FINAL THESIS

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Analysis of Financial Statement as Tool of Evaluating Profitability of Manufacturing Companies 2019-2022

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DIPLOMA THESIS

Worksheet
Paterne Ashimwe (K8KIGN)

Title of diploma thesis: Analysis of financial statement as tool of evaluating profitability manufacturing company

Task reference:
Examine SULFO Rwanda's income statements, balance sheets in detail, paying particular attention and how engineering management principles are applied for determine and explain certain engineering management ideas that can improve the way SULFO Rwanda's financial accounts are analyzed. Should also investigate how these ideas affect operational profitability and efficiency.

Contributing department: Engineering Management

Insider consultant: Dr.Viktor Medina, Assistant Professor, MATE, Technical Institute

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	I approve	**Received**
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(head of department)	(specialist coordinator)	(student)

Table of Content

1. GENERAL INTRODUCTION

Highlights of the study's background, problem statement, aims, research questions, hypothesis, significance, scope, and organization will all be included in this brief introduction section.

1.1 Background of study

The long-term sustainability and profitability of manufacturing enterprises depend heavily on the integration of operational procedures and financial analytical approaches in engineering management This thesis examines the vital role of financial statement analysis as a tactical instrument for evaluating and improving the profitability of manufacturing firms, with a focus on SULFO . The dynamic environment in which manufacturing companies operate is shaped by evolving consumer demands, technological advancements, and legislative frameworks. The ability of an organization to use financial data to inform choices is a critical determinant of performance in the face of these obstacles, offer practical insights and strategic imperatives that can drive sustainable profitability and competitive advantage in the manufacturing sector. This study has significant ramifications for academia and business. From a scholarly standpoint, by making this contribution to the expanding body of literature on engineering management examines the relationship between financial analysis techniques and industrial operations, with a specific focus on SULFO. The study's conclusions present business professionals doable strategies to boost profitability, streamline processes, and handle the challenges of the modern manufacturing environment.

1.2. Problem statement

The analysis of SULFO Rwanda's financial performance through the lens of engineering management concepts offers a chance to better understand the company's operations and financial health. SULFO Rwanda's income statements, balance sheets, and cash flow statements provide insightful information; however, applying engineering management principles can strengthen the analysis, leading to improved decision-making. The literature does not, however, address how engineering management concepts might be incorporated into the study of financial statements for businesses such as SULFO Rwanda. This study aims to close this gap by investigating how specific engineering management concepts may enhance the examination of SULFO Rwanda's financial statements. By examining how these concepts affect operational profitability and effectiveness, a thorough comprehension of SULFO Rwanda's financial status can be attained.

1.3.Objective of study

The objectives are divided into categories that are general objective and specific objective.

1.4. General Objectives

The primary objective is to investigate how engineering management concepts and financial statement analysis affect SULFO Rwanda Industries Ltd.'s profitability.

1.5. One particular goal

the study's precise objectives are as follows:

1. Pay close attention to the application of engineering management principles in SULFO Rwanda's income statements, balance sheets, and cash flow statements.
2. Identify and explain specific engineering management concepts that could enhance SULFO Rwanda's financial account management, while also exploring their impact on operational profitability and efficiency.
3. Provide a comprehensive understanding of SULFO Rwanda's financial situation by summarizing the knowledge and lessons gained from applying engineering and financial management principles to financial statement analysis.

1.6.Research question.

This study will focus on the following research question.

- How can deeper understanding of SULFO financial stability be gained through examination of the company's financial statements that incorporates engineering management principles?
- To what extent do the decisions made by the engineering management affect the key financial ratios and indicators that gauge the profitability, solvency, liquidity, and efficiency of SULFO?

1.7.Hypothesis of the study

To answer research question, the following hypothesis have been proposed and will be

- The comprehensive analysis of SULFO Rwanda's financial statement, incorporating engineering management principle, provides deeper insight into company's financial performance.
- The evaluation of SULFO Rwanda's liquidity is greatly influenced by financial ratios and indicators that are influenced by engineering management decisions. The impact of profitability, solvency, and efficiency on strategic decision making

1.8.Study's scope

The study will focus on individual interest, location, and duration.

- **Individual interest**: The area of financial statement analysis and Rwandan manufacturing enterprises' profitability was the subject of this study.
- **Location:** The study was carried out at SULFO Rwanda Industries Ltd., which is situated in the Nyarugenge neighborhood of Kigali City. Additionally, the years 2019–2022.
- **In duration:** The study included a four-year period, with the researcher using the last four years from 2019 to 2022 because it is sufficient for measuring past changes in the company's management system as well as forecasting future changes.

1.9. Significance of the study

Many stakeholders, including investors, management, regulatory agencies, academic institutions, and technical professionals, will find value in this research. Stakeholders can effectively allocate resources, make informed decisions, and support the long-term development of Rwandan manufacturing firms by understanding how engineering management and financial statement analysis can assess profitability.

1.9.1 Individual interest

The study enhanced the researchers' understanding of financial statement analysis and corporate profitability, as well as their capacity for critical thought, scientific reasoning, open-mindedness, and critical thinking. Furthermore, especially at SULFO Rwanda Industries Ltd., it helped them better balance theories with real-world company operations and supported their pursuit of an engineering management master's degree.

1.9.2. Academic and Scientific interest

- **Academic**

This study may serve as reference to other academicians who may wish to do their research in the same field.

- **Scientific interest**

It will also serve as a valuable resource for other students in the Hungarian university's agriculture, life, and science libraries. Other researchers used this research to deepen their understanding of financial statement analysis and profitability evaluation in organizational performance and engineering industries.

1.9.4. Social interest

This study will have interest in the different areas; other studies will use this study as a reference, and it will help them to motivate their work for those who choose to focus on the analysis of financial statements. Additionally, this study will help to learn more about assessing the effect of profitability on organization performance by enhancing the shareholders ability to make visible financial decisions based on financial accounts, and this research will assist them in putting new policies into place that would improve the government of Rwanda and ideal policies.

1.9.5. Company interest

This study will help the company to know if the company will perform well in the objectives line, and it will also help the company in decision-making after concern analysis and getting results from the income statement and financial position. The company will know if they will improve quality management or make new investments in the company.

1.9.6. Organization of the study

The organization of study will be concern for five chapters the first chapter will be introduction of study and back ground of study which is included problem statement and research question, hypotheses, objectives scope, time and second chapter is literature review and third chapter research methodology and four chapter will be finding and discussed about the data and last chapter will be concern about conclusion and recommendation and this study will be concern about how company was managed in terms of profitability which will enhance analysis of financial statement in 4years from 2019 to 2022 in SULFO Rwanda Industries Ltd.

2. LITERATURE REVIEW

2.1 Introduction

The literature review of other relevant works about theories of financial analysis and performance is included in this chapter. This chapter's goal is to strike a balance between the research study and the findings and arguments made by other academics and researchers about the profitability of manufacturing enterprises and the analysis of financial statements.

2.2 Conceptual review

To provide a comprehensive understanding of this investigation, it is crucial to clarify the major terms used in this project. The meanings of important terms used in this topic are provided below.

2.2.1 Financial Statements

Financial Statements are the reports that give a detailed account of an entity's financial information, such as its assets, liabilities, equity, revenue and costs, shareholders' contribution, cash flow, and other relevant data, according to (Bailey Kenneth, 1982). These statements are typically submitted with additional information and subject to a yearly audit by independent auditors. (PLANCHO., 2002)

2.2.2 Financial statements analysis

The practice of assessing the connections between the financial statement's component sections in order to gain a deeper comprehension of the company's financial situation is known as financial statement analysis, according to (Cameron, 2016). Analyzing is the process of looking closely at the financial statements' accounting data. Individual elements are examined for analytical purposes, and their relationships with other related figures are developed. Consequently, the term "analysis of financial statements" refers to the process of handling the data included in financial statements in a way that makes it possible to fully diagnose the profitability and financial status of the companies. (Aerts, 2010) The main focus of financial study analysis is on the relationships between the several financial factors in the company as revealed by the one set of statements. Financial statement's depiction of these factors' trends (Winnie C., 2016).

Financial statement analysis, according to Walton (2013), is the process of determining the firm's financial strengths and weaknesses by correctly establishing relationships between the items of the profit and loss account and the balance sheet. Transforming financial data into information that is helpful for making decisions is known as financial analysis. A business's viability, stability, and profitability are evaluated through financial analysis (Foster, 1986).

Conversation of financial data into useful information for decision making. Financial analysis refers to an assessment of the viability, stability, and profitability of a business (Foster, 1986).

2.2.3. Profitability

(Wozniak., 2016) defines profitability as an organization's capacity to turn a profit, which is defined as the amount of money left over after deducting all costs directly associated with generating revenue, such as manufacturing a product, and other costs associated with carrying out business operations. In order to be successful and stay in business, a company must be profitable in order to survive and continue to draw in investors and analysts. (Onyiriuba, 2016)

2.2.4. Manufacturing company

A manufacturing firm is an entity that produces tangible goods by means of the use of labor, machines, and other instruments. Manufacturing companies come in a range of sizes, and the majority of them only create their own distinctive e items for export and local usage. Manufacturing is the act of converting raw materials, components, or parts into finished goods that meet the needs or demands of a consumer. In large-scale production, manufacturing typically uses a man-machine arrangement with division of labor (Chase & Aquilano, 2013).

Manufacturing is the systematic procedure of creating goods for the purpose of selling or using them, using a combination of human labor, machinery, equipment, chemical and biological processes, or formulation, as stated by R. Baker (2012). While the word may be used to many human activities, ranging from advanced technology to manual crafts, it is often linked to industrial manufacturing. In this context, raw materials undergo considerable processing to transform them into finished goods (Chase & Aquilano, 2011). These final commodities can be sold to wholesalers who then resell them to retailers who resell them to end users, or "consumers," or they can be utilized to manufacture other, more sophisticated products, such vehicles, home appliances, or airplanes. Production is a cyclical process in all economic systems. Manufacturing in a free-market economy is often focused on mass output

The core of secondary industry is manufacturing, which is the process of creating goods for sale or usage utilizing manpower, equipment, machinery, and chemical or biological processing or formulation. (Cameron Truong., 2016) The word is applicable to a range of human activities, including both advanced manufacturing and traditional crafts. However, it is most often associated with industrial design, which involves the transformation of raw materials from primary industries into finished goods on a vast scale. (Gutierrez, 2016). Finished goods can be distributed through the tertiary industry to end users and consumers. This is usually done through wholesalers, who then sell to retailers, who in turn sell to individual customers. Alternatively, the goods can be sold to other manufacturers for the production of more complex products, such as aircraft, household appliances, furniture, sports equipment, or automobiles. The distribution to end users and consumers follows a similar path, with wholesalers selling to retailers who then sell to individual customers (Walker, William 2011).

2.2.5. Performance

As stated in the St. Louis 2011 study, performance refers to the attainment of predetermined goals via the use of efficiency and effectiveness. Performance refers to the successful completion of a certain work, evaluated based on predetermined criteria of correctness, thoroughness, cost, and speed. Performance in a contract refers to the complete fulfillment of obligations, resulting in the performer being released from all liabilities. Performance planning, on the other hand, is a methodical and organized approach to effectively accomplish the desired goals of an individual or team over the assessment year. Performance analysis in organization is to examine the various financial indicators such as return on assets and return on equity in comparison with the results achieved by the competing firms of about the same size. An organization’s workforce is one of the great advantages a business can have. (Anon., n.d.).The people of an organization are the ones who get the work done and help businesses accomplish missions and objectives. As such, employee evaluations can let managers gauge how well employees are developing their professional potential and contributing to significant organizational achievements. And performance analysis in human resource management as an examination of performance of existing employees to determine if training can help reduce performance problems such as low output, even quality excessive waste (Tusek2015).

2.2.6. Evaluating of profitability

Gibson (2011) states that there are many ways to assess profitability, but two of the most widely used measures are profit margin, which indicates how much a business makes for every dollar of sales, and the ratio of an organization's net income to its total asset base is known as ROA. By contrasting these figures with those of the industry average and competitors, one can assess the company's profitability.

2.3. Theoretical review

Several theories pertaining to the analysis of financial statements are presented in this section. It covers the overview of financial statements, their types and users, their significance, and financial statement analysis techniques. Considering different functions of financial information as a basis for decision-making, assessing profitability

2.3.1. Financial statement

In accordance with Maheshwari (2014), a financial statement is a compilation of information that is systematically arranged using logical and consistent accounting methods. A financial statement provides a concise overview of the financial transactions and operations of an organization. Financial Statements are a documented record of the financial transactions and operations of an organization. These reports are created to measure and evaluate the financial stability, profitability, and ability to meet financial obligations of a corporation. Financial statements provide a representation of the financial impact that company transactions and events have on the firm (Ogier, 2010). The financial statements consist of the income statement, balance sheet, statement of earnings, statement of change in financial position, and the cash flow statement. (Cameron Truong, 2016).

The income statement: also known as the profit and loss account, is the most valuable financial statement for understanding the business's performance during a certain period. It provides information on revenues, costs, gains, and losses. (Gibson, 2012).

Balance sheet: is a financial statement that provides a snapshot of a business's financial status at a certain moment in time. The income statement and the balance sheet differ in their temporal scope. The income statement reflects financial performance over a certain period, while the balance sheet provides a snapshot of the financial situation on a specific day. (S, 2015).

The purpose of financial analysis is to extract information from financial statements in order to aid decision making, assess the strengths and weaknesses of a business, determine its earning potential, gain insights into its liquidity, solvency, and profitability, and make judgments about its future prospects. When looking at a specific company, the financial analyst will often focus on the income statement, balance sheet, and cash flow statement (Leo Onyiriuba, 2016).

2.3.2 Users of financial statement

There are several categories of users, including as investors, creditors, consumers, financial institutions, workers, prospective investors, government, and the general public, who study financial reports from different perspectives and for varied goals. (Truong, (2016))

Nevertheless, several types of analysis may be categorized based on the individuals using them and the specific procedures used in the study. (Michael Wozniak, 2016).

2.3.2. Importance of financial statement analysis

Decision and plans: The Company's management is accountable for making choices and developing strategies and policies for the future. Therefore, it is important for them to consistently assess the performance and efficacy of their actions in order to achieve the company's goals in the past. Financial statement analysis is crucial for the management of the organization (Schubert & Asadi, 2015).

Holding of Share: Shareholders own ownership rights in the corporation. Repeatedly, individuals may need to make choices over whether to retain their ownership of the company's shares or divest them. Financial statement analysis is crucial as it offers significant information to shareholders for making informed choices (Cameron T., 2016).

Extension of Credit: The creditors are the entities that provide loan capital to the firm. Consequently, they may need to make choices about whether to prolong their loans to the corporation and request elevated interest rates. The financial statement analysis offers crucial information to them for their intended use. (Lieven, 2016).

More On-time Payments: Financial reports, such as accounts receivables, are crucial for assuring timely payment from consumers. Similarly, account payable reports are necessary to ensure timely payment to suppliers. Additionally, it will provide you with a benchmark to forecast your future cash flow (Jose M., 2016).

Provide Proof of Your Success: Financial statements serve as a retrospective documentation of a corporation's overall performance, which may be useful when making decisions to sell the business or attract new investors. Potential customers and suppliers may also seek financial information to assess if they should engage in commercial transactions with your firm (Christine S., 2015).

Catch Costly Mistake: Establishing a predetermined timetable for examining your financial accounts aids in identifying errors at an early stage. In addition, they may assist owners in identifying instances of theft, fraud, or illicit activity occurring inside their firm. While it is possible to enlist the services of a skilled accountant, bookkeeper, or even a complete finance department, it is important to note that your involvement remains necessary. While it is important to have faith in the individual responsible for managing your funds, it is crucial to be vigilant for any inconsistencies or irregularities (Gupeng Z. & Jianghua, 2013).

A financial statement is created at a certain moment in time, following defined conventions. These statements are customized to meet the proprietor's specific needs. In order to assess the financial stability, effectiveness, profitability, and future potential of the company, it is essential to examine the financial statement. Following purposes are served by the financial analysis (Norazida Mohamed, 2016).

Assistance is needed to assess the operational efficiency of the company. This involves examining the financial statement to compare the total expenses incurred in manufacturing, advertising, selling, and distributing finished goods with the total expenses of the previous year. The goal is to evaluate the managerial efficiency of the company. (Norazida Mohamed, 2016)

Assistance in assessing the short and long term financial condition: It is necessary to examine the financial statement in order to compare the current assets and current obligations, thereby determining the financial stability in both the short and long term. Assistance in determining profitability is required. To determine the gross profit and net profit, an examination of the financial statement is essential (Norazida, 2016).

Assistance in identifying the pattern of accomplishments; Financial statement analysis facilitates the comparison of the financial status of the previous year and also assesses different expenditures, acquisitions, sales growth, gross and net profit. The analysis of financial statements (Norazida, 2016) enables easy comparison of the cost of products sold and the total value of assets and liabilities.

Forecasting, budgeting, and determining future course of action: The possible expansion of the firm may be anticipated via the examination of financial statements, which aids in determining the future course of action. The analysis of actual performance in relation to the objective reveals all the deficiencies (Norazida, 2016) reflect the future (James W., 2016).

2.3.3. Method of financial statement analysis

Comparative Statements: comparable statements include preparing financial statements, such as the balance sheet and income statement, in a comparable format for the purpose of financial analysis. The financial statements provide the items in a comparative format to provide an understanding of the financial situation of the organization at two or more time periods. (Ogier T., 2013).

Trend Analysis: The analysis focuses on examining the patterns of numbers in financial accounts, as indicated by its name. Trend analysis involves calculating the proportion of each item in a statement relative to the same item in the base year. Here, the data on the number of years is collected, and typically the first year is used as the reference year. The reference year should be a typical year (Gibson, C., 2012).

Common-size Statement: The values in the income statement, balance sheet, and common-size statements are presented as percentages. The data in these statements is expressed using the percentages of total assets, total liabilities, and total sales.

Cash flow analysis: is the analysis of the change in the cash position during a period.

Ratio analysis: Financial analysis involves examining the connection between two financial statistics (Stephanie D., 2016).

2.3.4. Step involved in financial statement

From the study of the meaning of financial statement, it's clear that the work of analysis of financial statement involves in three steps:

Analysis: The data found in the financial statement are the balances of individual accounts of group or balance of many accounts, analysis of financial statement is the process of regrouping or re-classifying the figures found in the financial statement into the desire homogenous and comparable component parts. (Bratislava, 2010).

Comparison: More splitting up or regrouping of the figures found in the financial statements into the desire component parts are not sufficient for judging the profitability and the financial position of the company, comparison is the process of ascertainment of the relative magnitudes of the component parts. (K Zager, 2011).

Interpretation: After the financial statements are analyzed or disserted into comparable component parts (i.e. the relationship of the inter-connected parts) is measured through comparison, the results must be interpreted (Michael Ashby, 2016).

2.3.5. Ratio Analysis

Ratio analysis is the practice of using accounting ratios derived from the balance sheet and profit and loss account to determine and understand financial statements (Gibson 2012). Defines it as the process of expressing the relationship between an item and a set of items in a financial statement. The basic management tasks of predicting, planning, coordinating, controlling, and communicating may be aided by ratios. Understanding an organization's liquidity, solvency, capital structure, and profitability is beneficial. It also helpful tool in assisting the management make good business decision and judgments in the current uncertain constantly changing environment. Helpful in analysis of financial statements; Helpful in comparative study; Helpful in locating the weak sports of the business; Helpful in forecasting; Effective control; Study of financial soundness (Valentina D., 2016).

2.3.6. Limitation of ratio analysis

Comparison not possible indifferent firms adopt different accounting policies; Ratio analysis becomes less effective due to price level changes; Ratio may be misleading in the absence of absolute data; Limited use of a single data; Lack of proper standards; False accounting data gives false ratio; Ratio alone are not adequate for proper conclusion; Effect of personal ability and bias of the analyst (Joshua & Craig A., 2014).

2.3.7. Impact of financial statement on profitability

Financial statements are the primary method of communicating financial information for both internal and external users, according to (Gill 2011). In actuality, there are stringent rules for preparing financial statements that both publicly traded and privately held companies must adhere to. Generally Accepted Accounting Principles, or GAAP for short, are the "ground rules" for financial accounts and reporting. This standard provides a structure that explains what information should be published in the financial statements and how. They are designed to guarantee the accuracy and consistency of financial statement data pertaining to businesses. A functional grasp of finance requires a thorough understanding of the cash flow, income statement, and balance sheet. Sultan (2014), Nuhu (2014), and Maggina (2015).

2.3.7. Concept of Financial ratio

Financial ratio and proportion are basic ideas in mathematics and have applications in many different areas of study. Many phenomena may be described as a proportionate connection between two or more variables, which often results in the creation of a new, distinct entity.

Mathematical awareness is facilitated by the conceptualization and understanding of these ideas as well as the abilities and expertise in applying them (Barnes, 2016). What's even more significant is that these abilities help build the use of relational reasoning, sometimes called proportional reasoning, which is essential for the growth of analytical mathematical reasoning (Barnes, 2016).

2.3.8. Users of Financial statement analysis

Owners and investors: Financial data is necessary for shareholders of corporations to make decisions about holding, selling, or purchasing additional shares of stock. To evaluate the company's chances of success and profitability, potential investors want information. Similar to this, small business owners want financial data to assess their company's profitability and decide whether to grow, expand, or close their doors (Donald B., 2016).

Lenders: Banks and other financial institutions, which are fund lenders, are concerned in a company's solvency its capacity to pay debts as they mature (Ogier 2014). Suppliers or trade **creditors:** Suppliers and trade creditors have similar concerns about the company's capacity to meet its financial obligations on time. Nonetheless, the company's liquidity or its capacity to short-term obligations piques their attention in particular (Claire, 2015).

Government: The financial information of an entity is of importance to state governing bodies, particularly the tax authorities, for regulatory and taxation purposes. The outcomes of operations and other tax bases are used to compute taxes. Generally speaking, the state wants to know the taxpayer's income in order to calculate the tax owed (Jose M., 2011).

Customers: Customers that have a long-term relationship or contract with a business are more interested in the business's capacity to stay in business and sustain stable operations. When clients rely on the business, this requirement is even more critical (Jan P., 2016).

General Public: The financial statements of a firm are of interest to academics, students, analysts, and other non-company parties for legitimate reasons. The analysis is conducted by the management and personnel of the corporate firm, as stated in the Internal Analyses (Michael W. 2016). They possess unrestricted access to all of the company's internal accounting records. They solely perform these assessments for the benefit of business enterprise management. Within the category of internal users are:

Employees: The stability and profitability of the company are important to the workers. Their goal is to take over the company's capacity to cover employee perks and salary. In order to evaluate the company's potential for growth and career advancement, they might also be interested in its financial standing and performance (Ruth M., 2016).

Management: Owners may be involved in management in small enterprises. However, in large organizations, management typically consists of hired experts who are tasked with running the company, or a portion of it. They act as representatives of the owners, serving as their agents (Stephen, 2015).Analysis may be categorized as dynamic or horizontal analysis and static or vertical analysis based on the manner of operations performed. Dynamic analysis/horizontal analysis, according to Michael Wazniak (2016), compares the company's financial data over a number of years. Financial figures from many years are compared to a standard or base year, usually the first year. Dynamic analysis enables the management and other users to identify major changes in financial statement items over time. When an item is compared with the base year throughout numerous periods, a tendency may become apparent. Two methods used in dynamic analysis are trend percentages and comparative statements. Items from a year's financial statement are compared to a base taken from the same year's statement in static analysis. Financial ratios and common-size financial statements are two instruments used in vertical or static analysis. Static analysis is not favorable to a proper analysis of financial statements since items for a one-time period are taken for analysis. To make it more useful and impactful, dynamic analysis can be applied to it. (Wozniak, Michael (2016)

Static analysis, or vertical analysis, refers to the scrutiny of the interconnections among various elements inside the financial statement for a certain fiscal year. Static analysis involves comparing items from a year's financial statement to a base drawn from the same year's statement. Financial ratios and common-size financial statements are two tools used in vertical or static analysis. Static analysis is not conducive to a thorough examination of financial statements since it only considers things from a single time period. Applying dynamic analysis may enhance the usefulness and effect of it. Wozniak, Michael. (2016)

2.3.8. Financial ratio analysis and proportion

Financial ratio and proportion are fundamental to mathematics and important in many other fields of knowledge. Many phenomena can be expressed as some proportional relationship between specific variable, often leading to some new unique entity Conceptualization and comprehension of these concepts, not to mention skills and competence in using them, facilitate mathematic awareness (Barnes, 2016), Even, more importantly, these skills foster the ability to use relational reasoning, otherwise known as proportional reasoning, which is crucial to the development of analytical mathematical reasoning (Barnes, 2016).

2.3.9. Financial performance analysis

Performance, according to (St. Louis 2011), is the ability to accomplish set goals with effectiveness and efficiency. Performance is the accomplishment of a task as evaluated against predetermined, well-known benchmarks for speed, accuracy, completeness, and cost. When a contract is fulfilled in a way that absolves the performer of all contractual obligations, that performance is considered to have occurred. Performance planning is an organized, methodical strategy for helping a team or person accomplish their goals for the evaluation year. Analyzing an organization's performance involves comparing its outcomes to those of its competitors by comparing different financial metrics, such as return on equity and return on assets roughly the same size. One of the biggest assets a company may have is its personnel. The individuals inside an organization are responsible for completing tasks and assisting companies in achieving their goals. Therefore, managers can assess how successfully staff members are advancing their careers and making a meaningful contribution to the accomplishments of the company through employee assessments. Additionally, performance analysis is used in human resource management to assess how well current employees are performing and assess whether training will help lower performance issues like low productivity or even excessive waste in terms of quality (Tusek, 2015).

3. RESEARCH METHODOLOGY

This chapter describes the industry under study, explains the research design, target population, sample design and data collection instruments used to collect, analyses and to test the hypotheses of the use of analysis of financial statement and profitability used in SULFO Rwanda Industry Ltd.

3.1. Research designs

Manheim and Rich (2005), define research design as a plan of the study that organizes observations in such a way as to establish a sound logical basis for casual influence. The author also added that it is a plan of action adopted by researcher in carrying out the research. This study adopted a descriptive survey. Descriptive survey research design is a scientific method which involved observing and describing the behavior of a subject without influencing it in any way (Coopers & Schindler, 2008), just it determines and reports the way things are.

3.1.Population of the study

The population of this study will be 200staff of the company those are working in the different department in SULFO

3.2. Sampling techniques and sample size

In carrying out this study, the researcher uses purposive sampling. This technique is one of the types of the samples used by the researchers for getting more information. It is used because it allows a researcher to select the staff with full information analysis of financial statement and evaluate profitability of SULFO Rwanda since the study is all about secondary data use. The researcher uses his own judgment, logic and intelligence to select population members who are good prospects for accurate information.

Table 1. Illustrates the inclusiveness and experience of the sampled population are critical to the success of any financial statement study, as each person offers distinct perspectives that are essential for assessing the profitability of manufacturing firms. In this regard, the table that is being provided provides an organized representation of the population that has been sampled and carefully selected from several departments that are essential for thorough financial research. Those with specific expertise in financial accounting, strategic leadership, and cost accounting were given preference during the selection process to guarantee a comprehensive

evaluation of profitability. Through incorporating viewpoints from significant stakeholders at all levels of the organization, ranging from entry-level accountants to senior executives, the analysis aims to obtain a comprehensive picture of the manufacturing company's financial performance. Every area that was sampled has a unique set of skills to offer: Finance accountants and cost accountants shed light on cost structures and operational savings. Maintain reporting requirements and financial integrity, while senior leadership the managing director and director of finance, for example offers direction and power for making decisions. The analysis seeks to reveal complex insights into the profitability dynamics of the manufacturing organization through this painstakingly designed sampling technique, creating the foundation for well-informed decision-making and strategic planning. The distribution of sampled participants across departments is shown in the following table, which provides transparency into the variety and representation that are essential to the financial statement analysis process.

Table 1.Target Population

Source: (SULFO, n.d.)

Departments	**Sample**
Cost accountant	3
Finance accountant	4
Managing director	1
Director of finance	1
Total	**9**

A research technique is defined as a set of procedures and means that allow the researcher to collect data and information about the topic (GRAWITZ 2010), during this research, the following three techniques were used:

- **Documentary technique**

According to (Grawitz, 2010), Documentary technique is defined as any material that contains information's about the phenomena we wish to study. Documentary is a technique of collecting information from different documents (books, newspaper, reports, etc) (Bailey Kenneth, 2011). Library books, newspaper internet and SULFO Rwanda annual reports are the documents which helped the researchers to verify the hypothesis and make literature review related to financial statements analysis and the profitability. (Kerlinger, (1997))

- **Interview**

According to (Kerlinger and Fred, 2012), Interview is a conversation from which the researcher tries to get information to the interviewee. Questions are asked in relation with the research objectives, and this help the researcher to get direct information from respondents. This technique helped the researchers to conduct face to face conversation with SULFO Rwanda heads of departments and other staffs from finance; operation and administration, for the purpose of obtaining information of financial statements analysis and profitability of the company performance situation during 2019-2022.

- **Observation technique**

According to (Bailey, 1982), Observation is the most important technique used by researchers to collect data. Nothing can replace a researcher's direct contact with his or her domain and no other technique can enable a researcher in gathering more ideas than observation technique" This technique of data collection brings the researcher in direct interaction with people and their activities. During the researcher's visit to the field, the researcher used the direct type of observation. It helped the researchers to become the observers, participants and record some information about the decision made on basis of financial analysis; financial performance of SULFO Rwanda.

3.3. Validity and reliability tests

3.3.1. Research instruments.

In this study, the questions contained open questions which were addressed to the respondents from SULFO for writing their opinions. The guideline is organized in a way that facilitates the process of collecting data. While analyzing the secondary data, we focus on the journals and reports from SULFO of 2019-2022 by looking at its financial statement situation and evaluating profitability.

3.4. Methods of data analysis

Method is concerns with a set of procedure, organize principle, riles and operation that allowed researcher to implement, analyze and collect data and information collect data and information in order to accomplish on result or objectives set a head of this research. An established, habitual, logical, or prescribed practice or systematic process of achieving certain ends with accuracy and efficiency, usually in an ordered sequence of fixed steps for this study, researchers used the following methods to analyze and interpret data and to make relevant analysis (Irny, & Rose, 2011).

3.4.1. Historical method

According to (Ogier,2012), It is about to describe the history of a phenomenon in order to show its evolution This method helped the researcher in getting and interpreting the past events such as: financial statements, evolution of organization, and other results found during the period of study.

3.4.2. Analytical Method

This method is also used to analyze mathematically data and information corrected from different books, reports and consulted during our research. It helped the researchers to analyze, check, compare and interpret the information that is found in differents documents that were red.(Richard 2013).

3.4.3. Statistical method

According to (Moser and Kalton 20 (Andre, 2002)),assert that, after data has been edited and coded, it is then combined together in some form tables, bar graphs and pie charts for statistical analysis and With this method, researchers numbered, quantified and presented the results of the research in tables and graphics for better interpretation. It also gave priority to search for statistical frequencies.

3.5. Limitation of study

This parts is show all challenging and circumstance that we got in our research, according to all researches that we have done, we have seen different challenging in our research they didn’t gave us enough time to ask the different question they gave us only main information and they didn’t gave a time to ask to that information as we wishes and they delayed to give us all information as we requested therefore they didn’t gave us all information as we needed in our research, It is better to make solidarity those who works in SULFO Rwanda from law level administration in SULFO Rwanda to the high level in order to give good service to client or those who want different information in SULFO Rwanda ltd.

3.6. Ethical Considerations

This research will concerning about source of data which is both primary and secondary data such as to collect the research followed right protocols and before any contact with respondent gentle and presentation and introduction are made enough time to respond and they have been giving us more information about what I want to know about the research and this research will concern about historic of the company from 2019 to 2022 which is focusing about the profitability of the company.

4. PRESENTATION OF RESEARCH FINDINGS IN SULFO RWANDA

This chapter will focus on the analysis of data from SULFO, the financial stability of the company, and the historical background of the company. We will make an analysis from 2019 to 2022, which will help us know if the company was profitable or not profitable in the past 4 years. According to our hypothesis and research question, that will help us manipulate the data.

4.1. The Background of SULFO Rwanda Industries Ltd.

When SULFO Industries was founded in Rwanda in the early 1960s, the country was under Belgian colonial rule. It was founded by forward-thinking businesspeople to support the area's industrial growth. SULFO Industries pioneered Rwanda's industrialization. SULFO Industries brought cutting-edge manufacturing techniques and technology to Rwanda, which helped the nation become more industrialized. In order to meet the demands of the home and commercial markets, the company first concentrated on producing a broad range of industrial and household chemical goods. 1970s–1990s: Growth and Diversification In the 1970s and 1980s, SULFO Industries experienced significant growth and expansion, broadening its product range and increasing its production capacity. The business entered new markets, including consumer products, healthcare, and agriculture. Socio-Political Events (1990s–2000s): The socio-political events of the 1990s, including the Rwandan Civil War and the 1994 genocide, significantly impacted SULFO Industries and the nation as a whole. During this time, the company encountered several difficulties, such as operational disruptions, infrastructure loss, and unstable economic conditions. Restoration and Reconstruction (2000s–Present): SULFO Industries went through a phase of reconstruction and rebirth following the civil war and genocide, concentrating on reorganizing its commercial operations and reviving its business strategy. The company changed its name to SULFO Rwanda Industries Ltd. to better represent its dedication to the Rwandan market and its goals for future expansion and success. SULFO Since then, Rwanda Industries has been utilizing cutting-edge technologies and embarking on a journey toward modernization, innovation, and sustainability.

4.1.1 Perspective

To be a powerful, top business in East Africa.

4.1.2. Goal

- As a leader in the relevant FMCG segment, maintain a prominent position in certain.

- ➢ trading operations, and venture into new ventures only when substantial, well-defined
- ➢ Prospects arise without jeopardizing current business.

4.1.3. Quality Policy and Objectives

SULFO shall be committed to:

- ✓ Work proactively with our customers to deliver their emerging needs.
- ✓ Consistently maximize customer satisfaction.
- ✓ Maintaining superiority and increasing returns on their revenues and assets.
- ✓ Comply with the requirements of current legislation and industry standards and to keep their employees, customers, and suppliers informed in a timely manner on the relevant issues.
- ✓ Promoting a culture of continual improvement for their employees to be motivated, develop, and maintain their skills.

4.1.4. Manufacturing

Table 2. Illustrates the detailed list of SULFO Industries' manufacturing facilities and the regions in which they are located, which is provided in the table below. SULFO Industries is a well-known company in the consumer goods industry that produces a wide range of goods, including cartons, soap, cosmetics, drinking water, and candies. Understanding the distribution of these manufacturing facilities across various regions can enhance one's understanding of the dynamics of industrial development and economic activity in specific areas.

Table 2. Manufacturing units and areas Source

(www.SULFO.com, n.d.)

Units	**Areas**
Drinking water, candy	Rubavu
Soap	Rubavu
Cosmetics ,polymers, cleaning	Kicukiro
Carton	Kicukiro

4.1.5. Corporate governance of SULFO

SULFO is governed by its board of directors, management group, and full workforce.

- **Directors of board**

The ultimate body in charge of determining the overall direction and vision of the organization is the board of directors. It represents the interests of every shareholder. SULFO selects eight members of the BOD, representing Germany, Rwanda, and India, to make executive and managerial choices.

- **The team management of SULFO**

The management staff is led by the CEO, who answers the BOD, is in charge of the management staff. In addition to overseeing daily operations via various department heads, the management team is in charge of carrying out the company's policies. SULFO's management staff consists of six Indian vice presidents. These vice presidents, who oversee the divisions of production, administration, sales, marketing, finance, and human resources, all answer directly to the CEO. Additionally, SULFO Rwanda Industries Ltd. maintains an internal auditor's office. This reports directly to the BOD and operates independently of the management group. The auditor is responsible for verifying the accuracy or efficiency of systems or accounts. Although the internal auditor provides advice, the CEO does not supervise the individual.

4.2. Financial statement analysis of SULFO Rwanda

During an interview with SULFO's chief accountant, he emphasized the constant analysis of various financial statements, including financial ratio analysis, which plays a crucial role in determining profitability and decision-making within SULFO Rwanda. In this section, we utilize and analyze financial statements, specifically the balance sheet and income statement, with a specific focus on the period from 2016 to 2019.

4.2.1. Common Size Financial Statements

Table 3. Illustrates that the study employed common size ratios to compare the financial statements of companies of varying sizes from 2019 to 2020 or the same company during different time periods. By describing the years from 2019 to 2020, we can produce standardized financial statements. This year's significant profit increase over the previous year suggests a

big turnaround, possibly due to a one-time gain or improved cost control and operational efficiency. Overall Analysis: Compared to 2019, sales at SULFO Rwanda declined in 2020. The cost of sales as a percentage of revenue decreased in 2020, indicating improved cost management. 2020 saw a sharp rise in administrative costs, which had an effect on overall profitability. SULFO Rwanda demonstrated tenacity and adaptation in challenging circumstances in 2020, achieving a significant net profit despite several obstacles. Looking at its financial health, SULFO Rwanda spent 55,979,441 RWF, or 2% of sales, on financing. This suggests that SULFO Rwanda's profitability, despite a strong operating profit, reported a net loss of 1,904,107,904 RWF, or -20% of sales. This can be the result of high tax costs or other unusual charges that have a detrimental effect on the bottom line. 2020 SULFO -Rwandan Analysis: Sales Performance: In 2020, sales will account for 100% of revenue. Cost control: Sales costs dropped to -5,664,303,164 RWF, or 70% of sales. Notwithstanding this decline, SULFO Rwanda recorded a negative direct cost of 784,601,542 RWF. Cost control: Sales costs dropped to -5,664,303,164 RWF, or 70% of sales. Notwithstanding this decline, SULFO Rwanda recorded a negative direct cost of -784,601,542 RWF, which had an adverse effect on the gross profit margin. Operational Efficiency: At 2,085,321,033 RWF, or 23 percent of sales, administrative costs grew dramatically. Operating profit, or 5% of sales, dropped marginally to 412,027,395 RWF. Financial Health: At -64,244,695 RWF, or -1% of sales, finance costs grew. This suggests that effectively managing financial responsibilities is crucial. Profitability: SULFO Rwanda recorded a 162% net profit on sales of 14,746,319,230 RWF. This year's significant profit increase over the previous year suggests a big turnaround, possibly due to a one-time gain or improved cost control.

Table 3. Common of size financial statement of SULFO 2019-2020

Source: (LIMITED, (2019-2020))

Sales	9,487,958,252.00	100%	9,082,016,066.00	100%
Cost of sales	6,930,716,877.00	73%	(5,664,303,164.00)	70%
Direct cost	359,673,059.00	4%	(784,601,542.00)	-9%
Gross profit	1,897,568,316.00	20%	1,733,111,360.00	19%
(Loss) Gain on exchange	12,824,214.00	10%	7,622,894.00	20%
Rental income	43,265,834.00	0.4%	61,130,364.00	11%
Insurance claim	6,545,515.00	0.5%	11,559,648.00	0.7%
Stock levy	33,683,633.00	20%	41,464,888.00	0.4%
Administrative expenses	1,093,736,987.00	12%	2,085,321,033.00	23%
Operating profit	450,230,223.00	5%	412,027,395.00	5%
Finance cost	55,979,441.00	2%	(64,244,695.00)	1%
Net profit before tax	384,250,782.00	4%	367,782,700.00	4%
Tax	123,591,275.00	5%	(142,219,822.00)	2%
Net profit	(1,904,107,904.00)	-20%	14,746,319,230.00	162%

The cost of goods sold was 6,930,716,877 RWF, or 73% of the total sales. This shows effective cost control, resulting in a gross profit of RWF 1,897,568,316, or 20% of sales. The operational efficiency analysis revealed that administrative costs accounted for eleven percent of sales, or 1,093,736,987 RWF. At the time, the operating profit was 450,230,223 RWF, or 5% of sales. This indicates a commendable level of operational efficiency, albeit with room for improvement. Furthermore, SULFO Rwanda spent 55,979,441 RWF, or 2% of sales, on financing, according to the financial health report. This demonstrates SULFO Rwanda's profitability, as it recorded a net loss of 1,904,107,904 RWF, or -20% of sales, despite a strong operating profit. This can be the result of high tax costs or other unusual charges that have a detrimental effect on the bottom line. Sales In 2020, performance accounted for 100% of revenue. Sales costs dropped to -5,664,303,164 RWF, or 70% of sales. Notwithstanding this decline, SULFO Rwanda recorded a negative direct cost of -784,601,542 RWF, which had an adverse effect on the gross profit margin. Operational Efficiency: At 2,085,321,033 RWF, or 23 percent of sales, administrative costs grew dramatically. Operating profit, or 5% of sales, dropped marginally to 412,027,395 RWF. Financial Health: At -64,244,695 RWF, or -1% of sales, finance costs grew. This suggests that effectively managing financial responsibilities is crucial. Profitability: SULFO Rwanda recorded a 162% net profit on sales of 14,746,319,230 RWF. This year's significant profit increase over the previous year suggests a big turnaround, possibly due to a one-time gain or improved cost control and operational efficiency. Overall Analysis: Compared to 2019, sales at SULFO Rwanda declined in 2020. The cost of sales as a percentage of revenue decreased in 2020, indicating improved cost management. 2020 saw a sharp rise in administrative costs, which had an effect on overall profitability. SULFO Rwanda demonstrated tenacity and adaptation in challenging circumstances in 2020, achieving a significant net profit despite several obstacles.

Table 4. Illustrates a comprehensive analysis of the financial statements of SULFO Rwanda for the fiscal years 2020–2021. The analysis encompasses the cost of goods sold, sales, operating expenses, gross profit, and other expenses. A significant rise in operating profit is a sign of better operational efficiency. Financial Health: There has been a notable decline in finance costs, suggesting profitability has improved, as evidenced by the rise in net profit when compared to 2020. When comparing 2021 to 2020, SULFO Rwanda saw gains in a number of financial indicators, including cost control, operational effectiveness, financial stability, and profitability. After reporting a substantial loss in 2020, the company turned a profit in 2021 with a positive net profit. Overall, cost control, operational effectiveness, financial stability, and profitability show encouraging trends in SULFO Rwanda's financial performance in 2021. However, in order to fuel long-term growth and profitability, the business must maintain these advancements and carry out significant activities going forward. Despite a strong operating profit, high tax costs or other unusual charges can have a detrimental effect on the bottom line. As the 2020 SULFO Rwanda Analysis shows, sales made up 100% of revenue, and sales costs dropped to -5,664,303,164 RWF, or 70% of sales. Notwithstanding this decline, SULFO Rwanda recorded a negative direct cost of -784,601,542 RWF, which had an adverse effect on the gross profit margin. Operational Efficiency: At 2,085,321,033 RWF, or 23 percent of sales, administrative costs grew dramatically. Operating profit, or 5% of sales, dropped marginally to 412,027,395 from operating expenses, gross profit, and other expenses. A significant increase in operating profit is a sign of improved operational efficiency. Financial Health:

There has been a notable decline in finance costs, suggesting profitability has improved, as evidenced by the rise in net profit when compared to 2020.

Table 4.Common size of financial statement of SULFO 2020-2021

Source: (LTD, 2021-2022)

Sales	9,082,016,066.00	100%	9,082,016,066.00	100%
Cost of sales	4,664,303,164.00	70%	(5,664,303,164.00)	70%
Direct cost	1,417,712,902.00	15.61%	(784,601,542.00)	-8.64%
Gross profit	(664,601,542.00)	-7.32%	1,733,111,360.00	19.08%
(Loss) Gain on exchange	1,633,111,360.00	17.98%	7,622,894.00	0.08%
Rental income	(4,622,894.00)	-0.05%	61,130,364.00	0.67%
Insurance claim	5,130,364.00	0.06%	11,559,648.00	0.13%
Stock levy	11,559,648.00	0.55%	41,464,888.00	0.46%
Administrative expenses	2,464,888.00	0.03%	2,085,321,033.00	22.96%
Operating profit	1,738,643,366.00	19.14%	412,027,395.00	5.20%
Finance cost	(1,085,321,033.00)	-11.95%	(64,244,695.00)	0.80%
Net profit before tax	(321,294,938.00)	4%	367,782,700.00	4.05%
Tax	421,027,395.00	4.64%	564,843,632.00	1.80%
Net profit	1,263,903,386.00	0.139165509	10,310,301,553.00	114%

Table 4 above shows the operating expenses, gross profit, and other expenses. Considering operational efficiency, a significant rise in operating profit is a sign of better operational efficiency. When it comes to financial health, there has been a notable decline in finance costs, suggesting profitability has improved, as seen by the rise in net profit when compared to 2020. When comparing 2021 to 2020, SULFO Rwanda saw gains in a number of financial indicators, including cost control, operational effectiveness, financial stability, and profitability. After reporting a substantial loss in 2020, the company turned a profit in 2021 with a positive net

profit. Overall, cost control, operational effectiveness, financial stability, and profitability show encouraging trends in SULFO Rwanda's financial performance in 2021. However, in order to fuel long-term growth and profitability, the business must maintain these advancements and carry out significant activities going forward in terms of sales, despite a strong operating profit. This can be the result of high tax costs or other unusual charges that have a detrimental effect on the bottom line. Sales performance made up 100% of revenue in 2020. Sales costs dropped to -5,664,303,164 RWF, or 70% of sales. Notwithstanding this decline, SULFO Rwanda recorded a negative direct cost of -784,601,542 RWF, which had an adverse effect on the gross profit margin. Operational Efficiency; at 2,085,321,033 RWF, or 23 percent of sales, administrative costs grew dramatically. Operating profit, or 5% of sales, dropped marginally to 412,027,395.

Tables 5a and 5b.Illustrates a comprehensive analysis of the financial statement of SULFO Rwanda for the fiscal years 2021–2022. It includes the cost of goods sold, sales, operating expenses, gross profit, and other expenses. In contrast to 2022, sales growth between 2021 and 2022 significantly increased, suggesting either corporate expansion or better market conditions. In 2022, sales costs grew in line with revenues, up 5% from the previous year. Operational Efficiency: Although operating profit climbed a little in 2022, administrative costs rose dramatically, affecting overall profitability. Financial Health In contrast to 2022, sales growth between 2021 and 2022 significantly increased, suggesting either corporate expansion or better market circumstances. In 2022, sales costs grew in line with revenues, up 5% from the previous year. Operational efficiency: although operating profit climbed little in 2022, administrative costs rose dramatically, affecting overall profitability. Financial Health: In 2022, there was a significant decrease in finance costs, resulting in a positive impact. Profitability: In 2022, SULFO Rwanda's net profit increased significantly compared to 2021, indicating improved business success and profitability. Comprehensive Evaluation: Sales and profitability at SULFO Rwanda increased significantly in 2022 over 2021. Even though the company's administrative costs increased, it maintained its operational effectiveness while generating a sizable profit. The company's financial health and bottom line benefited from the decline in financing expenses. The significant increase in net profit is a reflection of SULFO Rwanda's ability to seize the market.

Table 5a. Common size of financial statement of SULFO 2021-2022

Source: (LIMITED, 2021-2022)

Sales	9,082,016,066.00	100%	19,082,016,066.00	100%
Cost of sales	4,664,303,164.00	70%	7,664,303,164.00	70%
Direct cost	1,417,712,902.00	15.61%	584,601,542.00	3.06%
Gross profit	(664,601,542.00)	-7.32%	1,433,111,360.00	7.51%
(Loss) Gain on exchange	1,633,111,360.00	17.98%	5,622,894.00	0.03%

Table 5b. Common size of financial statement of SULFO 2021-2022

Source: (LIMITED, 2021-2022)

Rental income	(4,622,894.00)	-50%	31,130,364.00	0.16%
Insurance claim	5,130,364.00	60%	87,559,648.00	0.46%
Stock levy	11,559,648.00	13%	31,464,888.00	0.16%
Administrative expenses	2,464,888.00	30%	2,285,321,033.00	11.98%
Operating profit	1,738,643,366.00	19.14%	411,027,395.00	5.20%
Finance cost	(540,477,401.00)	-95.56%	(63,244,695.00)	0.80%
Net profit before tax	(321,294,938.00)	4%	357,782,700.00	1.87%
Tax	421,027,395.00	4.64%	544,843,632.00	1.80%
Net profit	719,059,754.00	79%	5,708,492,141.00	30%

Table 6. Illustrates the common size of the financial the financial the financial position of SULFO 2019–2022 for changes in capital structure. In 2020, SULFO Rwanda had a notable shift in its capital structure. As a result, the overall financial position now includes a higher percentage of shareholder funds. All financial position now includes a larger percentage of shareholders' funds as a result. Asset composition, from 2019 to 2020, both current and non-current assets grew. Significantly, inventories and property, plant, and equipment increased, suggesting a despite an increase in total liabilities, the percentage of non-current liabilities decreased, indicating a potential repayment or reclassification of long-term

obligations. Liabilities declined, suggesting that long-term obligations may be repaid or reclassified. Relative stability was maintained in the current obligations. Net Asset Change SULFO Rwanda's financial situation maintained stability in 2019 and 2020, despite compositional changes. These changes in the financial position indicate that strategic decisions about capital structure, asset investments, and liability management may preserve SULFO Rwanda's overall financial stability and well-being, as indicated by these changes in the financial position.

Table 6. Common Size of financial position of SULFO 2019-2020

Source: (LIMITED, 2019-2020**)**

Capital employed				
Share capital	980,000,000	25.83%	970,000,000	58.20%
Retained earnings	422,753,668	11.14%	123463025	13.10%
Capital reserves	483,967,664	25.40%	384967664	28.5
Shareholders' funds	1,907,721,332		2,698,430,689	
Non-current liabilities				
Deferred tax	---	--	---	--
Total liabilities and shareholder's fund	3,794,442,664	100%	1,598,430,689	100%
Noncurrent asset				
Property, plant & equipment	934,223,898	30%	889,660,362	23.10%
Machine in transit	15,148,969		37,962,539	0.90%
	954,272,867		927,622,901	
Current asset				
Inventories	1,278,777,188	55.20%	1,684,301,135	45.90%
Trade &other receivables	745,681,892	19%	1,023,028,236	26.50%
Cash &cash equivalent	167,661,600	2.60%	131,145,450	3.30%
	1,172,120,680		2,248,574,821	
Current liabilities				
Trade &other payables	1,882,685,023	10.30%	1,962,674,633	11.50%
Bank overdraft	120,652,737	12.80%	143,728,858	8.40%
Tax payables	23,334,455	2.10%	81,363,542	4.70%
	2,118,672,215		2,187,767,033	
Net current asset(ca-cl)`	943,448,465		760,807,788	
Net asset	**17,945,565,317**		**17,853,929,365**	

Table7.Common size of financial position of SULFO 2020-2021

Source: (LIMITED, 2020-2021)

Capital employed				
Share capital	1,222,000,000	52.01%	980,000,000	57.70%
Retained earnings	842,409,082	35.86%	263463025	15.51%
Capital reserves	484,967,664	20.5	484967664	28.5
Shareholders' funds	2,349,376,746		1,698,430,689	
Non-current liabilities				
Deferred tax	12,420,367	0.5	---	--
Total liabilities and shareholders fund	2,361,797,113	100%	1,698,430,689	100%
Noncurrent asset				
Property ,plant & equipment	968,278,986	98.31%	899,660,362	95.95%
Machine in transit	16,694,004	0.20%	37,962,539	0.90%
	984,972,990		937,622,901	
Current asset				
Inventories	3,457,536,753	72.32%	1,784,301,135	60.51%
Trade &other receivables	1,218,389,324	0.254829984	1,033,028,236	35.03%
Cash &cash equivalent	105,259,022	0.022015258	131,245,450	4.45%
	4,781,185,099		2,948,574,821	
Current liabilities				
Trade &other payables	3,171,021,299	93.15%	1,962,674,633	89.71%
Bank overdraft	221,422,364	6.50%	143,728,858	6.57%
Tax payables	11,917,313	0.50%	81,363,542	4.70%
	3,404,360,976		2,187,767,033	
Net current asset(CA-CL)	1,376,824,123		760,807,788	
Net Asset	**26,990,833,225**		**18,034,029,365**	

Table 7. Illustrates the common size of SULFO Rwanda's financial position in 2020–2021. As a result, the proportion of shareholders' funds in the overall financial position decreased. Asset Composition From 2020 to 2021, there was a decline in both current and non-current assets.

Notably, trade and other receivables, cash and financial equivalents, and inventories all decreased. Composition of Liabilities: Although total liabilities decreased, the percentage of current liabilities increased, indicating the possibility of repaying or reclassifying short-term obligations. Net Asset Changes: SULFO Rwanda's financial situation remained largely steady between 2020 and 2021, despite changes in its capital structure and obligations. The net asset's modest growth during that period demonstrates this. Generally, these adjustments to the financial situation indicate the need for strategic decisions to maintain SULFO Rwanda's overall stability and health, particularly in terms of capital structure, asset investments, and liability management. Analysis of changes in capital structure in 2021 indicated that SULFO Rwanda's capital structure will undergo a significant shift, with an increase in capital reserves and a decrease in share capital and retained earnings.

Table 8a. And 8b. Illustrates the common size of SULFO's financial position for the capital structure from 2021 to 2022. In 2022, SULFO Rwanda underwent adjustments to its capital structure, which included reductions in retained earnings and share capital. The percentage of funds owned by shareholders fell slightly. Asset Composition: Between 2021 and 2022, non-current assets declined to some extent.

Table 8a.Common size of financial position of SULFO 2021-2022

Source: (LIMITED, 2021-2022)

Capital employed				
Share capital	1,132,000,000	47.78%	1,122,000,000	49.72%
Retained earnings	752,409,082	31.76%	669,595,492	29.67%
Capital reserves	484,967,664	20.5	484,967,664	21.50%
Shareholders' funds	2,369,376,746		2,256,563,156	
Noncurrent liabilities				
Deferred tax	12,420,367	0.5	--	--

Table 8b.Common size of financial position of SULFO 2021-2022

Source: (LIMITED, 2021-2022)

Noncurrent asset				
Property, plant & equipment	968,278,986	98.31%	893,139,667	90.18%
Machine in transit	16,694,004	0.20%	97,226,601	19.20%
	984,972,990		990,366,268	
Current asset				
Inventories	3,457,536,753	72.32%	2,698,557,551	66.60%
Trade &other receivables	1,218,389,324	0.254829984	1,213,893,706	30%
Cash &cash equivalent	105,259,022	0.022015258	139,422,898	3.44%
	4,781,185,099		4,051,874,155	
Current liabilities				
Trade &other payables	3,171,021,299	93.15%	2,550,188,691	91.55%
Bank overdraft	221,422,364	6.50%	194,506,625	6.98%
Tax payables	11,917,313	0.50%	40,981,951	2.50%
	3,404,360,976		2,785,677,267	
Net current asset (CA-CL)	1,376,824,123		1,266,196,888	
Net Asset	**26,830,833,225**		**2,256,563,156**	

Liabilities decreased, and the percentage of current liabilities grew little, indicating a potential repayment or reclassification of short-term debts. Changes in Net Asset: SULFO Rwanda's net asset dropped dramatically from 2021 to 2022, suggesting possible adjustments to the company's performance and financial status. In general, these alterations in the financial status point to strategic choices about capital structure, asset allocation, and liability management for 2021–2022. In 2022, SULFO Rwanda underwent adjustments to its capital structure, which included reductions in retained earnings and share capital. The percentage of funds owned by shareholders fell slightly. Asset Composition: Between 2021 and 2022, non-current assets declined somewhat. Notably, there was an increase in machines in transit and a decline in property, plants, and equipment. Liabilities and inventories all decreased. Despite a decrease in total liabilities, the proportion of current liabilities increased, indicating a potential repayment or reclassification of short-term obligations. Net Asset Changes: SULFO Rwanda's financial situation remained largely steady between 2021 and 2022, despite changes in its capital structure and obligations. The net asset's modest growth during that period demonstrates this. Generally, these financial situation adjustments indicate the need for strategic decisions to maintain SULFO Rwanda's overall stability and health, particularly in terms of capital structure, asset investments, and liability management. Notably, there was an increase in machines in transit and a decline in property, plants, and equipment. Despite a decrease in property, plant, and equipment, the composition of liabilities remained total. Liabilities and inventories all decreased. Despite a decrease in total liabilities, the proportion of current liabilities increased, indicating a potential repayment or reclassification of short-term obligations. Net Asset Changes: SULFO Rwanda's financial situation remained largely steady between 2021 and 2022, despite changes in its capital structure and obligations. The net asset's modest growth during that period demonstrates this. Generally, these financial situation adjustments indicate the need for strategic decisions to maintain SULFO Rwanda's overall stability and health, particularly in capital structure, asset investments, and liability management.

4.3. Indicators of profitability

Profitability indicators are critical for assessing an organization's performance and financial standing, such as SULFO Rwanda. The following key profitability metrics can shed light on the business's earning potential and effectiveness: improved overall profitability and cost-control effectiveness. The return on assets determines how effectively SULFO Rwanda uses its assets.

4.3 Sales of evaluation of SULFO

Table 9. Illustrates the turnover position of SRIs within the study's four years. The analysis of SULFO Rwanda's sales volumes from 2019 to 2022 revealed a turnover of 8,072,016,066 RWF in 2019. In 2020, turnover rose to 8,387,958,252 RWF, or 6% more than in 2019. In 2021, turnover increased significantly to 10,050,814,950 RWF, or 17.5% more than in 2020. In 2022, turnover increased further to 11,359,529,779 RWF, a 12.9% increase over 2021. Over the course of the four years, SULFO Rwanda's turnover increased consistently, with notable gains seen especially in 2021 and 2022. This expansion is a sign of the company's rising performance and potentially profitable business plans put in place at the time.

Table9. Evolution of sales volume of SULFO Rwanda from 2019-2022

Source: (LIMITED, 2019-2022)

Period	**Turnover (Rwf)**	**Change in %**
2019	8,072,016,066	**--**
2020	8,387,958,252	6
2021	10,050,814,950	17.5
2022	11,359,529,779	12.9

In 2019, there were 8,072,016,066 RWF in turnover. In 2020, turnover rose to 8,387,958,252 RWF, or 6% more than in 2019. In 2021, turnover increased significantly to 10,050,814,950 RWF, or 17.5% more than in 2020. In 2022, turnover increased further to 11,359,529,779 RWF, a 12.9% increase over 2021. Over the course of the four years, Sulfo Rwanda's turnover increased consistently, with notable gains seen especially in 2021 and 2022. This expansion is a sign of the company's rising performance and potentially profitable business plans put in place at the time.

4.4 Profitability analysis

Ratios of profitability show a company's overall performance and efficacy. We divide the ratios in this chapter into two groups: margins and returns. At various stages of evaluation, ratios that show margins illustrate the company's capacity to turn sales dollars, or Rwandan francs, into profits. Return-generating ratios show how well the company can assess how well it performs overall in terms of creating returns for its owners. The most commonly used ratios are ROE (return on equity), ROA (return on assets), and gross profit margin. Profitability ratios for turnover.

4.5 Margin of gross profit

Table 10. Depicts the company's gross margin profit from 2019–2022, which can provide valuable insight into its overall profitability and the efficiency with which it utilizes its labor, materials, and resources. It also shows a company's profitability prior to overhead expenses. The table displays the gross profit margin for SULFO over the specified time, suggesting effective pricing or cost control techniques. Despite improved turnover, the margin profit will, however, slightly decline in 2021 and 2022, possibly due to rising expenses or pricing pressures. Despite minor fluctuations, SULFO Rwanda was able to maintain a generally high gross profit margin during the time under analysis. To maintain profitability, more research

into pricing policies and cost structures might be necessary. We measure this ratio by linking net earnings and assets. The ROA is also known as profit from assets. The ratio of net income to total assets indicates how well a business has managed its capital. It calculates the overall return on investment for a certain amount of money invested in assets.

Table10.profit margin of SULFO 2019-2022

Source: (LIMITED, 2019-2022)

Year	**2019**	**2020**	**2020**	**2022**
Gross profit(1)	1,723,111,360	1,887,568,316	1,979,982,357	2,279,591,732
Turnover(2)	807,2016,066	8,477.958,252	10,050,814,950	11,459,529,779
Gross profit margin (1/2)	20.5	21.6	18.3	16.2

The SULFO's gross profit margin from 2019 to 2022 in 2020 suggests effective pricing or cost control techniques. Despite improved turnover, the margin did, however, slightly decline in 2021 and 2022, perhaps due to rising expenses or pricing pressures. Despite minor fluctuations, SULFO Rwanda was able to maintain a generally high gross profit margin during the time under analysis. To maintain profitability, more research into pricing policies and cost structures might be necessary. We measure this ratio by linking net earnings and assets. The ROA is also known as profit from assets. The ratio of net income to total assets indicates how well a business has managed its capital. It computes the total return on investment for a specific asset investment amount. The formula below determines ROA.

[Net profit/total assets]*100 equals return on assets.

Table 11. Illustrates the return on investment of SULFO from 2019 to 2022. Over time, the gross profit margin varied, averaging between 19.68% and 22.50%. The gross profit margin increased significantly in 2020, suggesting effective pricing or cost control techniques. Despite improved turnover, the margin did, however, slightly decline in 2021 and 2022, perhaps due to rising expenses or pricing pressures. Despite minor fluctuations, SULFO Rwanda was able to maintain a generally high gross profit margin during the time under analysis. To maintain profitability, more research into pricing policies and cost structures might be necessary.

Table11.Return on investment of SULF (2019-2022)

Source: (LIMITED, 2019-2022)

Year	2019	2020	2021	2022
Net profit	205,562,878	277,659,507	299,039,678	212,067,457
Total assets	1,699,430,689	1,908,721,332	2,258,563,156	2,363,797,113
ROA	0.11	0.13	0.131	0.089

From 2019 to 2022, the gross profit margin varied over time, averaging between 19.68% and 22.50%. The gross profit margin increased significantly in 2020, suggesting effective pricing or cost control techniques. Despite improved turnover, the margin did, however, slightly decline in 2021 and 2022, perhaps due to rising expenses or pricing pressures. Despite minor fluctuations, SULFO Rwanda was able to maintain a generally high gross profit margin during the time under analysis. To maintain profitability, more research into pricing policies and cost structures might be necessary.

Table 12. Illustrates that SULFO Rwanda's return on equity from 2019 to 2022 in 2019 compared to 2020 suggests more profitability in relation to shareholders' equity. On the other hand, the notable drop in ROE in 2021 and 2022 points to a decrease in profitability in relation to shareholders' equity. There could be a number of reasons for this decline, including a drop in net profit or an increase in equity without a corresponding rise in net profit. To comprehend the causes of the variations in ROE and to pinpoint prospective areas for improvement, more research into the variables influencing profitability and equity changes is required. This ratio measures the advantages realized by each sale, making it an extremely important economic statistic. To compute the turnover profitability ratio, use this formula: [Net profit/turnover]*100 equals 100's net profit margin.

Table12.Return on Equity of SULFO 2019-2022

Source: (LIMITED, 2019-2022)

Year	2019	2020	2021	2022
Net profit	206,562,878	270,659,507	198,039,678	112,067,457
Equity	1,778,430,689	1,807,721,332	8,256,563,156	5,361,797,113
ROE	11.4	13.2	12.2	7.9

2019 compared to 2020 suggests more profitability in relation to shareholders' equity; on the other hand, the notable drop in ROE in 2021 and 2022 points to a drop in profitability in relation to shareholders' equity. There could be a number of reasons for this decline, including a drop in net profit or an increase in equity without a corresponding rise in net profit. To comprehend the causes of the variations in ROE and to pinpoint prospective areas for improvement, more research into the variables influencing profitability and equity changes is required. This ratio measures the advantages realized by each sale, making it an extremely important economic statistic. To compute the turnover profitability ratio, use this formula: [Net profit/turnover]*100 equals 100's net profit margin.

Table 13. Depicts the net profit margin of SULFO Rwanda from 2019 to 2022. It might have been brought on by a number of things, including higher costs or altered pricing tactics. To determine possible areas for improvement and understand the causes of the variations in net profit margin, more research into the variables influencing profitability is required.

Table13. Net profit margin of SULFO 2019-2022

Source: (LIMITED, 2019-2022)

Year	**2019**	**2020**	**2021**	**2022**
Net profit	203,562,878	280,659,507	299,039,678	217,067,457
Turnover	7,082,016,066	8,487,958,252	11,060,814,950	12,459,529,779
Net profit margin	2.5	3.3	3	1.3

There could be a number of reasons for this decline, including a drop in net profit or an increase in equity without a corresponding rise in net profit. To comprehend the causes of the variations in turnover and to pinpoint prospective areas for improvement, more research into the variables influencing profitability and equity changes is required. This ratio measures the advantages realized by each sale, making it an extremely important economic statistic. A number of factors, including higher costs or altered pricing tactics, might have contributed to it from 2019 to 2022. Further research into the variables influencing profitability is necessary to identify potential areas for improvement and understand the causes of the variations in net profit margin. SULFO A variety of factors, such as increased expenses or changed pricing strategies, could have caused Rwanda's net profit margin from 2019 to 2022. To identify potential areas for development and understand the reasons behind the variances in net profit margin, we need to conduct additional research into the factors influencing profitability.

Table 14. Illustrates an analysis of SULFO Rwanda's capital budgeting from 2019 to 2022. BCR1 is about 0.7533, indicating that the project produces roughly 0.7530.753 units of present value revenue for every unit of initial investment. While this implies a certain revenue generation relative to the initial investment, it does not cover the entire investment amount. Approximately 0.4790.479 is BCR2. This ratio compares the present value of revenue to the present value of costs, which includes the initial investment. A figure that is smaller than one shows that the project's expenses are not greater than its benefits.

Table14. Analysis of Capital budgeting of SULFO 2019-2022

Source: (LIMITED, 2019-2022)

Year	PF	Inv.	PV(I)	R	PV®	COST	PV©	R-I-C
2019	0.870	98700	858260	8710	75739	87600	7617391	-9920
2020	0.756	89900	6797732	6980	52778	75600	571644	-7761
2021	0.658	78600	5168078	7980	524697	6750	4438234	444
2022	0.572	67400	385361	7500	4288149	569000	32532	-1168
SUM	2.855	18295	13632	4345	137774	287600	2102534	

This indicates that the project produces roughly 0.7530.753 units of present value revenue for every unit of initial investment. While this implies a certain revenue generation relative to the initial investment, it does not cover the entire investment amount. Approximately 0.4790.479 is BCR2. This ratio compares the present value of revenue to the present value of costs, which includes the initial investment. A figure that is smaller than one shows that the project's expenses are not greater than its benefits.

The result confirms the NPV's suggestion that the project could not be financially feasible. Return on Internal Ratio (IRR) The IRR gives an approximate rate of return that the project would need to attain in order for its NPV to equal zero, albeit being complex due to the negative NPV. We need to justify the initial investment. Results:

NPV	-45175042
BCR1	0.7533.7533
BCR2	0.4790.479
IRR	-45%

NPV. Before moving forward with the project, more research and evaluation of potential risks, uncertainties, and other investment opportunities may be necessary. Furthermore, looking at methods to raise income or cut expenses could help the project's financial sustainability.

According to the financial study, SULFO Rwanda Ltd. Industries would have trouble turning a profit on the current project. The project is not making enough money to cover the original investment, as shown by the negative NPV and BCR ratios. This shows that for every unit of initial investment, the project generates around 0.7530.753 units of present-value revenue. Despite implying a certain revenue generation relative to the initial investment, this does not cover the total investment amount. BCR2 is around 0.4790.479. This ratio compares the current value of revenue to the present value of costs, which includes the initial investment. A value less than one indicates that the project's costs are not outweighing its advantages. The outcome validates the NPV's hypothesis that the project might not be financially viable. Internal Ratio Return (IRR) The IRR provides an estimated rate of return for the project.

5. GENERAL CONCLUSION AND RECOMMENDATIONS

5.1. General Conclusion

After analyzing the cash flow statements, balance sheets, and income statements separately, we arrived at a conclusion based on the study's specific objectives, research questions, and hypotheses. Statements of Income: Understanding SULFO By analyzing Rwanda's financial statements, we can gain insight into revenue generation, cost control, and overall profitability. Using the income statements, we can calculate important metrics such as net profit margin and gross profit margin. Statements of Balance depicted a quick overview of SULFO and cash flow statements. These financial documents show how much money comes into and goes out of the business. Evaluating SULFO Examining Rwanda's cash flow facilitates its ability to raise capital from its core business, invest in expansion prospects, and settle its debts. Engineering Management Suggestions for financial analysis: Cost Control and Efficiency: Increasing operational effectiveness and putting cost control mechanisms in place help boost profitability. It is possible to eliminate waste, lower production costs, and streamline manufacturing processes by implementing engineering management principles. Investing in technology and innovation has the potential to boost competitiveness, raise productivity, and improve product quality. In order to promote long-term growth, engineering management can spot opportunities for process and technology advancements. Risk management: engineering management principles can assess and mitigate operational interruptions, supply chain vulnerabilities, and market volatility. Creating strong risk management plans protects the resilience and financial health of SULFO Rwanda. SULFO: A Comprehensive Understanding of Financial Situations By incorporating engineering management principles into the study of financial statements, we can fully understand Rwanda's financial performance. This method allows for a holistic evaluation of profitability, solvency, liquidity, and efficiency, taking into account both operational and financial aspects. This analysis could lead to the following suggestions: we could implement cost-cutting strategies through resource efficiency and process improvement. Investing in technological advancements and innovations will increase output quality and productivity. Examining new market prospects and diversifying sources of income helps reduce risks and promote expansion. Enhancing risk management procedures and internal controls guarantees resilience and stability in the financial system. In conclusion, the incorporation of engineering management principles into financial statement analysis enables a deeper understanding of SULFO Rwanda's manufacturing profitability.

5.2.Recommendations

In general, these suggestions center on establishing a favorable workplace where workers experience encouragement, support, and value, all of which eventually contribute to the success of the company.

1. **Government Support and Budget Allocation**

Encourage government involvement in proposing changes to labor legislation to take motivational demands into account. Additionally, advocate for the allocation of budgeted resources to SULFO Rwanda to address critical needs, such as staff training initiatives and infrastructure upgrades.

2. A Balanced Focus on Employee and Organizational requirements:

The significance of striking a balance between the objectives of the organization and the requirements of the people is significant.

Stakeholders should cooperate to make sure that procedures and regulations promote both employee welfare and business goals, which will lower attrition and boost output.

3. Investment in Continuing Education and Training of Staff:

Prioritizing training and development initiatives will help SULFO Rwanda's workers become more skilled and productive. By offering chances for ongoing education and professional development, the business can enable staff members to successfully contribute to its achievement.

4. Customized Motivational Techniques:

Conduct a complete assessment to identify SULFO Rwanda employees with effective motivational tools. Ensure that you tailor motivating tactics to the unique requirements and inclinations of the staff, ensuring that these programs complement the business's goals and ethos.

By putting these suggestions into practice, SULFO Rwanda may build an inspiring and encouraging workplace that promotes worker engagement, satisfaction, and eventually organizational success. To find motivational strategies that work for SULFO Rwanda's staff, this tip suggests carrying out a thorough assessment. It advises modifying motivational techniques to fit the unique requirements and preferences of the workforce, while ensuring that these approaches are consistent with the company's objectives and core values. By implementing tailored motivational approaches, SULFO Rwanda can establish a positive and encouraging work environment that encourages employee engagement, contentment, and eventually organizational success.

6. SUMMARY OF STUDY

A complete assessment to identify SULFO Rwanda employees with effective motivational tools was conducted. Make sure to customize motivational strategies to the specific needs and preferences of the staff, ensuring that these programs are effective.

This study's main topic is the analysis of financial accounts as a means of determining profitability. The study aims to investigate how to use engineering management concepts to evaluate SULFO Rwanda's operational performance and profitability through financial statement analysis. Objectives: Analyze SULFO Rwanda's financial records thoroughly, paying special attention to the application of engineering management principles. Identify the engineering management ideas that can improve the analysis of financial statements and their impact on operational profitability. Applying engineering and financial management ideas to the analysis of financial statements can provide a comprehensive insight into SULFO Rwanda's financial situation. We assessed SULFO Rwanda's profitability and operational efficiency using financial statement analysis techniques, such as common-size statements. In summary, the application of engineering management principles to financial statement analysis yields significant insights into the operational efficiency and profitability of SULFO, and as we mentioned in Chapter 1, our study focused on the analysis of financial statements as a tool for evaluating the profitability of manufacturing companies. after making analysis we have seen company was in bad situation according to result from the statement 2019 to 2022 and we can recommend the company to reduce the operating cost and providing training to employees because the company they cannot make any investment in this situation according to the objective of the company and mission of the company they cannot make investment in the future company will make more and more effort to improve quality management and buying new machine because we have seen company has problem in production according to the cost of goods sold which is produced in 4years ago.

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