purwanto SK (2013) processed by the author 2025

a =	2,246,000,000
b =	107,200,000

$$Y = a + bX$$

In the income trend analysis table above, it can be seen that the income forecast for UMKM Bakso Mas Eko Rawasikut Karawang continues to increase and the income of UMKM Bakso Mas Eko Rawasikut Karawang has increased annually. The income forecast calculated in the table above is from 2025 to 2028 with different amounts of income.

Table 11. Trend Analysis
Mas Eko's Meatballs Rawasiku Karawang

			Fee (VC) (Rp)	X	XY (Rp)	X^2
2022	1	1	1,404,900,000	-2.5	-3,512,250,000	6.25
	2	2	1,606,650,000	-1.5	-2,409,975,000	2.25
2023	1	3	1,831,550,000	-0.5	-915,775,000	0.25
	2	4	1,698,150,000	0.5	849,075,000	0.25
2024	1	5	1,875,080,000	1.5	2,812,620,000	2.25
	2	6	1,937,350,000	2.5	4,843,375,000	6.25
Amount			10353680000	0	1,667,070,000	17.5

2025	1	7	2,059,027,330	3.5	7,206,595,655	12.25
	2	8	2,154,288,472	4.5	9,694,298,124	20.25
2026	1	9	2,249,549,614	5.5	12,372,522,877	30.25
	2	10	2,344,810,756	6.5	15,241,269,914	42.25
2027	1	11	2,440,071,898	7.5	18,300,539,235	56.25
	2	12	2,535,333,040	8.5	21,550,330,840	72.25
2028	1	13	2,630,594,182	9.5	24,990,644,729	90.25
	2	14	2,725,855,324	10.5	28,621,480,902	110.25

Source: Suharyadi & Purwanto SK (2013) processed by the author 2025

a =	1,725,613,333
b =	95.261.142

$$VC = a + bX$$

In the cost trend analysis table above, it can be seen that the revenue forecast for UMKM Bakso Mas Eko Rawasikut Karawang continues to increase and the variable costs incurred by UMKM Bakso Mas Eko Rawasikut Karawang have increased annually. The cost forecast calculated in the table above is from 2025 to 2028 with different amounts of variable costs.

H. Earning After Tax (EAT)

The following is a table of Earning After Tax for UMKM Bakso Mas Eko Rawasituk Karawang. How to determine EAT = Variable Cost + Fixed Cost = Total Cost - Income = (EBT) x tax 0.5 % = EAT

Table 12. Earnings After Tax 2024
Mas Eko's Meatballs Rawasiku Karawang

Keterangan	2022	2023	2024	2025	2026	2027	2028
Pendapatan	Rp4.002.000.000	Rp 4.591.000.000	Rp 4.883.000.000	Rp 5.349.600.000	Rp 5.778.400.000	Rp 6.207.200.000	Rp 6.636.000.000
Biaya Variabel	Rp3.011.550.000	Rp 3.529.700.000	Rp 3.812.430.000	Rp 4.213.315.802	Rp 4.594.360.370	Rp 4.975.404.938	Rp 5.356.449.506
Biaya Tetap	Rp 856.222.000	Rp 856.222.000	Rp 856.222.000	Rp 856.222.000	Rp 856.222.000	Rp 856.222.000	Rp 856.222.000
Total Biaya	Rp3.867.772.000	Rp 4.385.922.000	Rp 4.668.652.000	Rp 5.069.537.802	Rp 5.450.582.370	Rp 5.831.626.938	Rp 6.212.671.506
EBT	Rp 134.228.000	Rp 205.078.000	Rp 214.348.000	Rp 280.062.198	Rp 327.817.630	Rp 375.573.062	Rp 423.328.494
Pajak 0,5%	Rp 527.335	Rp 1.652.600	Rp 1.851.700	Rp 3.242.848	Rp 4.205.533	Rp 5.141.818	Rp 6.091.304
EAT	Rp 134.755.335	Rp 206.730.600	Rp 216.199.700	Rp 283.305.046	Rp 332.023.163	Rp 380.714.880	Rp 429.419.798

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Table 12 Earning After Tax (EAT) above shows that the amount of EAT from 2022 to 2028 has different values, according to the calculation of income, variable costs, fixed costs, and taxes that MSME Bakso Mas Eko Rawasiku pays.

Depreciation = $$\frac{Investasi - Nilai\ sisa}{Umur\ Ekonomis}$$

$$= \frac{569.422.000 - 284.711.000}{25} = \frac{284.711.000}{25} = \text{Rp.}11,388,440$$

The method of calculating depreciation using the straight-line method, straight-line depreciation is the most commonly used and easy depreciation method to allocate the cost of capital assets. This depreciation is calculated by dividing the investment minus the residual value, by the useful life of the asset or economic life.

Table 13. Proceed Calculation
Mas Eko's Meatballs Rawasiku Karawang

Year	EAT (Rp)	Depreciation (Rp)	Proceed (Rp)
2022	134,755,335	11,388,440	146.143.775
2023	206,730,600	11,388,440	218.119.040
2024	216,199,700	11,388,440	227,588,140
2025	283,305,046	11,388,440	294,693,486
2026	332.023.163	11,388,440	343,411,603
2027	380,714,880	11,388,440	392.103.320
2028	429,419,798	11,388,440	440,808,238

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Based on table 13 above, it shows that the calculation of proceeds in 2022 to 2028 at UMKM Bakso Mas Eko Rawasikut has different results. The highest Proceed results have different results from the results with the highest to the lowest values.

Table 14. Cash Flow Table
Mas Eko's Meatballs Rawasiku Karawang

No	Tahun	EAT	Penyusutan	Kas bersih (Proceed)	Discount Factor (DF) 6%	PV kas bersih
1.	2022	Rp 134.755.335	Rp 11.388.440	Rp 146.143.775	0,9434	Rp 137.872.037
2.	2023	Rp 206.730.600	Rp 11.388.440	Rp 218.119.040	0,89	Rp 194.125.946
3.	2024	Rp 216.199.700	Rp 11.388.440	Rp 227.588.140	0,8396	Rp 191.083.002
4.	2025	Rp 283.305.046	Rp 11.388.440	Rp 294.693.486	0,7921	Rp 233.426.710
5.	2026	Rp 332.023.163	Rp 11.388.440	Rp 343.411.603	0,7473	Rp 256.631.491
6.	2027	Rp 380.714.880	Rp 11.388.440	Rp 392.103.320	0,705	Rp 276.432.841
7.	2028	Rp 429.419.798	Rp 11.388.440	Rp 440.808.238	0,6651	Rp 293.181.559
Jumlah		**Rp1.983.148.522**	**Rp 79.719.080**	**Rp 2.062.867.602**	**5,5825**	**Rp 1.582.753.586**

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

In table 13 Cash Flow above shows the amount of net cash PV from 2022 to 2028 with Discount Factor (DF) 6% has a net cash PV amount with a different amount and continues to increase from year to year. This Cash Flow table can also be used as a basis for calculating business feasibility in several formulas.

DF 6% is taken from the average interest rate in 2022 to 2024 using the Minimum Attractive Rate of Return (MARR) which means the minimum return interest rate for an investment. MARR is used as an indicator to determine the feasibility of an investment.

a. Payback Period (PP)

Description	PP Calculation (Rp)
Investment	569,422,000
Proceeds 2022	146.143.775
	423.278.225
Proceeds 2023	218.119.040
	205.159.185

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

Proceeds in 2024 amounting to Rp. 227,588,140 ,. so the remaining payback time is:

$\frac{205.159.185}{227.588.140}$ x 12 Months = 10 months 8 days

So the whole project is 2 years 10 months 8 days.

b. Net Present Value

Year	Proceed (Rp)	DF 6%	PV Proceed (Rp)
2022	146.143.775	0.9434	137,872,037
2023	218.119.040	0.89	194.125.946
2024	227,588,140	0.8396	191.083.002
2025	294,693,486	0.7921	233,426,710
2026	343,411,603	0.7473	256,631,491
2027	392.103.320	0.705	276,432,841
2028	440,808,238	0.6651	293,181,559
PV Amount: Rp.1,582,753,586			

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

NPV = Rp. 1,582,753,586 - Rp. 569,422,000= Rp. 1,013,331,586
That is, it produces a positive Net Present Value (NPV) of Rp. 1,013,331,586.

c. Profitability Index

The following is the calculation of the Profitability Index for the Bakso Mas Eko Rawasituk Karawang UMKM:

$$PI= \frac{Present\ Value}{Jumlah\ Investasi}\ x\ 100\%= \frac{1.582.753.586}{569.422.000}\ x\ 100\%= 2\ ,8$$

The Profitability Index value is 2.8 , therefore the PI value is > 1, so the criteria for this method for this project is declared feasible.

d. Internal Rate of Return (IRR)

Year	Proceeds (Rp)	DF 7%	PV Net Cash (Rp)
2022	146.143.775	0.9346	136,585,972

2023	218.119.040	0.8734	190.505.169
2024	227,588,140	0.8163	185,780,198
2025	294,693,486	0.7629	224,821,660
2026	343,411,603	0.713	244,852,472
2027	392.103.320	0.6663	261.258.442
2028	440,808,238	0.6227	274,491,289
PV Amount: Rp.1,518,295,206			

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

$$IRR = i_1 + \frac{NPV1}{NPV1 - NPV2} x\ (i_2 - i_1)$$

$$= 6\% + \frac{1.582.753.586}{1.582.753.586 - 1.518.295.206} x\ (7\% - 6\%)$$

$$= 0.06 + \frac{1.582.753.586}{64.458.380} x\ (1\%)$$

$$= 0.06 + 24 \times 0.01$$
$$= 0.3 = 30\%$$

Using a df of 7% because the goal of IRR is to find the internal rate of return that will drive the NPV to zero, which requires a higher df. The Internal Rate of Return (IRR) must be compared to a minimum interest rate, sometimes referred to as the Minimum Attractive Rate of Return (MARR), to assess the viability of an investment. IRR > MARR is feasible, and IRR < MARR is not feasible. These are the viability requirements for the IRR method. This project is considered feasible according to the project objectives because the calculations show that the IRR of 30% is higher than the 7% interest rate.

e. Average Rate of Return (ARR)

$$ARR = \frac{Jumlah\ EAT}{Investasi} x\ 100\%$$

$$= \frac{283.306.931}{569.422.000} x\ 100\%$$

$$= 0.50 \times 100\%$$
$$= 50\%$$

The Average Rate of Return (ARR) value for UMKM Bakso Rawasikut Karawang is 50%. This means that the profit obtained is high from the desired profit. So from the ARR calculation, UMKM Bakso Mas Eko Rawasikut Karawang is feasible to be developed.

Feasibility of Rawasiku Karawang Swimming Pool Business

The data obtained by the Rawasikut Karawang Swimming Pool is related to the feasibility of the Rawasikut Karawang Swimming Pool business.

A. Fixed Costs

The following is a table of operational costs for the Rawasikut Karawang Swimming Pool:

Table 15. Fixed Costs
Rawasikut Karawang Swimming Pool

Pre-Investment Fee	Rp. 55,000,000
Land purchase cost (5,200 m)	Rp. 598,000,000
4 swimming pools	Rp. 450,000,000
Hall 1 unit	Rp. 100,000,000
1 prayer room	Rp. 65,000,000
4 toilets	Rp. 40,000,000
1 canteen	Rp. 30,000,000
2 pieces of floor seating	Rp. 20,000,000
6 pieces of gazebo	Rp. 18,000,000
Ken waterboom 1 unit	Rp. 20,000,000
1 piece water shower pipe	Rp. 5,000,000
3 slides	Rp. 225,000,000
3 water pump machines	Rp. 6,000,000
PLN 3,500 VA electricity	Rp. 15,000,000
Table of 8 pieces	Rp. 4,000,000
32 chairs	Rp. 1,600,000
1 cash register	Rp. 2,500,000
2 refrigerators	Rp. 6,000,000
Display case 4 pieces	Rp. 3,000,000
Salary Cost	Rp. 302,400,000
Electricity cost	Rp. 132,000,000
Amount	**Rp.2,098,500,000**

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Table 15 above shows the fixed costs incurred by Kolam Renang Rawasikut in running its business. There are several needs required by UMKM Bakso Mas Eko Rawasikut in opening its business, with a total fixed cost of Rp. 2,098,500,000.

B. Variable Costs

The following is a table of operational costs for the Rawasikut Karawang Swimming Pool:

Table 16. Variable Costs
Rawasikut Karawang Swimming Pool

Year	Chlorine (Rp)	Skimmer (Rp)	Pool wall brush (Rp)	Amount (Rp)
2022	8,060,000	3,000,000	2,873,000	13,933,000
2023	11,600,000	3,600,000	2,700,000	17,900,000
2024	11,700,000	5,900,000	3,500,000	21,100,000

Source : Data processing from the owner of the Rawasikut Karawang Swimming Pool, processed by the author in 2025

Based on table 16 of the variable costs above, it can be seen that the costs incurred for three years have different amounts each year according to the needs of the swimming pool in that year. The need for chlorine in this swimming pool business is very necessary with the costs incurred per year having different figures. With the highest variable costs in 2024 because in that year the Rawasikut Swimming Pool became increasingly well-known to many people, so the costs of chlorine and other equipment increased.

C. Investment Requirement Costs

The following is a table of investment cost requirements for the Rawasikut Karawang Swimming Pool.

Table 17. Investment Cost Requirements
Rawasikut Karawang Swimming Pool

1. Pre-Investment Fees	Rp. 55,000,000
2. Purchase of fixed assets	
a. Land purchase costs (5,200 m)	Rp.598,000,000
b. Building and infrastructure costs	
4 swimming pools	Rp. 450,000,000
Hall 1 unit	Rp. 100,000,000
1 prayer room	Rp. 65,000,000
4 toilets	Rp. 40,000,000
1 canteen	Rp. 30,000,000
2 pieces of floor seating	Rp. 20,000,000
6 pieces of gazebo	Rp. 18,000,000
c. Equipment purchase costs	
Ken waterboom 1 unit	Rp. 20,000,000
1 piece water shower pipe	Rp. 5,000,000
3 slides	Rp. 225,000,000
3 water pump machines	Rp. 6,000,000
PLN 3,500 VA electricity	Rp. 15,000,000
d. Inventory	
Table of 8 pieces	Rp. 4,000,000
32 chairs	Rp. 1,600,000
1 cash register	Rp. 2,500,000
2 refrigerators	Rp. 6,000,000
Display case 4 pieces	Rp. 3,000,000
Amount of investment required	**Rp.1,664,100,000**
Own Capital Fund	**Rp. 664,100,000**
Loan Funds	**Rp.1,000,000,000**

Source: Results of an interview with the owner of the Rawasikut Karawang Swimming Pool, processed by the author in 2025

Based on table 17 above, the investment cost requirements for the Rawasikut Karawang Swimming Pool show the costs incurred to purchase fixed assets, including the cost of purchasing land with an area of 5,200 m2 at a price per meter of Rp. 115,000 . supported by the cost of purchasing other fixed assets such as building costs, equipment purchase costs, and the inventory of the Rawasikut Swimming Pool itself.

D. Income

Revenue provides a means of assessing the financial performance of a company or organization. Interest, investments, and the sale of goods or services can all generate revenue. (Pertiwi et al., 2023) The following is a table of revenue at the Rawasikut Karawang Swimming Pool.

Table 18. Income
Rawasikut Karawang Swimming Pool

Year	Income (Rp)
2022	2,202,900,000
2023	2,431,920,000
2024	2,474,940,000

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2024

Based on table 18 above, the highest income from the Swimming Pool is in 2024 because more and more people know about the Rawasikut Karawang Swimming Pool UMKM, which has increased the income of the Rawasikut Karawang Swimming Pool.

E. Net profit

The following is a table of net profit at the Rawasikut Karawang Swimming Pool.

Table 19. Net Profit
Rawasikut Karawang Swimming Pool

Year	Income	Expenditure	Net Profit of the business
2022	Rp. 2,202,900,000	Rp. 2,200,947,500	Rp. 1,952,500
2023	Rp. 2,431,920,000	Rp. 2,205,959,600	Rp. 225,960,400
2024	Rp. 2,474,940,000	Rp. 2,209,274,700	Rp. 265,665,300

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Based on Table 19, the Rawasikut Karawang Swimming Pool has recorded its income and expenses, it can be seen from the data above that every month there is an increase and decrease in the income. In 2022, the net profit obtained was only Rp. 1,952,500 . because at that time the Rawasikut Karawang Swimming Pool was still early to open and not many people knew that this swimming pool existed, coupled with the conditions after Covid-19 which at that time were still being monitored or monitored if there were crowds.

F. Income statement

The following is a table of the profit and loss report for the Rawasikut Karawang Swimming Pool.

Table 20. Profit and Loss Statement 2022
Rawasikut Karawang Swimming Pool

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	2,202,900,000
	Income outside business	0
		2,202,900,000
2.	**Costs**	
	Fixed costs	2,098,500,000
	Variable costs	13,933,000
	Non-business expenses	80,000,000
		2,192,433,000
3.	**Net profit before tax**	**10,467,000**
4.	**Tax 0.5%**	**8,514,500**
5.	**Net profit after tax**	**1,952,500**

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Table 21. Profit and Loss Statement 2023
Rawasikut Karawang Swimming Pool

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	2,431,920,000
	Income outside business	0
		2,431,920,000
2.	**Costs**	
	Fixed costs	2,098,500,000
	Variable costs	17,900,000
	Non-business expenses	80,000,000
		2,196,400,000
3.	**Net profit before tax**	**235,520,000**
4.	**Tax 0.5%**	**9,559,600**
5.	**Net profit after tax**	**225,960,400**

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Table 22. Profit and Loss Statement 2024
Rawasikut Karawang Swimming Pool

	Component	Amount (Rp)
1.	**Income**	
	Operating revenues	2,474,940,000
	Income outside business	0
		2,474,940,000
2.	**Costs**	
	Fixed costs	2,098,500,000
	Variable costs	21,100,000
	Non-business expenses	80,000,000
		2,199,600,000
3.	**Net profit before tax**	**275,340,000**
4.	**Tax 0.5%**	**9,874,700**
5.	**Net profit after tax**	**265,465,300**

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Based on the table of profit and loss reports for 2022 to 2024 above, it can be seen that the income earned by the Rawasikut Karawang Swimming Pool has increased from Rp. 2,202,900,000,. to Rp. 2,474,940,000,. with the amount of net profit after tax also increasing. This shows that the Rawasikut Swimming Pool business has continued to be able to maintain its business until now.

G. Trend Analysis

A trend is a long-term upward or downward movement that results from the average change over time. Both increases and decreases are the average changes of a value. It is called a good trend or uptrend if the average change is increasing. Conversely, if the average change is decreasing, it is called a downtrend or negative trend.

The following is a trend analysis table at the Rawasikut Karawang Swimming Pool.

Table 23. Trend Analysis
Rawasikut Karawang Swimming Pool

			Income (Y) (RP)	**X**	**XY (Rp)**	**X^2**
2022	1	1	964,900,000	-2.5	-2,412,250,000	6.25
	2	2	1,238,000,000	-1.5	-1,857,000,000	2.25
2023	1	3	1,133,920,000	-0.5	-566,960,000	0.25
	2	4	1,298,000,000	0.5	649,000,000	0.25
2024	1	5	1,148,940,000	1.5	1,723,410,000	2.25
	2	6	1,326,000,000	2.5	3,315,000,000	6.25
Amount			7,109,760,000	0	851,200,000	17.5
2025	1	7	1,352,960,000	3.5	4,735,360,000	12.25
	2	8	1,400,960,000	4.5	6,304,320,000	20.25
2026	1	9	1,448,960,000	5.5	7,969,280,000	30.25
	2	10	1,499,600,000	6.5	9,747,400,000	42.25

2027	1	11	1,544,960,000	7.5	11,587,200,000	56.25
	2	12	1,592,960,000	8.5	13,540,160,000	72.25
2028	1	13	1,640,960,000	9.5	15,589,120,000	90.25
	2	14	1,688,960,000	10.5	17,734,080,000	110.25

Source: Suharyadi & Purwanto SK (2013) processed by the author 2025

a =	1,184,960,000
b =	48,640,000

$Y = a + bX$

In the income trend analysis table above, it can be seen that the income forecast at the Rawasikut Karawang Swimming Pool continues to increase and the income of the Karawang Swimming Pool has increased annually. The income forecast calculated in the table above is from 2025 to 2028 with different amounts of income.

Table 24. Trend Analysis
Rawasikut Karawang Swimming Pool

			Fee (VC) (Rp)	**X**	**XY (Rp)**	**X^2**
2022	1	1	7,600,000	-2.5	-19,000,000	6.25
	2	2	6,333,000	-1.5	-9,499,500	2.25
2023	1	3	10,300,000	-0.5	-5,150,000	0.25
	2	4	7,600,000	0.5	3,800,000	0.25
2024	1	5	13,700,000	1.5	20,550,000	2.25
	2	6	7,400,000	2.5	18,500,000	6.25
Amount			52,933,000	0	9,200,500	17.5
2025	1	7	10,662,263	3.5	37,317,920	12.25
	2	8	11,188,005	4.5	50,346,022	20.25
2026	1	9	11,713,747	5.5	64,425,608	30.25
	2	10	12,239,489	6.5	79,556,678	42.25
2027	1	11	12,765,231	7.5	95,739,232	56.25
	2	12	13,290,973	8.5	112,973,270	72.25
2028	1	13	13,816,715	9.5	131,258,792	90.25
	2	14	14,342,457	10.5	150,595,798	110.25

Source: Suharyadi & Purwanto SK (2013) processed by the author 2025

a =	8,822,166
b =	525,742

$VC = a + bX$

In the cost trend analysis table above, it can be seen that the revenue forecast at the Rawasikut Karawang Swimming Pool continues to increase and the variable costs incurred by the Rawasikut Karawang Swimming Pool increase annually. The cost forecast calculated in the table above is from 2025 to 2028 with different amounts of variable costs.

H. Earning After Tax (EAT)

The following is a table of Earning After Tax (EAT) requirements at the Rawasikut Karawang Swimming Pool.

Table 25. Earnings After Tax (EAT)
Rawasikut Karawang Swimming Pool

Keterangan	2022	2023	2024	2025	2026	2027	2028
Pendapatan	Rp2.202.900.000	Rp 2.431.920.000	Rp 2.474.940.000	Rp 2.753.920.000	Rp 2.948.560.000	Rp 3.137.920.000	Rp 3.329.920.000
Biaya Variabel	Rp 13.933.000	Rp 17.900.000	Rp 21.100.000	Rp 21.850.268	Rp 23.953.236	Rp 26.056.204	Rp 28.159.172
Biaya Tetap	Rp2.098.500.000	Rp 2.098.500.000	Rp 2.098.500.000	Rp 2.098.500.000	Rp 2.098.500.000	Rp 2.098.500.000	Rp 2.098.500.000
Total Biaya	Rp2.112.433.000	Rp 2.116.400.000	Rp 2.119.600.000	Rp 2.120.350.268	Rp 2.122.453.236	Rp 2.124.556.204	Rp 2.126.659.172
EBT	Rp 90.467.000	Rp 315.520.000	Rp 355.340.000	Rp 633.569.732	Rp 826.106.764	Rp 1.013.363.796	Rp 1.203.260.828
Pajak 0,5%	Rp 527.335	Rp 1.652.600	Rp 1.851.700	Rp 3.242.848	Rp 4.205.533	Rp 5.141.818	Rp 6.091.304
EAT	Rp 90.994.335	Rp 317.172.600	Rp 357.191.700	Rp 636.812.580	Rp 830.312.297	Rp 1.018.505.614	Rp 1.209.352.132

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

In table 25 Earning After Tax (EAT) above, it shows that the amount of EAT from 2022 to 2028 has different values, according to the calculation of income, variable costs, fixed costs, and taxes that Kolam Renang Rawasikut issues.

Depreciation = $\dfrac{Investasi - Nilai\ sisa}{Umur\ Ekonomis}$

$= \frac{1.664.100.000-998460.000}{20} = \frac{665.640.000}{20}$ = Rp.33,282,000

The method of calculating depreciation using the straight-line method, straight-line depreciation is the most commonly used and easy depreciation method to allocate the cost of capital assets. This depreciation is calculated by dividing the investment minus the residual value, by the useful life of the asset or economic life.

Table 26. Proceed Calculation
Rawasikut Karawang Swimming Pool

Year	EAT (Rp)	Depreciation (Rp)	Proceed (Rp)
2022	90,994,335	33,282,000	124,276,335
2023	317,172,600	33,282,000	350,454,600
2024	357,191,700	33,282,000	390,473,700
2025	636,812,580	33,282,000	670,094,580
2026	830,312,297	33,282,000	863,594,297
2027	1,018,505,614	33,282,000	1,051,787,614
2028	1,209,352,132	33,282,000	1,242,634,132

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Based on table 26 above, it shows that the calculation of proceeds in 2022 to 2028 at the Rawasikut Swimming Pool has different results. The highest Proceed results have different results from the results with the highest to the lowest values.

Table 27. Cash Flow Table
Rawasikut Karawang Swimming Pool

No	Tahun	EAT	Penyusutan	Kas bersih (Proceed)	Discount Factor (DF) 6%	PV kas bersih
1.	2022	Rp 90.994.335	Rp 33.282.000	Rp 124.276.335	0,9434	Rp 117.242.294
2.	2023	Rp 317.172.600	Rp 33.282.000	Rp 350.454.600	0,89	Rp 311.904.594
3.	2024	Rp 357.191.700	Rp 33.282.000	Rp 390.473.700	0,8396	Rp 327.841.719
4.	2025	Rp 636.812.580	Rp 33.282.000	Rp 670.094.580	0,7921	Rp 530.781.917
5.	2026	Rp 830.312.297	Rp 33.282.000	Rp 863.594.297	0,7473	Rp 645.364.018
6.	2027	Rp1.018.505.614	Rp 33.282.000	Rp 1.051.787.614	0,705	Rp 741.510.268
7.	2028	Rp1.209.352.132	Rp 33.282.000	Rp 1.242.634.132	0,6651	Rp 826.475.961
Jumlah		**Rp4.460.341.258**	**Rp 232.974.000**	**Rp 4.693.315.258**	**5,5825**	Rp 3.501.120.771

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

In the table 27 Cash Flow above shows the amount of net cash PV from 2022 to 2028 with a Discount Factor (DF) of 6% has a net cash PV amount with a different amount and continues to increase from year to year. This Cash Flow table can also be used as a basis for calculating business feasibility in several formulas.

a. Payback Period (PP)

Description	PP Calculation
Investment	1,664,100,000
Proceeds 2022	124,276,335
	1,539,823,665
Proceeds 2023	350,454,600
	1,189,369,065
Proceeds 2024	390,473,700
	798,895,365
Proceeds 2025	670,094,580
	128,800,785

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

Proceeds in 2026 amounting to Rp. 863,594,297 ,. so the remaining payback time is:

$\frac{128.800.785}{863.594.297}$ x 12 Months = 15 days

So the whole project is 4 years and 15 days.

b. Net Present Value

Year	Proceed (Rp)	DF 6%	PV Proceed (Rp)
2022	124,276,335	0.9434	117.242.294
2023	350,454,600	0.89	311,904,594
2024	390,473,700	0.8396	327,841,719

2025	670,094,580	0.7921	530,781,917
2026	863,594,297	0.7473	645,364,018
2027	1,051,787,614	0.705	741,510,268
2028	1,242,634,132	0.6651	826,475,961
PV Amount: Rp.3,501,120,771			

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

NPV= Rp. 3,501,120,771 - Rp. 1,664,100,000 = Rp. 1,837,020,771
That is, it produces a positive Net Present Value (NPV) of Rp. 1,837,020,771.

c. Profitability Index

The following is the calculation of the Profitability Index for the Bakso Mas Eko Rawasituk Karawang UMKM:

$$PI=\frac{Present\ Value}{Jumlah\ Investasi}\ x\ 100\%=\frac{3.501.120.771}{1.664.100.000}\ x\ 100\%$$

= 2 ,1

The Profitability Index value is 2.1 , therefore the PI value is > 1, so the criteria for this method for this project is declared feasible.

d. Internal Rate of Return (IRR)

Year	Proceeds	DF 7%	PV Net Cash
2022	124,276,335	0.9346	116,148,662
2023	350,454,600	0.8734	306,087,047
2024	390,473,700	0.8163	318,743,681
2025	670,094,580	0.7629	511.215.155
2026	863,594,297	0.713	615,742,733
2027	1,051,787,614	0.6663	700,806,087
2028	1,242,634,132	0.6227	773,788,274
PV Amount: Rp.3,342,531,642			

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

$$IRR = i_1 + \frac{NPV1}{NPV1-NPV2} x\ (i_2 - i_1)$$

$$= 6\% + \frac{3.501.120.771}{3.501.120.771-3.342.531.642} x\ (7\% - 6\%)$$

$$= 0.06 + \frac{3.501.120.771}{158.589.129} x\ (1\%)$$

= 0.06 + 22 x 0.01
= 0.28 = 28%

The calculation results show that the Internal Rate of Return is 28% greater than the interest rate of 7 %, so according to the criteria this project is declared feasible.

e. Average Rate of Return (ARR)

$$ARR = \frac{Jumlah\ EAT}{Investasi} \times 100\%$$

$$= \frac{637.191.608}{1.664.100.000} \times 100\%$$

$$= 0.38 \times 100\%$$
$$= 38\ \%$$

The Average Rate of Return (ARR) value for Rawasikut Karawang Swimming Pool is 38%. This means that the profit obtained is high from the desired profit. So from the ARR calculation, Rawasikut Karawang Swimming Pool is feasible to be developed.

Research Discussion

The results of this study explain that in carrying out business activities we must know what will make our business progress, and also in carrying out business activities also requires increasing income every day, in this study the problem taken is the feasibility of the Bakso Mas Eko Rawasikut UMKM business, this business started in 2000 until now 2024 has added a swimming pool tour with an increase in visitors that is always increasing. Before the swimming pool was made, Bakso Mas Eko Rawasikut also provided several other facilities, namely a gazebo which became a new atmosphere for eating meatballs besides sitting in the shop. However, in 2018 the Bakso Mas Eko Rawasikut shop had experienced a decline because there was already some competition near the meatball shop, and it lasted until 2021 because of the Covid-19 which was spreading from 2019 at that time. But after that, Bakso Mas Eko rose again by adding new tours that could attract visitors, namely the Rawasikut Karawang Swimming Pool business.

Feasibility of UMKM Business of Bakso Mas Eko Rawasituk Karawang

In the feasibility analysis of the Bakso Mas Eko Rawasikut Karawang UMKM business, there are several calculations that must be calculated to assess whether a business is feasible or not. However, to calculate these calculations, a profit and loss report, Earning After Tax, depreciation, and its peoceed must be made. In this business feasibility analysis, trend analysis is also used to forecast income and variable costs of the Bakso Mas Eko Rawasikut Karawang UMKM from 2025 to 2028 with different income and cost results.

Standard	Results	Description
Payback Period	2 years 10 months 8 days	The business can be run because the return on investment is not too long from the age of the business.
Net Present Value	Rp. 1,013,331,586	Because NPV > 0 then the business is worth implementing
Profitability Index	2.8 (Decent)	Because (PI > 1) then the business is worth implementing.
Internal Rate of Return	30% (Eligible)	Because IRR > MARR, namely 30% > 7%, it is feasible to implement
Average Rate of Return	50% (Eligible)	Because ARR > MARR, namely 50% > 7%, it is feasible to implement

Source: Data processing from the owner of UMKM Bakso Mas Eko Rawasituk Karawang processed by the author in 2025

In the calculation results, UMKM Bakso Mas Eko Rawasiku produces a positive Net Present Value of Rp.1,013,331,586 which means that this Bakso business can be said to be feasible and also feasible to be developed. In the calculation of the Internal Rate of Return of 30% and the Average Rate of Return of 50% The calculation results show that the Internal Rate of Return shows 30% and 50% greater than the interest rates of 7% and 6%, so according to the criteria of UMKM Bakso Rawasiku it is declared feasible and obtains high profits from the desired profits, therefore, this Bakso business is feasible to be developed.

This is in line with previous research (Nurhalimah, 2023) revealed from his research that the Lesehan Bangkit Food Stall business is feasible to run because in the financial calculation the Payback Period is 4 months and 6 days, the ARR produces 23.8%, the total NPV is Rp. 11,376,779, the PI is greater than 1, which is 1.5 and the IRR value is 23% higher than the interest rate of 12%.

In the feasibility analysis results of the Bakso Mas Eko and Rawasikut Karawang UMKM Business, the ones that are more feasible to be developed through financial calculations are the Bakso Mas Eko Rawasikut Karawang UMKM because the return on investment is only calculated for 2 years 10 months and 8 days compared to the Rawasikut Karawang Swimming Pool which is calculated for 4 years 15 days. The Average Rate of Return (ARR) value shows a result of 50% compared to the swimming pool which is only 38% because this ARR value measures the average profit obtained from an investment.

Feasibility of Rawasiku Karawang Swimming Pool Business

In the feasibility analysis of the Rawasikut Karawang Swimming Pool business, there are several calculations that must be calculated to assess whether a business is feasible or not. However, to calculate these calculations, a profit and loss report, Earning After Tax, depreciation, and its peoceed must be made. In this business feasibility analysis, trend analysis is also used to forecast income and variable costs of the Rawasikut Karawang Swimming Pool from 2025 to 2028 with different income and cost results.

Standard	Results	Description
Payback Period	4 years 15 days	The business can be run because the return on investment is not too long from the age of the business.
Net Present Value	Rp. 1,837,020,771	Because NPV > 0 then the business is worth implementing
Profitability Index	2.1 (Decent)	Because (PI > 1) then the business is worth implementing.
Internal Rate of Return	28% (Eligible)	Because IRR > MARR, namely 28% > 7%, it is feasible to implement
Average Rate of Return	38% (Eligible)	Because ARR > MARR, namely 38% > 7%, it is feasible to implement

Source: Data processing from the owner of the Rawasikut Karawang Swimming Pool processed by the author in 2025

In the calculation results, the Rawasikut swimming pool produces a positive Net Present Value of Rp.1,837,020,771 which means that the Rawasikut swimming pool business can be said to be feasible and also feasible to be developed. In the calculation of the Internal Rate of Return 28% and Average Rate of Return 38% that the Rawasikut swimming pool obtains high profits from the desired profits, therefore, this swimming pool business is feasible to be developed.

This is in line with previous research (Fatoni, 2023) which revealed from his research that the Becrow *Shoes Clean business* is feasible to run because in the financial calculation the Payback Period is 2 years 5 months, the ARR produces 68.5%, the total NPV is IDR 110,396,918, PI is greater than 1, which is 2.13, and the IRR value is 30% higher than the interest rate of 10%.

In the feasibility analysis results of the Bakso Mas Eko and Rawasikut Karawang UMKM Business, the ones that are more feasible to be developed through financial calculations are the Bakso Mas Eko Rawasikut Karawang UMKM because the return on investment is only calculated for 2 years 10 months and 8 days compared to the Rawasikut Karawang Swimming Pool which is calculated for 4 years 15 days. The Average Rate of Return (ARR) value shows a result of 50% compared to the swimming pool which is only 38% because this ARR value measures the average profit obtained from an investment.

5. CONCLUSION AND IMPLICATIONS

Conclusion

1. Based on the results of the research and discussion conducted, it can be concluded that reviewed from the calculation of trend analysis, the profit and loss report can be said that UMKM Bakso Mas Eko and Kolam Renang Rawasiku Karawang can continue to increase the amount of income that is greater than the costs incurred. With the number of visitors that continues to increase every day, in addition UMKM Bakso Mas Eko and Kolam Renang Rawasiku Karawang have operational efficiency to run business activities by recording financial income and expenses every day, variants of the contents of the meatballs and honest, friendly, polite, and patient service in serving consumers so as to produce good product quality and service that makes UMKM Bakso Mas Eko and Kolam Renang Rawasiku Karawang survive and develop until now.
2. The production process carried out by the meatball business at Bakso Mas Eko Rawasikut Karawang is the type of meat production that is processed into meatballs that are ready to be sold with the ongoing process of the swimming pool business. The results of the financial feasibility analysis are declared feasible, the NPV value is positive at a discount rate of 6%, IRR> (7%), and Profitability Index> 1. The Payback Period states that the UMKM Bakso Mas Eko Rawasikut Karawang business returns its investment within 2 years 10 months 8 days and the Rawasikut Karawang Swimming Pool 4 years 15 days.

Implications

1. The results of the study showed that the Bakso Mas Eko and Rawasikut Karawang Swimming Pool UMKM businesses have financial feasibility. Therefore, managers need to maintain the sustainability of UMKM and swimming pool businesses by increasing operational efficiency, optimizing production costs, and improving the quality of service in serving food and cleanliness of the swimming pool area to maintain the Bakso and swimming pool businesses.
2. With a financially viable business, UMKM Bakso Mas Eko and Kolam Renang Rawasikut Karawang can contribute to empowering the surrounding community by creating new jobs, using raw materials from farmers, and providing a positive economic impact on the surrounding community.
3. It is hoped that future researchers can conduct further research on the social and environmental aspects of the Bakso Mas Eko and Rawasituk Karawang Swimming Pool MSMEs. Future researchers can examine the socio-economic impacts on the surrounding community, as well as analyze business sustainability from an environmental perspective.

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