# Feasibility Study of Business Development for Simpang Bukik Yopi Fried Rice

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#### ABSTRAK

Tujuan penelitian ialah untuk mengetahui kelayakan pengembangan usaha Nasi Goreng Simpang Bukik Yopi. Data yang digunakan dalam penelitian ini adalah data primer dari tahun 2020-2021-2022. Dengan menggunakan analisis keuangan konvensional dan syariah. Metode yang di gunakan dalam penelitian ini adalah Net Present Value (NPV), Profitability Index(PI), Payback Period (PP), Internal Rate of Return (IRR), Gold Value Method (GVM), Gold Index Method (GI), Investible Surplus Method (ISM). Hasil penelitian ini menunjukkan bahwa dari perhitungan semua aspek, baik itu aspek finansial maupun aspek syariah usaha nasi goreng simpang bukik yopi layak untuk dikembangkan, karena hasil perhitungan yang telah di lakukan dalam penelitian ini menunjukkan nilai yang melebihi dari nilai standar yang telah di tetapkan dari semua aspek finansial maupun syariah, nilai standar yang di tetapkan adalah 0,001, oleh karena itu usaha Nasi Goreng Simpang Bukik Yopi layak dikembangkan.

The research aims to assess the feasibility of expanding the Simpang Bukik Yopi Fried Rice business. Primary data from 2020-2021-2022 is utilized in this study, employing both conventional and Sharia financial analyses. The research methodology includes the application of financial metrics such as Net Present Value (NPV), Profitability Index (PI), Payback Period (PP), Internal Rate of Return (IRR), Gold Value Method (GVM), Gold Index Method (GI), and Investible Surplus Method (ISM). The findings indicate that, based on the comprehensive analysis of both financial and Sharia aspects, the development of Simpang Bukik Yopi Fried Rice is deemed feasible. The calculated values surpass the established standard of 0.001 for all financial and Sharia aspects, affirming the viability of developing the Simpang Bukik Yopi Fried Rice business.

Katakunci: Feasibility, business development, medium-sized enterprises

# 1. Background

Micro, small, and medium-sized enterprises (MSMEs) play a strategic role and are widely recognized as critical drivers in fostering national economic development. This is attributed to their potential to positively impact economic growth and increase employment opportunities, thus facilitating a more equitable distribution of development outcomes. The culinary business has become notably appealing within the Indonesian community, particularly in Pekanbaru. This is attributed to the perception of culinary ventures as straightforward enterprises, primarily offering diverse food and beverage options at various price points. Pekanbaru has many culinary businesses, reflecting this sector's widespread interest and engagement.

One up-and-coming economic sector for development within the culinary industry is the Simpang Bukik Yopi Fried Rice, distinguished by its signature dish, the Rendang Fried Rice. The establishment offers a range of rendang-infused fried rice, from regular to unique variations. The proprietor

recounts that the venture was initiated three years ago when they initially leased a single shop unit. However, recognizing the business's favourable prospects and successful progression, the proprietor expanded by acquiring an additional adjacent shop unit. The rendang fried rice menu is the flagship culinary offering that substantial demand. The proprietor acknowledges that on any given night, the business can utilise 6 kilograms of beef, 12 kilograms of red chilli peppers, and 70 kilograms of rice to meet the requirements of its clientele. As for the preferred beverage, it is fermented egg tea, a distinctive Minangkabau speciality.

Based on the sales data for 2021, Simpang Bukik Yopi Fried Rice's business achieved an annual sales figure of 2.764 billion rupiahs; in 2022, it amounted to 3.24 billion rupiahs. The lowest sales were recorded in January 2021 and October 2022. One of the distinct advantages of Simpang Bukik Yopi Fried Rice business is its strategically located establishment – a comfortable venue for family relaxation. The business is characterized by friendly and prompt service,

complemented by free Wi-Fi access. Additionally, it offers a diverse menu of food and beverage options at highly affordable prices, starting from five thousand rupiahs for beverages and eleven thousand rupiahs for food.

The business commences operations at 5:00 PM (WIB) and plans to expand its business network by establishing a new branch. This expansion is aimed at maximizing profits. The venture is expected to play a significant role and positively impact the local community by creating employment opportunities. Moreover, it will help the surrounding community meet their food needs more conveniently.

# Literature Review

According to Agustin (2016), Sharia Business Feasibility Study is also referred to as systematic research information utilizing an analysis of whether a proposal within a company's business framework is reasonable or unreasonable (rejected) in the context of general investment activities. The business feasibility study targets investors, explicitly aiming to release investments if excessive capital investment is involved in a business plan that, in reality, proves to be incorrect. Typically, businesses or ventures conduct evaluations to determine the reasonableness of their endeavours, enabling them to assess whether the undertaken business is justified and conduct a thorough evaluation.

The assessment of a business feasibility study based on financial aspects can be conducted through:

Payback Period (PP)

The Payback Period is a method used to determine how long it takes to recover the initial investment from the annual cash inflows generated by the investment project. The formula to calculate PP with annual cash inflows from year to year is as follows:

$$PP = \frac{Net\ Cash\ Inflow}{Annual\ Net\ Cash\ Inflow}$$

Net Present Value (NPV)

The present value of the investment and the present value of the net cash inflows are compared. The difference between the two is also referred to as Net Present Value (NPV) (Kasmir and Jakfar,

$$NPV = \sum \frac{Net\ Cash\ Inflow\ in\ Period\ t}{(1+i)^n}$$

Where,

i = interest

n = period

Profitability Index (PI)

According to Kasmir and Jakfar (2012), the Profitability Index or Benefit and Cost Ratio (B/C ratio) is the activity ratio of the total value over the investment's lifespan.

$$PI = \frac{\sum Present\ Value\ of\ Net\ Cash}{\sum Present\ Value\ of\ Investing}$$

Internal Rate of Return (IRR)

Internal Rate of Return (IRR) can be used to match the present value of all cash inflows to the project with the cash outflows from the project (Suliyanto, 2010).

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

Gold Value Method

The standard calculation of gold is based on the opinion of Ibn Khaldun, who asserted that gold and silver—two metals—serve as universally accepted measures of value and can be used as currency due to their resistance to natural changes.

$$GV_n = \sum_{t}^{n} = \frac{(LB_t \times N_t)}{HE_t - INV}$$

Where,

 $LB_t = Net \ profit \ (from \ cash \ inflow)$ 

 $N_t = Profit - sharing ratio$ 

 $HE_t = Net profit (from cash inflow)$ 

INV = Initial Investment

f. Gold Index

> This method is consistent with the results of the gold value method. The gold index is the ratio between the current gold price and the amount

$$GI = \frac{Total\ Gold\ Insome\ (gr)}{initial\ Investment\ (gr)}$$

Investible Surplus Method (ISM)

The ISM method involves assessing magnitude of investment surplus a business generates over time by calculating the years for investment surplus (after the payback period) continuously achieved by the company with financial improvement. The objective of the ISM method is to provide an alternative to replace the NPV method, which incorporates interest elements (Agustin, 2017)

$$IS_n = \sum_{t=1}^{N} (B_t - C_t)(n-t)$$

Where,

 $B_t = The \ profit \ gained$   $C_t = Cost \ required$ 

n = business age

t = period

$$B_t - C_t > 0$$

 $B_t - C_t > 0$  indicates a positive difference in cash flows, assuming that all inflows persist until the end of the period.

The business cost equation can be compared with investible surplus to calculate the investible surplus rate, as follows.

$$ISR = \sum_{t=1}^{N} IS_{N} (C_{t})(b - t_{1})x \, 100$$

# 3. Methodology

The population and sample of this research are the Simpang Bukik Yopi Fried Rice businesses located at JL. Taskurun, Pekanbaru. Qualitative and quantitative data collected from the Simpang Bukik Yopi Fried Rice business sales reports are utilized to assess the business's feasibility. The investment feasibility standards employed in this study include Net Present Value (NPV), Payback Period (PP), Profitability Index (PI), Investible Surplus Method (ISM), Gold Index Method (GI), Gold Value Method (GVM), and Internal Rate of Return (IRR).

#### Results

# Payback period

Initial Investment	Rp.1,816,192,000
1st year cash flow	Rp 807,806,000 -
	Rp.1,008,386,000
2 <sup>nd</sup> year cash flow	Rp 834,446,000 -
	Rp. 173,940,000
3 <sup>rd</sup> year cash flow	Rp 859,075,000

$$PP = \frac{Rp. 173,940,000}{Rp. 859,075,000} = 0.202$$
$$0.202 \ x \ 12 = 2.424 \ months$$
$$0.42 \ x \ 30 = 12.6 \ days$$

The payback period is 2 years, 2 months, and 13 days.

### b. Net Present Value

This method examines the difference between the present value of net cash flows and the current value of the total initial investment. As illustrated in the calculation below:

Table 1. Net Present Value

Tahun	Arus kas	DF (6,57%)	PV
2020	807,806,000	0.902	728,641,012
2021	834,446,000	0.952	794,392,502
2022	859,075,000	0.731	627,983,825
Jumlah	arus kas		2,151,017,429
Jumlah investasi			1,816,192,000
NPV			334,825,429

From the above (NPV) calculation, a positive value of (+334,825,429) is obtained, indicating that the business venture Nasi Goreng Simpang Bukik Yopi is deemed feasible for development.

#### **Profitability Index** c.

This method helps calculate the present value ratio of net cash flows to the current value of the initial investment.

$$PI = \frac{2,151,017,429}{1,816,192,000} = 1.184$$

The results of the present value ratio (PI) calculation indicate that Nasi Goreng Simpang Bukik Yopi is feasible for development, as the (PI) value is greater than 1.

# **Internal Rate of Return**

This method helps find the rate used to discount future cash flows so that their sum equals the initial investment. According to the criteria, the investment is deemed feasible if the Internal Rate of Return (IRR) is greater than the initial investment. The IRR calculation is performed at an interest rate of 25%.

Table 2. Internal Rate of Return

Year	Cash Flow	Df 6.5 %	PV	Df 25%	PV
2020	807,806,000	0.90	728,641,012	0.80	646,244,800
2021	834.446.000	0.95	794.392.592	0.62	517.356.520
2022	859.075.000	0.73	627.983.825	0.57	489.672.756
Net ca	sh flow		2.151.017.429		1.653.274.070
Total	investment		1.816.192.000		1.816.192.000
NPV			334.825.429		-162.917.930

$$IRR = 6.57\% + \frac{334,825,429}{2.151.017.429 - 1,653,274,070} (14.28\%)$$

IRR = 16.18%

The Internal Rate of Return (IRR) calculation indicates that the invested capital amounts to Rp. 1,816,192,000. Compared to the interest or cost of capital of 6.57%, the development of Nasi Goreng Simpang Bukik Yopi is deemed viable because the IRR exceeds the cost of capital at 16.18%.

## **Gold Value Method**

Below is the calculation using the (GVM) method for two years for Simpang Bukik Yopi Fried Rice: Table 3. Gold Value Method

	Table 3. Gold	value ivicui	lou
Year	Net Profit	Gold	Income value
	Net Profit	Price /gr	after being

			converted into grams of gold
Tahun 1	632,306,000	771,000	820.11
Tahun 2	641,336,000	839,000	764.48
Tahun 3	656,575,000	961,000	683.22
Total gold	Total gold income (gr)		2,267.81
Initial investment (gr)			2,209.31
Value of gold income (gr)			58.5

From the results in the table above, it is evident that the owner of the Nasi Goreng Simpang Bukik Yopi business has gained a profit of 58.5 grams of gold. Therefore, it is advisable to expand this business.

#### **Gold Index**

$$GI = \frac{2,267.81}{2,209.31} = 1.26$$

The value of (GI) is greater than 1, indicating that the Nasi Goreng Simpang Bukik Yopi business is feasible for development.

# g. Investible Surplus Method (ISM)

Below is the table of the (ISM) method for Nasi Goreng Simpang Bukik Yopi over three years.

Table 4. Investible Surplus Method (In Thousand Rupiahs)

		1			
Period	Bt	Ct	IS	n-t	Isn
0		1.816.192	1.816.192		
1 <sup>st</sup>	807.806		1.008.386		
$2^{nd}$	834.446		173.940		
$3^{rd}$	859.075		685.135		
ISM				3	1.730.270

Based on various feasibility calculations using both conventional and Shariah methods outlined above, expanding the business of Nasi Goreng Simpang Bukik Yopi is deemed appropriate. This decision is grounded in the outcomes of the calculations conducted across all aspects utilizing the Payback Period method, indicating a return on investment within one year, two months, and 13 days.

Regarding Shariah's financial analysis and conventional financial aspects, it is evident that Nasi Goreng Simpang Bukik Yopi is suitable for business expansion. The Islamic Financial Sustainability Ratio (ISM) of 31.76% over three years signifies that the venture has achieved a surplus investment of 31.76%. The Gold Value Method (GVM) yields a value of 58.50 grams, indicating a profit equivalent to 58.50 grams of gold within a 2-year timeframe. Furthermore,

the Gold Index (GI) value exceeding 1, specifically at 1.026, signifies the suitability of expanding the business.

From the perspective of conventional finance, a positive Net Present Value (NPV) of +334,825,000, a Profitability Index (PI) exceeding one at 1.184, and an Internal Rate of Return (IRR) surpassing the cost of capital at 16.18% all align with research findings by Eka Purwanda, Raden Willa Permatasari, and others. Their studies suggest a payback period of 1 year and eight months, NPV of Rp 1,077,541,937, PI of 2.6, and IRR of 66%.

Additionally, the results of this study align with research by Masnunah, Dian Puspita Sari, and Ade Irawan (2019), demonstrating a positive NPV of Rp 18,511,049 and a PI exceeding 1.07. Considering both Shariah and conventional financial calculations, it is concluded that Nasi Goreng Simpang Bukik Yopi is worthy of development, meeting all criteria established through the conducted analyses.

#### 5. Conclusion

Based on the financial feasibility calculations using the Shariah-compliant Gold Value Method (GVM), with a calculated result of (58.5), Gold Index Method (GI) of (1.026), and Investible Surplus Method (ISM) of (31.76%), the business of Nasi Goreng Simpang Bukik Yopi is deemed suitable for development.

According to the results of conventional financial feasibility calculations using the Payback Period (PP) method, with a calculated result of (1 year, two months, 13 days). Net Present Value (NPV) of (+334,825,429), Profitability Index (PI) of (1.184), and Internal Rate of Return (IRR) of (20.33%), the business of Nasi Goreng Simpang Bukik Yopi is deemed suitable for development.

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