

# Improving Business Performance Using Financial Planning Toward Electrical & Mechanical Industry: Case Study of CV. Jogi Teknik

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## Keyword

*machinery industry, boiler service, financial performance, financial management, financial ratio, financial planning, cash flow projection*

## Abstract

The Micro, Small and Medium Enterprise (MSMEs) sector which is engaged in the service, maintenance and installation of boilers often faces a series of challenges that hinder its growth and sustainability. The main challenge faced by MSMEs in this industry is the lack of access to finance (Board of Governors of the Federal Reserve System, 2019). CV. Jogi Teknik has experienced a decrease as shown by the gross profit margin on CV. Jogi Teknik is 24.9% in 2020, with an increase of 10.1% in 2021. Unfortunately, the conditions did not last long, where CV. Jogi Teknik experienced a significant decrease in Gross Profit Margin of up to 7.8%. According to NYU Stern School of Business data for 2023, CV has a gross profit margin. Currently the gross profit margin from CV. Jogi Teknik is lower than the electricity industry average. Researchers used a quantitative approach by processing data on the financial history of CV. Jogi Teknik and secondary data from journals, books, articles, and literature reviews. In generating data, researchers used an analysis of internal business conditions with financial reports, SWOT analysis, and business model canvas analysis. Meanwhile, to analyse the external conditions of the business using competitor analysis and competitor mapping. The results of this study want to show that CV. Jogi Teknik has low financial performance in 2022. After conducting an evaluation, to improve CV. Jogi Teknik financial performance, this company is feasible in three scenarios based on the NPV, IRR, and payback period that can be used as an optimal plan to run this business for the next five years.

## INTRODUCTION

Based on the 2020 Industrial Information Report issued by the Ministry of Industry of the Republic of Indonesia, there are 76 companies in industrial estates and 137 companies outside industrial estates engaged in repair services and installation of machinery and equipment in Indonesia. One focus of this industry is services for boiler service, maintenance, and installation. The magnitude of the potential and business opportunities in this industry has encouraged many business people from the Micro, Small and Medium Enterprise (MSMEs) scale to large-scale businesses to get involved in this industry. Boiler service, maintenance and installation business is a vital industry that ensures the smooth operation of heating systems and plant processing. The MSMEs sector which is engaged in the service, maintenance and installation of boilers often faces a series of challenges that hinder its growth and sustainability. The main challenge faced by MSMEs in this industry is the lack of access to finance (**Board of Governors of the Federal Reserve System, 2019**). Without adequate funding, they may struggle to invest in the equipment, tools and materials needed to provide high-quality services.

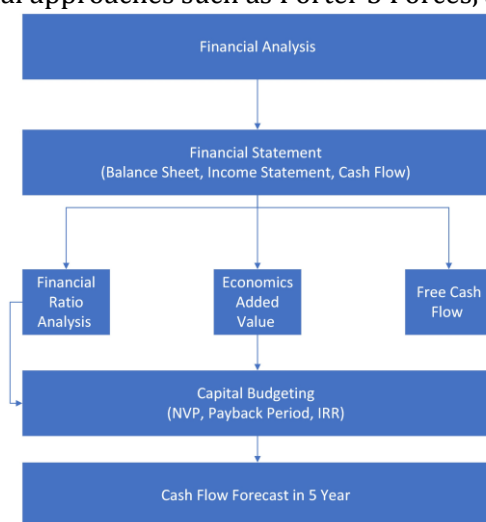
CV. Jogi Teknik as an MSMEs engaged in the Repair Services Industry and Machine and Equipment Installation for Boilers. Based on the results of preliminary internal interviews with the President Director, Manotar Nainggolan, it is possible to review that CV. Jogi Teknik has limited investment resources and funds in running business management and operations when compared to large competitors. In making financial and business planning, CV. Jogi Teknik needs to determine an effective and sustainable plan to continue to develop according to the company's capabilities. According to (Vesna Grozdanovska, 2017) financial management has an important function in the company, namely, to estimate the capital requirements of the company. This depends on expected costs and profits as well as future programs and policies. Capital estimation should be done in a way that will increase the earning capacity of the company. After an assessment has been made, the short-term and long-term capital structure, as well as borrowing and capital values must be determined.

The results of the analysis are based on the Annual Corporate Income Tax Return from CV. Jogi Teknik in 2020-2022 shows that the financial planning that has been carried out has proven to show business performance at CV. Jogi Teknik has experienced a decrease as shown by the net profit generated in 2022 of IDR 178,298,475, a decrease of -33.30% from 2021 with a total profit of IDR 267,346,241. On the other hand, CV. Jogi Teknik in 2021 experienced an increase in net income, with a total net profit of IDR 211,946,450, this net profit increased by 26.13% compared to 2020.

In addition, the gross profit margin on CV. Jogi Teknik is 24.9% in 2020, with an increase of 10.1% in 2021. Unfortunately, the conditions did not last long, where CV. Jogi Teknik experienced a significant decrease in Gross Profit Margin of up to 7.8%. According to NYU Stern School of Business data for 2023, CV has a gross profit margin. Currently the gross profit margin from CV. Jogi Teknik is lower than the electricity industry average. The average gross profit margin in the Power Industry is around 35.40%. This is an indication of the company's growth from CV. Jogi Teknik is slow in its industry. Founder CV. Jogi Teknik has the ambition to increase the company's revenue and get a bigger gross profit margin in the following year.

## METHOD

This study used a quantitative approach in using the process of analyzing financial data from CV. Jogi Teknik for the last 3 years and projected finances for CV. Engineering Jogi for 5 Years. The researcher also uses the Company's Internal Analysis (SWOT Analysis, and Business Model) and Company External approaches such as Porter 5 Forces, and PESTEL



**Figure 1** Conceptual Framework

From CV. Jogi Teknik Historical financial data was found that gross profit margin CV. Jogi Teknik is currently below the industry's average contribution margin. Financial performance is measured using financial statements that include an income statement, a balance sheet, and a cash flow statement (Rory Knight, 2000). Financial ratios can provide investors with information about the company's actual value. We can calculate corporate value by analysing expected cash flow, company assets, organizational structure, technology, and human resources (Rashid, 2021). Capital budgeting can help to improve financial performance by calculating forecasting scenarios for NVP, IRR, and payback periods (Mia Juliani, 2020 ).

## RESULTS

To understand the financial conditions, business conditions and solutions to business problems faced by CV. Jogi Teknik, the author analyses the internal and external factors of this business. Ratio analysis is used to examine internal business issues and the company's present financial situation. The following ratios are employed in ratio analysis: liquidity ratio, solvability ratio, efficiency ratio, and profitability ratio. In addition to evaluating financial reports from 2020 to 2021, the reports examined include the income statement, balance sheet, and cash flow statement.

	2020	2021	2022	Evaluation from 2020 to 2021	Evaluation from 2021 to 2022
Income Statement	211.946.450	267.346.240	178.297.476	Increased	Decreased
Balance Sheet	816.000.000	940.000.000	1.105.160.000	Increased	Increased

Financial Statement Analysis is based on historical data from 2020 to 2021 from CV. Jogi Teknik. According to the results of the calculations used to create the income statement and balance sheet, CV. Jogi Teknik's financial performance increased in the second year, for the income statement and from Rp 211.946.450 to Rp 267.346.240. CV. Jogi Teknik saw a decrease in various areas in 2022, including an income statement of IDR -89,048,764

### *Financial Ratio Analysis of CV. Jogi Teknik*

**Table 4 2 Financial Ratio Analysis from 2020 - 2022**

Account Name	2020	2021	2022	Evaluation from 2020 to 2021	Evaluation from 2021 to 2022
<b>Liquidity Ratio</b>					
Current Ratio	2,09	2,07	1,95	Decrease	Significant Decrease
<b>Solvability Ratio</b>					
Debt to Equity Ratio	0,37	0,35	0,36	Decreased	Increase
Debt to Asset Ratio	26,96	25,74	26,28	Decreased	Increase
<b>Efficiency Ratio</b>					

Total Asset Turnover	2,85	2,81	2,66	<b>Decreased</b>	<b>Decreased</b>
<b>Profitability Ratio</b>					
ROA	25,97	28,44	16,13	<b>Increased</b>	<b>Decreased</b>
ROE	35,56	38,30	21,88	<b>Increased</b>	<b>Decreased</b>
Gross Profit Margin	25,00	35,00	7,89	<b>Increased</b>	<b>Decreased</b>
Net Profit Margin	9,12	10,14	6,07	<b>Increased</b>	<b>Decreased</b>

(Source: Author Analysis)

In evaluating the financial performance of CV. Jogi Teknik in 2020 to 2022, the authors conducted a ratio analysis as follows: Liquidity Ratio, Profitability Ratio, Efficiency Ratio, Solvability Ratio. This is done to acquire a more comprehensive picture of financial performance, detect trends and patterns, and compare performance with similar firms or industries as CV. Jogi Teknik.

To assess CV. Jogi Teknik's ability to meet its short-term liabilities, the authors examine financial reports using the Current Ratio technique, with outcomes of 2.09 in 2020 and 2.06 in 2021. In 2022 there will be a significant decrease of -0.12. The authors conclude that the CV. Jogi Teknik ratio is relatively stable and the company has a decent ability to satisfy its present liabilities.

In addition, the solvency ratio approach is utilized to calculate the level of usage of total debt by CV. Jogi Teknik for the first two years of business activities. According to the findings of the investigation, CV. Engineering Jogi's debt-to-equity ratio declined by -0.023 from 2020 to 2021. But experiencing a slight increase of 0.01 in 2022. It can be seen that the ratio is quite low, and the total debt is less than the company's capital. This also demonstrates that CV. Jogi Teknik takes a prudent approach to debt financing and prefers to finance its assets with equity. The examination of CV. Jogi Teknik's debt-to-asset ratio revealed that it has fallen by -1.22%. In 2022, there will be an increase of 0.54. On the other hand, this ratio indicates the debt-to-asset ratio of CV. Jogi Teknik is relatively high compared to its industry, showing a significant proportion of debt financing compared to its total assets.

The efficiency ratio is used in examining CV. Jogi Teknik's finances to determine how effective this CV is at managing its resources and assets to create revenue. The Total Asset Ratio CV. Engineering Jogi indicates a reduction of -0.042, and continued to experience a decrease of -0.18, however the ratio value is better when compared to the industry, indicating good asset use to create income.

Profitability Ratio is a financial ratio that will be used to analyse the ability of a CV. Jogi Teknik is generating profits from its operations. Based on the results of the analysis of Return of assets from CV. Jogi Teknik experienced an increase of 2.48% from 2020 of 25.97%. But a very sharp drop in 2022 of -12.31%. Besides that, for the analysis of Return of Equity (ROE) CV. Jogi Teknik experienced an increase of 2.74% from 35.56% in 2020. Unfortunately, CV. Jogi Teknik in the following year decreased, so the ROE value was 21.88%. In addition, the Gross Profit Margin for 2020 towards 2021 has increased by 10.1% and an increase in Net Profit Margin of 1.01%. For the value of this ratio in 2022, CV. Jogi Teknik got worse where Gross Profit Margin fell to 7.89% and Net Profit Margin fell drastically to 6.07%.

*Economic Value-Added CV Jogi Teknik*

Economic Value-Added analysis is used by CV. Jogi Teknik, the author, to measure the added value of the economy and the extent to which the company is able to make profits that surpass the cost of capital used to operate Company

**Table 1 Economic Value Added of CV. Jogi Teknik**

	2020	2021	2022	Evaluation from 2020 to 2021	Evaluation from 2020 to 2022
Economic Value Added	120.051.190	164.420.236	79.681.154	Increased	Decreased

(Source: Author Analysis)

Based on the results of this calculation, that CV. Jogi Teknik has succeeded in increasing added value during 2020-2021. But there was a significant decrease in 2022 of - IDR 84.739.082, this needs special attention. Here shows the CV. In Jogi Teknik there are fluctuations in the achievement of added value. Therefore, the author will conduct a more in-depth analysis regarding the factors that affect performance and take appropriate actions to increase the economic value added to CV. Jogi Teknik.

#### **Free Cash Flow CV. Jogi Teknik**

**Table 2 Free Cash Flow of CV. Jogi Teknik**

	2020	2021	2022	Evaluation from 2020 to 2021	Evaluation from 2020 to 2022
Free Cash Flow	-	138.160.236	9.524.753	- Can Calculated Cause no Depreciation	Decreased

(Source: Author Analysis)

Free cash flow CV. Jogi Teknik experienced an increase in cash flow generated from operations and reduced investment spending significantly. Unfortunately, in 2022 there will be a very significant and lowest decline in 3 years of operation. In 2022 Free Cash Flow CV. Engineering Jogi experienced a very significant decrease of Rp 9.542.753. CV. Jogi Teknik experienced negative cash flow due to increased expenses. If this continues in the long term, it will show that the company is experiencing difficulties in maintaining positive cash flow to finance the company's growth.

#### **Business Condition Analysis**

Based on company analysis conducted with the PESTEL framework, SWOT Analysis and Fishbone at CV. Jogi Teknik is to find out the root causes of company problems. The author concludes that the root cause of the problem focuses on the financial side, it is influenced by internal and external companies. Financial management is regarded as the most important management skill for a SMEs since it influences every function of the entrepreneurial enterprise and helps to minimize costs, maximize profits, and plan and oversee the business's financial assets. Financial management consists of three components: financial planning, financial accounting, and working capital management. If there is no financial planning in the firm, the firm will face business challenges. As a result, the author's solution is to make long-term financial preparation for CV. Jogi Teknik. The long-term financial plan is the company's

planned financial activity and expected effect over the next 2-10 years. A five-year strategic plan is the most common.

CV. Jogi Teknik is a small-scale enterprise; hence expansion is critical. CV. Jogi Teknik has encountered numerous issues in various industries during its expansion. However, financial issues are at the basis of all of the other issues that these small enterprises encounter. A failure that arises in the small and medium business sector is poor cash flow management. As a result, businesses must be able to manage cash flow by developing cash flow estimates and forecasting business performance. Cash flow data is a better predictor of a company's failures. In general, the volume of cash inflows and outflow components of various business activities determines a company's success or failure. Therefore, projections of cash flow, cash inflow and outflow are made to determine the company's growth is economically significant.

Long-term financial planning is done in a business to reach financial objectives relating to budgeting, capital improvement planning, formulating financial policies, and strategic planning. Understanding long-term trends and risk variables that have an impact on overall financial sustainability is the goal of this planning. Long-term financial planning stimulates strategic thinking, increases knowledge of financial literacy within an organization or corporation, and enables decision makers and businesses to concentrate on long-term goals.

In making financial planning, various key data are needed. The business's financial condition and sales volume serve as the necessary input data. These financial planning's outcomes take the form of cash flow estimates, inflow and outflow reports, as well as NPV, IRR, and payback period calculations. The worst, typical or most likely, and best scenarios will all be included in financial planning. This scenario was developed using historical company data as well as assumptions made by CV. Jogi Teknik shareholders and stakeholders.

A pessimistic scenario is one that has minimal impact on the approach that will be used. As for the normal and optimistic scenarios that affect the strategy to be implemented. The normal scenario has the minimum number of people the strategy is expected to reach. Whereas for the optimistic scenario, the maximum value of people expected to be achieved from the strategy implemented.

**NPV, IRR, and Payback Period Scenario**

*Table 3 NVP, IRR, Payback Period CV. Jogi Teknik*

	<b>Worst Scenario</b>	<b>Normal Scenario</b>	<b>Best Scenario</b>
NPV	1.576.874.671	6.528.016.517	9.164.958.175
IRR	49,80%	90,60%	99%
Payback Period	2 Years 2 Month	1 Year 10 Months	1 Year 9 Months

Payback time, Net Present Value (NPV), and Internal Rate of Return (IRR) are used in Financial Planning Analysis to assess the project's investment suitability. The metrics that are used to evaluate the project must comply with specific criteria. The project should be able to pay back its investment in less than five years, and the table above demonstrates that in all cases this is the case. Projects must have a positive net present value (NPV) in order to be considered a worthy investment. Since all scenarios have more than the required 10.84% capital cost, they are all acceptable.

**DISCUSSION**

Researchers use scenarios that are classified into three conditions, namely the best, normal, and worst scenarios. This is done to reduce future risks such as changes to trends, rapidly developing technology, unexpected market situations, and other problems that may

occur within the company. Reaching the best scenario for CV. Jogi Teknik achieves the desired profit, enabling the company to expand its market to 4- and 5-star hotels or penetrate MSMEs that use small capacity boilers. As well as adding a variety of services from CV. Jogi Teknik along with experts who are experienced in their fields.

However, if only until the normal scenario is reached, it is possible for the company to optimize its marketing strategy both digitally / online and offline marketing. For Online Marketing CV. Jogi Teknik will create a website that is useful as a company portfolio and will be the first gate for those who want to use the services of CV. Jogi Teknik. Online Marketing can increase the credibility of the CV. Jogi Teknik as well as expanding the area geographically for the services offered. For Offline Marketing, CV. Jogi Teknik will provide the best service to loyal and potential customers by providing marketing entertainment, as well as CV. Jogi Teknik will actively contribute to events related to the boiler industry and others. CV. Jogi Teknik can use the prior implementation plan for the next 5 years.

## CONCLUSION

CV. Jogi Teknik experienced a decline in various fields in 2022, including a profit and loss statement of IDR -89,048,764. To answer this first question in depth, researchers use financial analysis ratios, economic added value, and company free cash flow from 2020 to 2022. It can be concluded that conditions in 2022 have decreased in various aspects (Liquidity Ratio, Efficiency Ratio, Profitability Ratio) but experienced an increase in the solvency ratio. And for Economics Value Added in 2022 it has decreased by - IDR 84.739.082 Plus, for Free Cash Flow in 2022 worth minus -Rp 9.542.753. The factors that can be improved to optimize the financial performance of CV. Jogi Teknik. This question was answered by root cause analysis using a fishbone diagram, common size income statements. The results of the analysis show that there has been a significant increase in operating expenses from 2021 to 2022. As well as financial management from CV. Jogi Teknik which is not good, this is shown because there is no financial planning for the company in the current or future. Finance CV. Jogi Teknik is also influenced by external factors, namely inflation, cost shipping and government regulations, because many materials or machine spare parts are still imported from abroad.

Financial planning is executed in a company to accomplish financial goals. Financial planning starts with analysis and evaluation activities, which result in assessments that serve as benchmarks and company growth based on actual facts. Financial planning is done in order to allocate the most financial company. In this manner, the company's funds will be allocated to finance any interest that may benefit the company. Furthermore, financial planning will regulate the budget that is not too significant so that the business's financial stability is maintained. Financial planning can serve as a gateway to higher productivity. With the advancement of the company's productivity, future planning will be successful in advancing the company to a superior and advanced position than previously.

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