

A STUDY ON FINANCIAL PERFORMANCE OF ARA SOFTWARES

Submitted in partial fulfillment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

By

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Register No. 41410138



**DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF MANAGEMENT STUDIES**

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with Grade “A” by NAAC | 12B Status by UGC | Approved by AICTE

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119

APRIL 2023

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SCHOOL OF MANAGEMENT STUDIES

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **JAYASHREE R 41410138** who carried out the project entitled "**A Study on financial performance in ARA Softwares**" under my supervision from January 2023 to March 2023.

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Submitted for Viva voce Examination held on 05/05/2023

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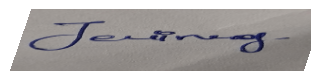
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DECLARATION

I **JAYASHREE R (41410138)** hereby declare that the Project Report entitled “**A Study on financial performance of ARA Softwares**” done by me under the guidance of **Dr. VELUMONI MBA, M,Phil, NET,SET,Ph.D.**, is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

DATE:05/05/2023

PLACE:Chennai

A handwritten signature in blue ink, appearing to read 'Jayashree', is written on a small, light-colored rectangular piece of paper.

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing the project and for completing it successfully. I am grateful to them.

I convey my sincere thanks to **Dr. Bhuvaneswari G MBA, Ph.D., Dean- School of Management Studies and Dr. A. Palani M.Com, M.Phil, MBA, Ph.D Head - School of Management Studies** for providing me necessary support and details at the right time during the progressive reviews.

I would like sincere and deep sense of gratitude to my Project Guide **Dr. VELUMONI (Internal Guide) and Mr.Hari Babu (External Guide)**, for their valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the School of Business Administration who were helpful in many ways for the completion of the project.

JAYASHREE R

ABSTRACT

Investors and analysts employ ratio analysis to evaluate the financial health of companies by scrutinizing past and current financial statements. Comparative data can demonstrate how a company is performing over time and can be used to estimate likely future performance. This data can also compare a company's financial standing with industry averages while measuring how a company stacks up against others within the same sector. Investors can use ratio analysis easily, and every figure needed to calculate the ratios is found on a company's financial statements.

Ratios are comparison points for companies. They evaluate stocks within an industry. Likewise, they measure a company today against its historical numbers. In most cases, it is also important to understand the variables driving ratios as management has the flexibility to, at times, alter its strategy to make its stock and company ratios more attractive. Generally, ratios are typically not used in isolation but rather in combination with other ratios. Having a good idea of the ratios in each of the four previously mentioned categories will give you a comprehensive view of the company from different angles and help you spot potential red flags.

This research aims to study the financial performance of Ara softwares. The financial performance is analysed through ratio analysis and working capital analysis. The ratios used in the analysis are current ratio, quick ratio, working capital ratio, solvency ratio, fixed asset to networth ratio, gross profit ratio, net profit ratio, operating profit ratio and return on investment ratio.

The results show that all the calculated ratios are higher than the ideal ratio. The liquidity position of the company is too high. The company has to utilise its current assets to its optimum. The company has to reduce its liquidity ratios as it affects capital structure. The working capital of the company is fluctuating. From the analysis it was found out that there is a slight downfall in their financial ratios during the financial year 2020-2021. This may be due to the covid pandemic situations. Overall, the financial position of the company is considered to be good.

TABLE OF CONTENTS

S.NO	CHAPTERS	PG.NO
	ABSTRACT	V
	LIST OF TABLES	VIII
	LIST OF CHARTS	IX
1	INTRODUCTION	
	1.1 INTRODUCTION	2
	1.2 INDUSTRY PROFILE	32
	1.3 COMPANY PROFILE	40
	1.4 STATEMENT OF THE PROBLEM	50
	1.5 OBJECTIVES OF THE STUDY	50
	1.6 NEED FOR THE STUDY	51
	1.7 SCOPE OF THE STUDY	51
	1.8 LIMITATIONS OF THE STUDY	51
2	REVIEW OF LITERATURE	54
3	RESEARCH METHODOLOGY	
	3.1 RESEARCH METHODOLOGY	66
	3.2 DATA COLLECTION	66
	3.3 STATISTICAL TOOLS	67
4	DATA ANALYSIS AND INTERPRETATION	76
	4.1 RATIO ANALYSIS	76
	4.2 STATEMENT OF CHANGES IN WORKING CAPITAL	
5	FINDINGS & CONCLUSIONS	
	FINDING OF THE STUDY	96

	SUGGESTIONS	100
	CONCLUSION	101
	BIBLIOGRAPHY	102
	ANNEXURE	

LIST OF TABLES

CHAPTER	TABLE	PG.NO
4.1	CURRENT RATIO	76
4.2	LIQUID RATIO	77
4.3	NET WORKING CAPITAL RATIO	78
4.4	DEBT SOLVENCY RATIO	79
4.5	FIXED ASSET TO NET WORTH RATIO	80
4.6	GROSS PROFIT RATIO	81
4.7	NET PROFIT RATIO	82
4.8	OPERATION PROFIT RATIO	83
4.9	RETURN ON INVESTMENT	84
4.10	STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2017 – 18	85
4.11	STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2018 – 19	87
4.12	STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2019 – 20	89
4.13	STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2020 – 21	91
4.14	STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2021 – 22	93

LIST OF CHARTS

CHAPTER	CHART	PG.NO
4.1	CURRENT RATIO	76
4.2	LIQUID RATIO	77
4.3	NET WORKING CAPITAL RATIO	78
4.4	DEBT SOLVENCY RATIO	79
4.5	FIXED ASSET TO NET WORTH RATIO	80
4.6	GROSS PROFIT RATIO	81
4.7	NET PROFIT RATIO	82
4.8	OPERATION PROFIT RATIO	83
4.9	RETURN ON INVESTMENT	84

From
Human Resource Department,
Ara Softwares,
Chennai -600053.

Date: 31st March 2023

To
Jayashree. R,
Sathyabama Institute of Science & Technology,
Chennai.

Sub: MBA Internship Completion letter

Dear Jayashree. R,

This letter is to confirm **Ms. Jayashree.R (Reg No: 41410138)**, pursuing final year MBA in Sathyabama Institute of Science and Technology, has completed 3 months internship in Marketing.

Date: 23rd January 2022 to 31st March 2023

We wish her all the very best for her upcoming career.

Sincerely,



HR Head



Email

info@arasoftwares.com



Address

18/A2, 1st Floor, Old Township Road,
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Chennai - 600053

CHAPTER 1

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Finance is the master key that unlocks all production and merchandising opportunities. For the preparation and administration of financial decisions, financial success is critical. It is a method of determining how well a firm uses its assets from its core business mode to generate money, as well as a method of determining an organization's overall financial health over time. Every business, large, medium, or small, requires funding to continue operations and meet its goals. Finance is so important nowadays that it is rightfully referred to as the "living blood" of businesses. No business can achieve its goals without enough funding. As a result, the study of financial performance is critical, as it is the process of calculating the financial results of a company's operations.

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

Financial performance analysis is the process of determining a company's financial strengths and weaknesses by correctly defining the relationship between balance sheet and profit and loss account components. It also aids in short- and long-term forecasting, as well as the identification of growth through the use of various financial techniques in financial performance analysis. In the development of the Indian economy, the bank plays a critical role. In emerging countries, a sound and efficient banking sector provides the required financial inputs to the economy. It also assesses an organization's overall financial health over a period of time. The financial performance of an organisation is concerned with the bank's financial strengths and weaknesses, as well as the relationship between the balance sheet and the income statement.

Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance and social performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. In this context researcher has undertaken an analysis of financial performance of pharmaceutical companies to understand how management of finance plays a crucial role in the growth.

WORKING CAPITAL

Working capital can be understood as a measure of both a company's efficiency and its short-term financial health. For a layman, it simply means the difference between the current assets and current liabilities. It is the firm's holdings of current, or short-term, assets (such as cash). Working capital is generally divided in two types, viz. gross working capital and net working capital. Gross Working Capital (GWC) is nothing but the total current or circulating assets. Net working capital, NWC (current assets minus current liabilities), provides an accurate assessment of the liquidity position of firm with the liquidity-profitability dilemma solidly authenticated in the financial scheme of obligations which mature within a twelve-month period.

The two main components of the working capital are assets and liabilities. First, short-term, or current liabilities constitute the portion of funds which have been planned for and raised. Since management must be concerned with proper financial structure, these and other funds must be raised judiciously. Short-term or current assets constitute a part of the asset investment decision and require diligent review by the firm's executives. Further, since there exists a close correlation between sales fluctuations and invested amounts in current assets, a careful maintenance of the proper asset and funds should be ensured.

One of the most important areas in day to day management of the firm is the management of working capital. Working capital management is the fictional area of fiancé that covers all the current account of the firm. Working capital management involves the relationship between a firms short term assets and its short term liabilities the goal of Working capital management is to ensure that a firm is able to continue it's a operations and that it has sufficient ability to satisfy both maturing short term debt and upcoming operational expenses.

Working capital is the life blood and every manager's primary task is to help to keep it managing. Good management of working capital generate cash and helps to improves profits and reduce risk. In other words working capital is the current asset the management of which is different from fixed asset. For example the discounting and compounding techniques, in capital budgeting is not required in WCM. Another difference is a large amount of working capital strengthen firm's liquidity position but at the same time it also reduces the over all profitability. Current asset can be adjusted with sales fluctuations in the short run. Thus the firm has a greater degree of flexibility in managing current or working capital.

Working capital is part of the total assets of the company. Generally, it is the difference between current assets and current liabilities. Practically speaking, it is the daily, weekly and monthly cash requirement for the operations of a business. Therefore, working capital management is a process of managing short-term assets and liabilities. It makes sure that a firm has sufficient liquidity to run its operations smoothly. The analysis of working capital management of the company includes Operating cycle, Receivables management, Inventory management, Cash management and Working capital financing of the company. In the operating cycle 'Net Working Capital' is required to becalculated. Net working capital includes Raw material conversion period, Work in progress conversion period, Stores and Spares conversion period, Fuel conversion period, finished goods conversion period, Account receivable conversion period and Payable deferral period. Liquidity ratios, Activity ratios and Profitability ratios are calculated.

For receivable management, collection procedure of a company is studied and outstanding debtors are also ascertained. For inventory management inventory control system of the company is studied and its effect on working capital. An overview of cash management has been undertaken in order to ascertain the cash position of the company. By studying the working capital of a company the efficiency of different functional departments come into picture along with that of finance department. In reality management of working capital has become one of the most important issues in the organisation. Consequently, companies can minimize risk and improve the overall performance by understanding the role and determinants of working capital. The main objective of the working capital management is to maintain an optimal balance between each of the working capital components. Business success is heavily on the ability of financial executives to effectively manage receivables inventory and payables.

Most of the financial manager's time and effort are allocated in optimizing the level current

assets and liabilities back toward optimal levels. A firm may be able to reduce the investment of total assets by renting or leasing plant and machinery. The high level of current assets the risk of liquidity associated with the opportunity cost of funds that may have been invested in long-term assets. The impact of working capital policies on profitability is highly important, however a little empirical research has been carried out to examine this relationship (Khan, 2020).

Thus, efficient management of working capital in an important prerequisite for successful working of a business concern it reduces the chances of business failure generates a feeling of security and confidence in the minds of personnel in the organization it assurance solvency of steady of organization.

The efficiency of working capital management can be measured through a variety of methods and ratios. Financial analysts typically compare the working capital cycle and other working capital ratios against industry benchmarks or a company's peers. The most commonly used ratios and measures are the current ratios, days of sales outstanding, days of inventory outstanding and days of payables outstanding.

Liquidity is often tight in small businesses. It's because of the reason that the scale of their operations and investment in WC is a drag on liquidity. The majority of small businesses are not able to fund the operating cycle with account payables. And due to which they have to rely on the cash generated internally. Or, in some cases, a cash injection is from their owner. Efficient working capital management will, therefore, allow a business to run efficiently and potentially free up some cash. This could be used to pay down debt or invest in a profitable project.

It has been often observed that the shortage of working capital leads to the failure of a business. The proper management of working capital may bring about the success of a business firm. The management of working capital includes the management of current assets and current liabilities. A number of companies for the past few years have been finding it difficult to solve the increasing problems of adopting seriously the management of working capital.

A firm may exist without making profits but cannot survive without liquidity. The function of working capital management in an organization is similar that of the heart in a human body. Also it is an important function of financial management. The financial manager must determine the satisfactory level of working capital funds and also the optimum mix of current assets and current liabilities. He must ensure that the appropriate sources of funds are used to finance working capital and should also see that short term obligation of the business are met well in time.

CONCEPT OF WORKING CAPITAL

Working capital typically means the firm's holdings of current, or short-term, assets such as cash, receivables, inventory, and marketable securities. Working capital refers to that part of firm's capital which is required for financing short-term or current assets such as cash, marketable securities, debtors, and inventories. In other words working capital is the amount of funds necessary to cover the cost of operating the enterprise.

Working capital means the funds (i.e.; capital) available and used for day-to-day operations (i.e.; working) of an enterprise. It consists broadly of that portion of assets of a business which are used in or related to its current operations. It refers to funds which are used during an accounting period to generate a current income of a type which is consistent with major purpose of a firm existence.

Working Capital is the money used to make goods and attract sales. The less Working Capital used to attract sales, the higher is likely to be the return on investment. Working Capital management is about the commercial and financial aspects of Inventory, credit, purchasing, marketing, and royalty and investment policy. The higher the profit margin, the lower is likely to be the level of Working Capital tied up in creating and selling titles. The faster that we create and sell the books the higher is likely to be the return on investment. Thus, when we have been using, the larger the percentage of funds obtained from short-term funds, the more aggressive (and risky) in firm's working capital policy and vice-versa. There are two possible interpretations of working capital concept:

1. Balance Sheet Concept
2. Operating Cycle Concept

It goes without saying that the pattern of management will be very largely influenced by the approach taken in defining it. Therefore, the two concepts are discussed separately in a nutshell.

Balance Sheet Concept

There are two interpretations of working capital under the balance sheet concept. It is represented by the excess of current assets over current liabilities and is the amount normally available to finance current operations. But, sometimes working capital is also used as a synonym for gross or total current assets. In that case, the excess of current assets over current liabilities is called the net working capital or net current assets. Economists like Mead, Malott, Baket and Field support

the latter view of working capital. They feel that current assets should be considered as working capital as the whole of it helps to earn profits; and the management is more concerned with the total current assets as they constitute the total funds available for operational purposes. On the other hand, economists like Lincoln and Salvers uphold the former view. They argue that

1. In the long run what matters is the surplus of current assets over current liabilities;
2. It is this concept which helps creditors and investors to judge the financial soundness of the enterprise;
3. What can always be relied upon to meet the contingencies, is the excess of current assets over the current liabilities since this amount is not to be returned;
4. This definition helps to find out the correct financial position of companies having the same amount of current assets

Institute of Chartered Accountants of India, while suggesting a vertical form of balance sheet, also endorsed the former view of working capital when it described net current assets as the difference between current assets and current liabilities.

The conventional definition of working capital in terms of the difference between the current assets and the current liabilities is somewhat confusing. Working capital is really what a part of long-term finance is locked in and used for supporting current activities. Consequently, the larger the amount of working capital so derived, greater the proportion of long-term capital sources siphoned off to short-term activities. It is about tight working capital situation, the logic of the above definition would perhaps indicate diversion to bring in cash, under the conventional method, working capital would evidently remain unchanged. Liquidation of debtors and inventory into cash would also keep the level of working capital unchanged. A relatively large amount of working capital according to this definition may produce a false sense of security at a time when cash resources may be negligible, or when these may be provided increasingly by long-term fund sources in the absence of adequate profits. Again, under the conventional method, cash enters into the computation of working capital. But it may have been more appropriate to exclude cash from such calculations because one compares cash requirements with current assets less current liabilities. The implication of this in conventional working capital computations is that during the financial period current assets get converted into cash which, after paying off the current liabilities, can be used to meet other operational expenses. The paradox, however, is that such current assets as are relied upon to yield cash must themselves to be supported by long-term funds until are converted into cash.

Operating Cycle Concept

The simplest definition of the term operating cycle is, “The average time between purchasing or acquiring inventory and receiving cash proceeds from its sale.” The operating cycle can be said to be at the heart of the need for working capital. The continuing flow from cash to suppliers, to inventory, to accounts receivable and back into cash is what is called the operating cycle. In other words, the term cash cycle refers to the length of time necessary to complete the following cycle of events:

1. Conversion of cash into inventory
2. Conversion of inventory into receivables
3. Conversion of receivables into cash.

If it were possible to complete the sequences instantaneously, there would be no need for current assets (working capital). But since it is not possible, the firm is forced to have current assets. Since cash inflows and outflows do not match, firms have to necessarily keep cash or invest in short-term liquid securities, so that they will be in a position to meet obligations when they become due. Similarly, firms must have adequate inventory to guard against the possibility of not being able to meet demand for their products. Adequate inventory, therefore, provides a cushion against being out of stock. If firms have to be competitive, they must sell goods to their customers on credit which necessitates the holding of accounts receivable. It is in these ways that an adequate level of working capital is absolutely necessary for smooth activity which, in turn, enhances the owner's wealth.

The operating cycle consists of three phases.

Phase I

In phase I, cash gets converted into inventory. This includes purchase of raw materials, conversion of raw materials into work-in-progress finished goods and finally the transfer of goods to stock at the end of the manufacturing process. In the case of trading organizations, this phase is shorter as there would be no manufacturing activity and cash is directly converted into inventory. The phase is, of course, totally absent in the case of service organisations.

Phase II

In phase II of the cycle, the inventory is converted into receivables as credit sales are made to customers. Firms which do not sell on credit obviously do not have phase II of the operating cycle.

Phase III

The last phase, phase III, represents the stage when receivables are collected. This phase completes the operating cycle. Thus, the firm has moved from cash to inventory, to receivables and to cash again.

A company's operating cycle typically consists of three primary activities; purchasing resources, producing the product, and distributing (selling) the product. These activities create funds flows that are both unsynchronized because cash disbursements usually take place before cash receipts. Example: Payments for resource purchases takes place before the collection of receivables.

They are uncertain because future sales and costs, which generate the respective receipts and disbursements, cannot be forecasted with complete accuracy. If the firm is to maintain a cash balance to pay the bills as they come due. In addition, the company must invest in inventories to fill customer orders promptly. And, finally, the company invests in accounts receivable to extend credit to its customers.

$$\text{Operating cycle} = \text{Inventory conversion period} + \text{Receivables conversion period}$$

The cash conversion cycle represents the net time interval between the collection of cash receipts from product sales and the cash payments for the company's various resource purchases. It is calculated as follows:

$$\text{Cash conversion cycle} = \text{Operating cycle} - \text{Payable deferral period}$$

The cash conversion cycle represents the net time interval between the collection of cash receipts from product sales and the cash payments for the company's various resource purchases. It is calculated as follows:

$$\text{Cash conversion cycle} = \text{Operating cycle} - \text{Payable deferral period}$$

1. Conversion of cash into raw materials
2. Conversion of raw materials into work in process
3. Conversion of work in process into finished goods
4. Conversion of finished goods into debtors and bills receivables through sales
5. Conversion of debtors and bills receivables into cash

The cash conversion cycle shows the time interval over which additional no spontaneous sources of working capital financing must be obtained to carry out the firm's activities. An increase in the length of the operating cycle, without a corresponding increase in the payables deferral period, lengthens the cash conversion cycle and creates further working capital financing needs for the company. This cycle is extremely important for retailers and similar businesses. This measure illustrates how quickly a company can convert its products into cash through sales. The shorter the cycle, the less time capital is tied up in the business process, and thus the better for the company's bottom line. Cash Cycle is an important analysis tool that allows the credit analyst to determine more easily why and when the business needs more cash to operate, and when and how it will be able to repay the cash. It is also used to distinguish between the customer's stated loan purpose and the borrowing cause. Once the cash conversion cycle for the borrower is mapped, the analyst is able to judge whether the purpose, repayment source and structure of the loan are the adequate ones. Managing asset conversion in favor of the business owner is the ultimate goal of transportation logistics and techniques such as just in time inventory.

The length of the cash cycle dictates the amount of money that needs to be tied up in working capital proportionate to sales. A shorter cash conversion cycle is better, other things being equal. It is possible for the cash conversion cycle to be negative; this is most likely for certain retailers who buy on credit, sell for cash and have a high stock turnover.

Operating cycle in case of a trading firm consists of the following events:

1. Cash into inventories
2. Inventories into accounts receivable
3. Accounts receivable into cash

Each component of working capital has two dimensions. One is time and another is money. When it comes managing working time of money, a company can get money to move faster around the cycle or reduce the amount of money tied up, the business will generate more cash or it will need to borrow less money to fund working capital. As a consequence, it will reduce the cost of bank interest. There are two concepts of working capital—gross working capital and Net working capital.

1. Gross Working Capital refers to the firm's investment in current assets. Current assets are the assets which can be converted into cash within an accounting year and include

cash, short term securities, debtors, and stocks.

2. Net Working Capital refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders which are expected to mature for payment within an accounting year and include creditors, bills payable, and outstanding expenses. Net working capital can be positive or negative. A positive net working capital will arise when current assets exceed current liabilities. Negative net working capital occurs when current liabilities are in excess of current assets.

Both the concepts of working capital have their own points of importance. "If the objective is to measure the size and extent to which current assets are being used, 'Gross concept' is useful; whereas in evaluating the liquidity position of an undertaking 'Net concept' becomes pertinent and preferable. It is necessary to understand the meaning of current assets and current liabilities for learning the meaning of working capital, which is explained below.

Current assets – It is rightly observed that "Current assets have a short life span. These type of assets are engaged in current operation of a business and normally used for short– term operations of the firm during an accounting period i.e. within twelve months. The two important characteristics of such assets are, (i) short life span, and (ii) swift transformation into other form of assets. Cash balance may be held idle for a week or two; account receivable may have a life span of 30 to 60 days, and inventories may be held for 30 to 100 days.

Current liabilities – The firm creates a Current Liability towards creditors (suppliers) from whom it has purchased raw materials on credit. This liability is also known as accounts payable and shown in the balance sheet till the payment has been made to the creditors. The claims or obligations which are normally expected to mature for payment within an accounting cycle (1 year) are known as current liabilities. These can be defined as "those liabilities where liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current assets, or the creation of other current liabilities."

Working capital (WC) can be defined in simple words as that part of the total capital which is required for daily working of business. It is the capital with which the business is worked over. According to the subbing working capital is the amount of funds necessary to cover the cost of operating the enterprises. Thus the funds required by the business for conducting the day to day operation. E.g purchase of raw material or finished goods, payment of expenses like salary, wages, rent etc ... The term working capital is also defined as "Excess of current assets over current liabilities"

Gross working capital (GWC)

When the term working capital is used to denote the total current assets it is stated as gross working capital. Gross working capital refers to the investment in current assets such as inventories, cash, accounts receivables, debtors, etc., which can be converted into cash in short notice focuses attention on management of current assets. Investment in current assets should be adequate, since inadequate investment causes solvency problems. Thus, working capital is necessary to run a business firm and to meet day - to - day expenses. Without current assets, it is not imaginable to make sales and maximise profits. Cash is generated through sales which are possible with the investment in inputs such as raw materials, consumables, labor etc., hence working capital is necessary for acquiring inputs.

Net working capital (NWC)

The term working capital is used to denote the net current assets (i.e current assets as net working capital). It refers to the difference between current assets and current liabilities. Net working capital can be positive or negative. It is conventional to maintain sufficiently excess current assets. It is a conventional rule to maintain the level of current assets twice that of current liabilities. Net working capital may be negative working capital which means negative liquidity. Net working capital refers to the judicious mix of long term and short term loans for financing current assets. However, a minimum amount of net working capital is permanent and therefore it is necessary to finance with long term capital. Weak liquidity position is a threat to the solvency of the company. Both gross and net working capital is necessary for a firm. Any size of current assets can be maintained by raising short term debts. So, a prudent management will see long term funds go into working capital, so as to be stable. Hence, a firm if maintains high net working capital is said to be sound. It does not mean that net working capital is to be too high. Too high net working capital i.e., if the difference between current assets and current liabilities is too high, it is called idle current assets. Idle current assets may be in the form of bad debts, unmoving inventories. Hence, too high net working capital is not a sound indication.

Permanent working capital (PWC)

It is the minimum amount of the current assets which are needed to conduct the business even during the dullest season of the year. This amount varies from year to year depending upon the growth of a company and stage of the business cycle in which it operates. It represents the current assets which are required on a continuing basis over the year.

Temporary working capital (TWC)

It represents the additional assets which are required at different time during the operating year.

Negative working capital

It emerges when current liabilities exceed current assets such a situation is absolutely theoretical and occurs when a firm is nearing a crisis of some magnitude.

Working capital management (WCM)

It is the management of short term financing requirement of a firm. This includes maintaining optimum balance of working capital components receivables inventory and payables and using the cash efficiently for day to day operations it also defines the management of current assets and current liabilities to maximize short term liquidity.

COMPONENTS AND DETERMINANTS OF WORKING CAPITAL

Components of Working Capital

Working capital	
Components	
Inventory	Raw Materials Work in Progress Finished Goods
Receivables	Amount owed by Customers Prepayments to Suppliers
Other Current Assets	Prepaid Expenses Operating Cash
Payables	Amounts owed to suppliers Prepayments by Customers

Other Current Liabilities	Short-term debt Accrued expenses
Working capital = Inventory + Receivables + Other Current Assets – Payables – Other Current Liabilities	

Determinants of working capital	
Internal	External
Nature and Size of the business	Business cycles
Operating Efficiency	Changes in technology
Firm's production policy	Seasonal variation
Firm's credit policy	Taxation policy
Availability of credit	Price level changes
Growth of the business	
Profit Margins	
Dividend Policy	

The term working capital truly means "current assets," but in common use is used to signify net working capital. Net working capital (which will be referred to as simply working capital) is the difference between current assets and current liabilities. Current assets are those that are expected to be liquidated or converted to cash within a year. Current liabilities are expected to be settled within a year. These are the broad descriptions of current assets and liabilities. Analysts are actually interested primarily in certain current assets and certain current liabilities; ones that may result in a cash inflow to the company. Prepaid insurance does not refer to a subsequent cash flow, but rather to a period of time covered by insurance.

Accounts payable results in a cash outflow will result in a company's earning some cash already received. For the company, and unearned revenue is a liability to fulfill that. So, overall, an analysis of working capital management will (should) focus on receivables and payables rather than prepaid items and unearned revenue. In addition, this analysis typically also involves inventory

because its sale will result in a cash inflow

Net working capital = Current assets -Current liabilities

OR = Cash + Accounts receivable + Inventory -Accounts payable
Working capital ratio = Current assets / Current liabilities

OR = (Cash +Accounts rec. + Inventory) / Accounts payable

The main components of working capital are examined to find out how productively the company is using its current assets and liabilities (turnover ratios) and how efficient the company is (represented by number of days related to a turnover). Many approaches might be used in teaching the basic financial management course. Fundamentals of Financial Management sequences things in order to cover certain foundation material first, including: the role of financial management; the business, tax, and financial setting; the mathematics of finance; basic valuation concepts; the idea of a trade-off between risk and return; and financial analysis, planning, and control.

More specifically, the book goes on to investigate current asset and liability decisions and then moves on to consider longer-term assets and financing. A good deal of emphasis is placed on working-capital management. Working capital management encompasses the administration of the firm's current assets namely; cash and marketable securities, receivables, and inventory and the financing (especially, current liabilities) needed to support current assets. The fundamental decisions underlying this management involve the level of investment in current assets and the appropriate mix of short-term and long-term financing used to support this investment in current assets.

Such decisions are governed by the important financial principle of a trade-off between risk and profitability. Usually, increased profitability is only possible with the addition of risk. In broad terms, the profitability and risk associated with current assets are a function of the level, composition, and financing of these assets. As the level of current assets increases (a movement to a more "conservative" working capital strategy, the riskiness of the firm generally decreases but, so too does the firm's profitability. When we speak of working capital, we mean current assets. Therefore, "temporary" working capital is the amount of current assets that varies with a firm's seasonal needs. A "Permanent" current asset, on the other hand, is the amount of current assets required to meet a firm's long-term minimum needs.

If a firm adopts a hedging (maturity matching) approach to financing, each asset would be offset

with a financing instrument of the same approximate maturity. Temporary or seasonal variations in current assets would be financed with short-term debt. The permanent component of current assets would be financed with long-term debt or equity. Increasing the firm's liquidity increases the safety margin against adverse cash flow fluctuations (increases the probability of interest and principal repayment and thus reduces all the risks outlined above. Too large an investment in working capital lowers the firm's profitability without a corresponding reduction in risk. (In fact, risk might actually increase. Too small a level of working capital could also lower profitability due to stock outs and too few credit sales (because of an overly strict-credit policy).

DETERMINANTS OF WORKING CAPITAL

It is understood that working capital is the vital component for-future growth of the firm. Financial manager has to maintain adequate level of working capital: There are several factors influence the determinants of working capital. It is necessary to know those factors which identifying the optimum size of working capital.

Nature of business: The size of working capital depends upon the nature of business such astrading or manufacturing. The manufacturing forms need relatively more working capital for maintaining current assets and firms do need more i.e., 60 to 70 per cent working capital than trading firms. Thus, working capital requirement depends upon the nature of the industry. en case of banking and financial institutions also need large " amount or-working capital to meet the needs of the customers whereas public utilities such as railways, /~transportation, hotels, resorts need less working capital relatively

Capacity: The extent of working requirement of a firm also depends upon its plant capacity. Larger the capacity, higher the scale of operations and huge the goods and services are sold, hence the working capital required is heavy.

Market coverage: Working capital requirement largely depends upon the market size which names the extent of market coverage decides the requirement of working capital. Larger the market, higher the requirement and vice – versa. Firms with state level market, national market and global market need working capital requirement.

Manufacturing cycle: Every product requires some technology to be used for converting the its inputs into finished product. Length of the process depends upon the type of technology used. Lengthy processes consume huge amount of working capital and vice - versa. For example, ship

building industry requires more working capital as it takes more time to construct ships. Since, manufacturing process differs from product to product the size of the working capital also varies based on its manufacturing cycle.

Advances: In fact some firms while booking order itself ask for advances by which they want to reduce the working capital pressures. Whereas, the firms without such policy do need more working capital. Similarly, while making purchases also, the firms who have to give advances for supply of materials, consumables, services and labourers require more amount of working capital.

Technology: Technology refers to how-to and why-to in making a product or service. This processing technology may be manual or mechanized or computerized. Higher the technology lesser the time taken to produce the goods or services. Hi - techs though required huge capital for acquiring assets, but take, less time to finish the processing, thus require less working capital funds. Whereas, the production processes with manual methods require huge working capitals they use more number of workers and maintenance of work-in-process material.

Growth of the firm: Growing firms need more working capital as their sales tend to increase. The firm from time to time in Sunrise industry do make more sales from year to year. Such firms need to plan for more working capital and in order to arrange more inputs to meet the increasing demands.

Seasonal fluctuations: Generally, the demand for goods is of two kinds. One is seasonal and the other is permanent. The seasonal industries usually produce goods only in the selected months, and in the off-season, they stop production. Industries such as sugar, tobacco, cotton, chilies etc., are such industries which need working capital during season times only. These firms should arrange the working capital funds more in size during the seasons and produce the products even for meeting the customers' demand during the non - seasonal period.

Production Policy: Some firms undertake production activity through-out the year, since they sell in several markets. Such firms require working capital all the twelve months in the year to supply their products in different months. Thus, these companies with continuous production require working capital continuously in the year.

Credit policy: Firms sell goods always not for cash offer some sales on credit to their customers for maximizing sales. The firms have to be flexible in their credit terms to enable sales. Such firms do require more amount of working capital than the firms which sell for cash always.

Nowadays credit has become common and necessary in the wake of competition. The firms selling on credit should review credit worthiness of their customers from time to time, so as to reduce the delay in collections. The collection department has to be alert and see that collections are made promptly. Therefore, the firms with efficient collection departments do require less working capital than the firms with liberal collection I credit policy.

Availability of supplies on credit lines: Firms buy goods, services and other inputs both for cash and credit. Normally, a firm is reluctant to commit cash and wish to get goods on credit. Hence, firms searching for supplies on credit require less amount of working capital than otherwise.

Operational efficiency: The operational efficiency firms will reduce their cost of production and provide more profit margin. Such firms can generate financial resources from within and they require less of working capital requirement.

Experienced personal: The operational efficiency of the firm depends upon experienced personnel who take decisions effectively and implement them the efficiently. This calibre among employees enable the firm to function with minimum inputs thereby, reduces the pressure for more working capital requirements.

Expansion chances: Firms having opportunities to expand or diversification will need more and more working capital. Whereas the firms which have reached saturation will not warrant more amount of working capital as their opportunities of expansion are sealed.

TYPES OF WORKING CAPITAL

The working capital in certain enterprise may be classified into the following kinds.

Initial working capital: The capital, which is required at the time of the commencement of business, is called initial working capital. These are the promotion expenses incurred at the earliest stage of formation of the enterprise which include the incorporation fees. Attorney's fees, office expenses and other preliminary expenses.

Regular working capital: This type of working capital remains always in the enterprise for the successful operation. It supplies the funds necessary to meet the current working expenses i.e. for purchasing raw material and supplies, payment of wages, salaries and other sundry expenses.

Fluctuating working capital: This capital is needed to meet the seasonal requirements of the business. It is used to raise the volume of production by improvement or extension of machinery. It may be secured from any financial institution which can, of course, be met with short term capital. It is also called variable working capital.

Reserve margin working capital: It represents the amount utilized at the time of contingencies. These unpleasant events may occur at any time in the running life of the business such as inflation, depression, slump, flood, fire, earthquakes, strike, lay off and unavoidable competition etc. In this case greater amount of capital is required for maintenance of the business.

Permanent and Temporary Working Capital: The Operating Cycle creates the need for Current Assets (Working Capital). However the need does not come to an end once the cycle is completed. It continues to exist. To explain the continuing need of current assets, a distinction should be drawn between temporary and permanent working capital.

Business Activity does not come to an end after the realization of cash from customers. For a company, the process is continuing, and hence, the need for regular supplies of working capital. However, the magnitude of Working Capital required is not constant but fluctuating. To carry on a business, a certain minimum level of working capital is necessary on a continuous and uninterrupted basis. For all practical purposes, this requirement has to be met permanently as with other fixed assets. This requirement is referred to as permanent or fixed working capital.

Any amount over and above the permanent level of working capital is temporary, fluctuating or variable working capital. The position of the required working capital is needed to meet fluctuations in demand consequent upon changes in production and sales as a result of seasonal changes. Both kinds of working capital are necessary to facilitate the sales proceeds through the Operating Cycle.

Long Term working capital: The long-term working capital represents the amount of funds needed to keep a company running in order to satisfy demand at lowest point. There may be many situations where Demand may fluctuate considerably. It is not possible to retrench the work force or instantly sell all the inventories whenever demand declines. Due to temporary reasons. Therefore the value, which represents the long-term working capital, stays with the business process all the time. It is for all practical purpose as permanent as fixed assets. In other words, it consists of the minimum current assets to be maintained at all times. The size of the permanent working capital varies directly with the size of Operation of a firm.

Short-term working capital: Short-term capital varies directly with the level of activity achieved by a company. The Volume of Operation decides the quantum of Short-term working capital. It also changes from one firm to another; from cash to inventory from inventory to debtors and from debtors back to cash. It may not always be gain fully employed. Temporary Working capital should be obtained from such sources, which will allow its return when it is not in use.

Gross Working Capital: Gross working capital refers to the firm's investment in current assets. Current assets are those assets which can be converted in to cash with in an accounting year and includes cash short term securities, debtors bills receivable and stock

Net Working Capital: Net working capital refers to the difference between current asset and Current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within accounting year and include creditors, bills payable and outstanding 10 expenses. Net Working capital can be positive or negative. A positive net working capital will arise when current assets exceed current liabilities.

FINANCIAL RATIO ANALYSIS

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement. Ratio analysis is a cornerstone of fundamental equity analysis.

Investors and analysts employ ratio analysis to evaluate the financial health of companies by scrutinizing past and current financial statements. Comparative data can demonstrate how a company is performing over time and can be used to estimate likely future performance. This data can also compare a company's financial standing with industry averages while measuring how a company stacks up against others within the same sector.

Investors can use ratio analysis easily, and every figure needed to calculate the ratios is found on a company's financial statements.

Ratios are comparison points for companies. They evaluate stocks within an industry. Likewise, they measure a company today against its historical numbers. In most cases, it is also important to understand the variables driving ratios as management has the flexibility to, at times, alter its strategy to make its stock and company ratios more attractive. Generally, ratios are typically not used in isolation but rather in combination with other ratios. Having a good idea of the ratios in each

of the four previously mentioned categories will give you a comprehensive view of the company from different angles and help you spot potential red flags.

A ratio is the relation between two amounts showing the number of times one value contains or is contained within the other.

1.3.1 Types of Ratio Analysis

The various kinds of financial ratios available may be broadly grouped into the following six silos, based on the sets of data they provide:

Liquidity Ratios

Liquidity ratios measure a company's ability to pay off its short-term debts as they become due, using the company's current or quick assets. Liquidity ratios include the current ratio, quick ratio, and working capital ratio.

Solvency Ratios

Also called financial leverage ratios, solvency ratios compare a company's debt levels with its assets, equity, and earnings, to evaluate the likelihood of a company staying afloat over the long haul, by paying off its long-term debt as well as the interest on its debt. Examples of solvency ratios include: debt-equity ratios, debt-assets ratios, and interest coverage ratios.

Profitability Ratios

These ratios convey how well a company can generate profits from its operations. Profit margin, return on assets, return on equity, return on capital employed, and gross margin ratios are all examples of profitability ratios.

Efficiency Ratios

Also called activity ratios, efficiency ratios evaluate how efficiently a company uses its assets and liabilities to generate sales and maximize profits. Key efficiency ratios include: turnover ratio, inventory turnover, and days' sales in inventory.

Coverage Ratios

Coverage ratios measure a company's ability to make the interest payments and other obligations associated with its debts. Examples include the times interest earned ratio and the debt-service coverage ratio.

Market Prospect Ratios

These are the most commonly used ratios in fundamental analysis. They include dividend yield, P/E ratio, earnings per share (EPS), and dividend payout ratio. Investors use these metrics to predict earnings and future performance.

For example, if the average P/E ratio of all companies in the S&P 500 index is 20, and the majority of companies have P/Es between 15 and 25, a stock with a P/E ratio of seven would be considered undervalued. In contrast, one with a P/E ratio of 50 would be considered overvalued. The former may trend upwards in the future, while the latter may trend downwards until each aligns with its intrinsic value.

Most ratio analysis is only used for internal decision making. Though some benchmarks are set externally (discussed below), ratio analysis is often not a required aspect of budgeting or planning.

Ratio analysis is a quantitative method that helps ascertain a company's profitability, liquidity, and operational efficiency. It is the main tool in fundamental analysis. Ratio analysis helps in analysing the financial health of a company. You can also determine how a company's performance compares to another similar company over time.

Ratios are never used in isolation, instead, they are used in combination with other ratios to better understand whether the company's financial position has improved or deteriorated over time. It is a tool used by both internal and external parties in a company. Internal users are management and employees. Also, they use it to ascertain the company's performance and whether they are on track to meet their goals and objectives. External users are analysts, credit rating companies and investors. They use ratio analysis to determine whether the company is investment-worthy or not.

There are several types of accounting ratios that help in analysing a company. They can be broadly categorised into five different types.

Liquidity Ratios

Liquidity ratios measure the company's ability to repay its short and long-term obligations. There are three types of liquidity ratios namely current ratio, quick ratio, and cash ratio.

1. Current ratio

The current ratio is a measure of the company's ability to pay its short-term liabilities with current assets. Also, it indicates the company's liquidity. The higher the ratio, the higher its liquidity.

However, the ideal current ratio is 2:1. Anything higher than this indicates the company is not putting its excess cash to good use. However, there is one drawback of the current ratio that it cannot be used in isolation to compare different companies.

Current ratio = Current assets/Current liabilities

2. Quick ratio

Quick ratio or acid test ratio is a measure of the company's ability to pay its short-term liabilities with quick assets. The quick assets are current assets without inventory and prepaid assets. The higher the ratio, the higher its liquidity. The ideal quick ratio is 1:1. Though this ratio can be used to compare different companies, it doesn't consider future cash flows and the long-term liabilities due within 12 months.

Quick ratio = (Current assets – inventory – prepaid assets)/Current liabilities

3. Cash ratio

The cash ratio measures the company's capacity to repay short-term liabilities with its cash and cash equivalents. A high cash ratio indicates the company is cash rich. However, companies are not advised to maintain a high level of cash. Hence cash ratio is hardly used in financial analysis.

Cash ratio = Cash and cash equivalents/Current liabilities

Profitability Ratios

Profitability ratios measure the company's profits in relation to revenue and assets. It also tells the company's financial health. The higher the profitability ratios, the better the company's profit-generating capacity. Profitability ratios are also known as performance ratios. Analysts use five different types of profitability ratios to determine the company's ability to generate profits.

1. Gross profit margin

The gross profit ratio measures the company's profits from selling its goods and services. It takes into account the net sales and all expenses that the company incurred to produce goods and services. A high gross profit margin indicates the company's efficiency in selling goods and services. One drawback of gross profit margin is that it doesn't consider corporate or indirect expenses, such as marketing and distribution expenses that the company incurs to sell goods and services.

Gross profit margin = ((Net Sales – Cost of goods sold)/Net sales) * 100

2. Net profit margin

Net profit margin indicates how much profit is generated for every rupee of revenue earned. The higher the net profit, the greater the company's ability to generate profits. It is the most important indicator as it tells how profitable the company is. It considers all direct and indirect income and expenses before determining the company's profitability. Hence even one off-time, such as profit or loss from the sale of an asset, can affect the company's profitability.

Net profit margin = $((\text{Revenue} - \text{Operating and non-operating expenses}) / \text{Revenue}) * 100$

3. Return on capital employed (RoCE)

Return on capital employed measures the company's ability to generate profits from its capital. A high RoCE indicates that the company is using its capital efficiently. This ratio is used for companies that are capex-heavy. It is a very good tool for comparing companies with different capital structures. However, the ratio is calculated based on the book value of assets and liabilities and doesn't consider the market value.

$\text{RoCE} = \text{EBIT} / \text{Capital Employed}$

Where EBIT is earnings before interest and tax

Capital employed = Total assets – Current liabilities

4. Return on equity (RoE)

Return on equity measures the profits from the equity invested. In other words, it tells how much profit the company made using shareholder funds. The higher the RoE, the greater the return for the shareholders. As an investor, you can look at the RoE of different companies and compare them to make an investing decision. However, RoE can be easily manipulated by increasing the asset life or decreasing the depreciation rate.

$\text{RoE} = \text{Net Profit} / \text{Average shareholder's equity}$

Where the average shareholder's equity is the average of two years.

5. Return on assets (RoA)

Return on assets (RoA) measures the profits against the assets. It indicates how well the company is using its assets to generate profits. In other words, it measures the company's ability to generate profits using the assets. RoA is not a very useful measure for service-oriented companies as their asset base is usually low, and they do not incur a lot of capex as well.

$$\text{RoA} = \text{EBIT} / \text{Average total assets}$$

Where EBIT is earnings before interest and tax

Average total assets are the average assets of two years

Solvency Ratios

Solvency ratios, also known as leverage ratios, measure the company's solvency. In other words, these ratios determine whether the company is able to pay back its debt and interest obligations. There are two types of leverage ratios that analysts and investors use for analysis. They are the debt-to-equity ratio and interest coverage ratio.

1. Debt-to-equity ratio

The debt-to-equity ratio measures the company's ability to pay back its debt obligations using its equity. It also tells how much leverage the company is using in its capital. High leverage indicates that the company uses more debt, indicating a higher risk. It means the company uses more outside funds to operate its business. The debt-to-equity ratio is a very useful tool that helps gauge the risk in the business. The only drawback of this ratio is that it cannot be used to compare companies from different industries. This is because some industries have a high capex and hence may require more leverage than others.

$$\text{Debt-to-equity} = \text{Total debt} / \text{Shareholder's equity}$$

2. Interest coverage ratio

The interest coverage ratio measures whether the company is generating enough profit to cover its interest expense. Also, creditors have the first right to the profits of the company. Hence it is important to gauge whether the company's profits will be sufficient to pay interest on the loan. Moreover, a high ratio is considered better as the company has enough money to pay off the interest.

$$\text{Interest coverage ratio} = \text{EBIT} / \text{Interest expense}$$

Where EBIT is earnings before interest and tax

Turnover Ratios

Turnover ratios indicate how well the company uses its assets and liabilities to generate revenue. They are also known as efficiency ratios, as they determine how efficient the company's management is. There are three turnover or activity ratios that investors use for analysis: fixed asset turnover ratio, inventory turnover ratio and receivables turnover ratio.

1. Fixed asset turnover ratio

The fixed asset turnover ratio measures how efficiently a company generates revenue from its fixed assets. Also, a high ratio implies that the company efficiently uses its fixed assets to generate revenue. On the other hand, a low ratio implies that the business is underperforming.

Fixed asset turnover ratio = Net sales/Average fixed assets.

2. Inventory turnover ratio

The inventory turnover ratio measures the speed at which the company converts its inventory into sales. Also, it indicates the number of times the inventory is converted and sold to customers in a year. A high ratio signals strong sales, and a low ratio indicates weak sales. But a high ratio can also mean the company is stocking its inventory inadequately.

Inventory turnover ratio = Cost of goods sold/Average inventory

3. Receivables turnover ratio

The receivables turnover ratio measures the speed at which the company can collect its receivables. It indicates the number of times the receivables are converted into cash during a year. A high ratio indicates the company has quality customers and good collection efficiency. On the other hand, a low ratio indicates the company's debtors are not financially viable and might lead to bad debts.

Receivables turnover ratio = Net credit sales/Average receivables

Valuation Ratios

Also known as the earnings ratio, they determine whether the company is a good investment or not using the share price. Hence these ratios are also known as market ratios. Also, analysts usually use these ratios to predict the company's future performance. There are four different types of earnings ratios that you can use for analysis.

1. Earnings per share (EPS)

Earnings per share is the net profit earned per outstanding equity share. Also, it is a widely used metric that indicates how much profit the company makes for each share. A high EPS indicates that the company is making more profits. Hence shareholders will be willing to pay more for the company's shares. However, EPS doesn't factor in the cash flow. The shareholders don't know how much cash will they receive in the form of dividends just by seeing the EPS.

EPS = Net profit/Total number of outstanding shares

2. Price to earnings ratio (P/E)

The price-to-earnings ratio indicates the price an investor is willing to pay for every rupee of earnings. It also tells whether the share is overvalued or undervalued compared to its peers. A high P/E ratio usually indicates that the company is overvalued. However, if the investors expect a company's earnings to increase in the near term, the P/E ratio tends to increase. A low ratio might indicate that either the company is undervalued or the investors are not positive about the company's future. Hence P/E ratio shouldn't be considered in isolation while valuing a company.

$$\text{P/E ratio} = \text{Share Price} / \text{Earnings per share}$$

3. Price to book value (P/B)

Price to book value compares the firm's market value to its book value. A P/B ratio under one is considered good as this shows the company's intrinsic value is higher and that it has scope for growth in the near future. A high P/B ratio indicates that the company's shares are overvalued compared to its peers. However, the P/B ratio doesn't consider the value of intangibles such as goodwill and brand value.

$$\text{P/B ratio} = \text{Share price} / \text{Book value per share}$$

Where Book value per share = $(\text{Assets} - \text{Liabilities}) / \text{Outstanding shares}$

4. Dividend yield

Dividend yield measures the return an investor would earn solely based on the dividend payments. Also, the dividend yield takes into account the current share price and dividend payment. A high dividend yield would mean the return is high, but it can also mean the share price is falling. In contrast, a low dividend yield indicates low return, which can also mean the share price is rising.

$$\text{Dividend yield} = \text{Annual dividend per share} / \text{Share price}$$

Application of Ratio Analysis

The fundamental basis of ratio analysis is to compare multiple figures and derive a calculated value. By itself, that value may hold little to no value. Instead, ratio analysis must often be applied to a comparable to determine whether or a company's financial health is strong, weak, improving, or deteriorating.

Ratio Analysis Over Time

A company can perform ratio analysis over time to get a better understanding of the trajectory of its company. Instead of being focused on where it is today, the company is more interested in how the company has performed over time, what changes have worked, and what risks still exist looking to the future. Performing ratio analysis is a central part in forming long-term decisions and strategic planning.

To perform ratio analysis over time, a company selects a single financial ratio, then calculates that ratio on a fixed cadence (i.e. calculating its quick ratio every month). Be mindful of seasonality and how temporarily fluctuations in account balances may impact month-over-month ratio calculations. Then, a company analyzes how the ratio has changed over time (whether it is improving, the rate at which it is changing, and whether the company wanted the ratio to change over time).

Ratio Analysis Across Companies

Imagine a company with a 10% gross profit margin. A company may be thrilled with this financial ratio until it learns that every competitor is achieving a gross profit margin of 25%. Ratio analysis is incredibly useful for a company to better stand how its performance compares to similar companies.

To correctly implement ratio analysis to compare different companies, consider only analyzing similar companies within the same industry. In addition, be mindful how different capital structures and company sizes may impact a company's ability to be efficient. In addition, consider how companies with varying product lines (i.e. some technology companies may offer products as well as services, two different product lines with varying impacts to ratio analysis).

Different industries simply have different ratio expectations. A debt-equity ratio that might be normal for a utility company that can obtain low-cost debt might be deemed unsustainably high for a technology company that relies more heavily on private investor funding.

Ratio Analysis Against Benchmarks

Companies may set internal targets for their financial ratios. These calculations may hold current levels steady or strive for operational growth. For example, a company's existing current ratio may be 1.1; if the company wants to become more liquid, it may set the internal target of having a current ratio of 1.2 by the end of the fiscal year.

Benchmarks are also frequently implemented by external parties such as lenders. Lending institutions often set requirements for financial health as part of covenants in loan documents. Covenants form part of the loan's terms and conditions and companies must maintain certain metrics or the loan may be recalled.

If these benchmarks are not met, an entire loan may be callable or a company may be faced with an adjusted higher rate of interest to compensate for this risk. An example of a benchmark set by a lender is often the debt service coverage ratio which measures a company's cash flow against its debt balances.

Examples of Ratio Analysis in Use

Ratio analysis can predict a company's future performance—for better or worse. Successful companies generally boast solid ratios in all areas, where any sudden hint of weakness in one area may spark a significant stock sell-off. Let's look at a few simple examples

Net profit margin, often referred to simply as profit margin or the bottom line, is a ratio that investors use to compare the profitability of companies within the same sector. It's calculated by dividing a company's net income by its revenues. Instead of dissecting financial statements to compare how profitable companies are, an investor can use this ratio instead. For example, suppose company ABC and company DEF are in the same sector with profit margins of 50% and 10%, respectively. An investor can easily compare the two companies and conclude that ABC converted 50% of its revenues into profits, while DEF only converted 10%.

Using the companies from the above example, suppose ABC has a P/E ratio of 100, while DEF has a P/E ratio of 10. An average investor concludes that investors are willing to pay \$100 per \$1 of earnings ABC generates and only \$10 per \$1 of earnings DEF generates.

The Bottom Line

There is often an overwhelming amount of data and information useful for a company to make decisions. To make better use of their information, a company may compare several numbers together. This process called ratio analysis allows a company to gain better insights to how it is performing over time, against competition, and against internal goals. Ratio analysis is usually rooted heavily with financial metrics, though ratio analysis can be performed with non-financial data

Objectives of Ratio Analysis

Interpreting the financial statements and other financial data is essential for all stakeholders of an entity. Ratio Analysis hence becomes a vital tool for financial analysis and financial management. Let us take a look at some objectives that ratio analysis fulfils.

Measure of Profitability

Profit is the ultimate aim of every organization. So if I say that ABC firm earned a profit of 5 lakhs last year, how will you determine if that is a good or bad figure? Context is required to measure profitability, which is provided by ratio analysis. Gross Profit Ratios, Net Profit Ratio, Expense ratio etc provide a measure of the profitability of a firm. The management can use such ratios to find out problem areas and improve upon them.

Evaluation of Operational Efficiency

Certain ratios highlight the degree of efficiency of a company in the management of its assets and other resources. It is important that assets and financial resources be allocated and used efficiently to avoid unnecessary expenses. Turnover Ratios and Efficiency Ratios will point out any mismanagement of assets.

Ensure Suitable Liquidity

Every firm has to ensure that some of its assets are liquid, in case it requires cash immediately. So the liquidity of a firm is measured by ratios such as Current ratio and Quick Ratio. These help a firm maintain the required level of short-term solvency.

Overall Financial Strength

There are some ratios that help determine the firm's long-term solvency. They help determine if there is a strain on the assets of a firm or if the firm is over-leveraged. The management will need to quickly rectify the situation to avoid liquidation in the future. Examples of such ratios are Debt-Equity Ratio, Leverage ratios etc.

Comparison

The organizations' ratios must be compared to the industry standards to get a better understanding of its financial health and fiscal position. The management can take corrective action if the standards of the market are not met by the company. The ratios can also be compared to the previous years' ratios to see the progress of the company. This is known as trend analysis.

1.3.4 Advantages of Ratio Analysis

When employed correctly, ratio analysis throws light on many problems of the firm and also highlights some positives. Ratios are essentially whistleblowers, they draw the management's attention towards issues needing attention. Let us take a look at some advantages of ratio analysis.

- Ratio analysis will help validate or disprove the financing, investment and operating decisions of the firm. They summarize the financial statement into comparative figures, thus helping the management to compare and evaluate the financial position of the firm and the results of their decisions.
- It simplifies complex accounting statements and financial data into simple ratios of operating efficiency, financial efficiency, solvency, long-term positions etc.
- Ratio analysis helps identify problem areas and bring the attention of the management to such areas. Some of the information is lost in the complex accounting statements, and ratios will help pinpoint such problems.
- Allows the company to conduct comparisons with other firms, industry standards, intra-firm comparisons etc. This will help the organization better understand its fiscal position in the economy.

1.2 INDUSTRY PROFILE

IT INDUSTRY

The three major industry groups within the IT sector are software and services, technology hardware and equipment, and semiconductors and semiconductor equipment. These three industry groups are further divided into industries and sub-industries. The information technology (IT) sector includes companies that produce software, hardware or semiconductor equipment, and companies that provide internet or related services.

Software and services

The software and services industry group is made up of companies that provide internet services, as well as companies that provide software and IT services. Internet services include companies that provide online databases or interactive services, such as search engines or social networks. IT services includes companies that provide IT consulting or data processing services to other companies. Finally, software consists of any sort of software for business or consumer use, ranging from enterprise software and systems software to video games.

Technology hardware and equipment

Technology hardware and equipment is broken down into three industries: communications equipment; technology hardware, storage and peripherals; and electronic equipment, instruments and components.

Communications equipment includes routers, telephones and switchboards. Technology hardware, storage and peripherals includes computers, printers and cell phones. Electronic equipment, instruments and components includes companies that make equipment like barcode scanners, transformers and security systems, as well as companies that are distributors or Original Equipment Manufacturers (OEM).

Semiconductors and semiconductor equipment

Semiconductors are substances that can conduct electricity under some conditions, but not others, making them ideal for controlling electrical currents. Silicon is a material that is frequently used as a

semiconductor. This industry group includes both companies that make semiconductors and companies that make peripheral equipment for semiconductors.

The **Information Technology & Information Technology Enabled Services (IT-ITeS)** sector is a field which is undergoing rapid evolution and is changing the shape of Indian business standards. This sector includes software development, consultancies, software management, online services and business process outsourcing (BPO).

IT INDUSTRY IN INDIA

Indian Information Technology (IT) industry has played a key role in putting India on the global map. The IT-BPO sector has become one of the significant growth sector for the Indian economy. In addition to fuelling India's economy, this sector is also positively influencing the lives of its people through an active direct and indirect contribution to various socio-economic parameters such as employment, standard of living and diversity. IT sector has played a significant role in transforming India's image from a slow moving bureaucratic economy to a place of innovative entrepreneurs and a global player in providing world class technology solutions and business services.

The evolution of the IT sector can be studied in 4 states as follows.

Stage 1 Prior to 1980: In the first stage of evolution, Indian IT sector was basically started with hardware products and software industry did literally not exist in India until 1960. Government protected the hardware sector through high tariff barriers and licensing. In the west, there was a greater demand for software development because the inbuilt software with the systems was insufficient to perform all the operations accurately. So, to earn more foreign exchange, the Indian Government found out the potential of software sector. In 1972, the government formulated a new software export scheme, in which it was decided to import hardware and export software. TCS Ltd. became the first company to accept such scheme. In 1974, the software export was started in India.

Stage 2 1980 to 1990: During this stage, in spite of government initiatives, the software exports could not be reached at the expected level because of two reasons. First, the export of software was dependent on the imports of hardware and the procedural aspects were too cumbersome. Second, there were no proper infrastructural facilities for software development. In order to encourage more participants in this sector, it was mandatory to reduce import duty and to simplify import and export procedure. To overcome the above problem, a new software policy was formulated. According to this policy, the import procedure was simplified and the import duty for import on hardware for

software developers was reduced. In 1986, the government took some healthy corrective steps to develop IT sector. As a result, Indian Government software policy and liberalized the IT sector. According to this policy, the imports of hardware were de-licensed and were also made duty free for exporters. This policy has reduced a number of entry barriers making the growth in this sector inevitable.

Stage 3 1990 to 2000: This period has witnessed intensified competition in the IT sector. During this stage, there were some significant changes in Indian economy, including trade liberalization, relaxation in the entry barriers, opening up of Indian economy for foreign investments and devaluation of rupee. Due to the liberalization, a flow of foreign investments was come in India and MNCs in India were introduced. “Offshore Model”, “Onsite Model” and “Global Delivery Model (GDM)” were also introduced as part of their distinguished services.

Stage 4 Post 2000: The global problems like Y2K, the dotcom crash and the recession in the US economy has forced many US firms to utilize the services of the Indian firms. This has resulted in placing the Indian IT industry on the global map. Post 2002-2003, the industry had registered a robust growth rate. During this stage, there was an increase in the Indian client base, large sized contracted and a strong global delivery model.

According to an article in the Times of India, **India's liberalization was possible due to its IT industry**. In the 1990s, the industry started off with an export of nearly \$100 million with around 5,000 employees. Now it is an industry that thrives globally and India's IT exports are now around \$70 billion with 2.8 million employees working in this sector. The article states that the IT sector is one of the top two industries in the country today.

India's IT industry is expected to grow at a rate of 12 - 14% during 2016 - 2017 as per a report by India's software industry body National Association of Software and Services Companies (NASSCOM.) This clearly shows that information technology is a sector which will likely be one of the emerging markets in the days to come as India's economy requires more hardware, software and other IT services. In a NASSCOM-McKinsey report, India's position in the global offshore IT industry is based on five factors - abundant talent, creation of urban infrastructure, operational excellence, conducive business environment and finally, continued growth in the domestic IT sector.

The IT industry is heavily influenced by factors like the global market and sustenance of its rate of growth. The recession in the United States also impacted the IT community in India negatively. This

segment is promising and has vast potential, but there are concerns regarding the demand-supply gap, which is widening. Some challenges which the industry is facing are inadequate infrastructure, tax issues and limited preferential access for local firms. China and Taiwan are examples of low cost destinations, and India needs to change its current tax structure so that it can outdo competition from other countries.

One of the biggest benefits that the computer and IT industry provides in India is the employment it can generate. Other benefits are export and Foreign Direct Investments (FDI). New markets have opened up in the Middle East, Africa, Eastern Europe, and South and South East Asia. India is now a major destination for IT outsourcing.

The IT industry is one which is not limited to software development alone. Technology can be applied in libraries, hospitals, banks, shops, prisons, hotels, airports, train stations and many other places through database management systems, or through custom-made software as seen fit.

Among other sectors, the **IT sector in India** has been driving growth for the last decade and more, and has the potential to continue doing so for the next couple of years if shortcomings are met and challenges are faced.

The **information and communications technology** industry all over the world is a rapidly growing sector. In New Zealand, the technology sector overall employs over 120,000 people, and technology is New Zealand's third largest export sector, accounting for \$8.7 billion of exports, with information technology creating 50,000 full time jobs, and about \$1 billion in IT services exports.

The prediction business has been a tough one over the last two years. Unpredictability and uncertainty have ruled, leaving many companies and their workers on unsure footing. As a result, many firms sidelined their broader strategic initiatives and goals as a way to stay afloat. They remained in tactical mode to ensure certain basic outcomes: Keep the lights on, pay your people, hold onto your customers, and, at minimum, maintain status quo revenue intake. Bide your time, in other words.

But history tells us that you can't stay in bunker mode forever. At some point, you must climb out. Encouragingly, signs point upward and onward as we head into 2022, with a level of cautious optimism creeping back into the technology industry. The attitude lift is happening at both the IT professional level and among those in the business of technology – channel firms, vendors, distributors and the like. Tech budgets are expected to increase in 2022, some to the heftier pre-

pandemic levels of 2019 or beyond. That means expanded opportunities to hire and fill in the missing skills that have held firms back from any number of ambitious pursuits.

Along those lines, companies are beginning once again to talk up their plans to continue with or dive into emerging technologies or to fast-track digital transformation projects. On the channel side, firms are embracing the pivot to new business models to ensure both continued industry relevance, competitive differentiation and innovation in the years ahead.

There's no doubt some firms took a hit in the last couple of years, and we can't discount still-looming concerns related to the global economy, the pandemic and the state of public affairs. And yet, 2022 is shaping up to be a year of not just recovery, but of acceleration and innovation. The new year brings us a return to strategy.

While the specifics of the technology industry continue to reveal a strong and growing sector, the most important characteristic of technology is the extended impact on the global economy and the job market. In many ways, the lines are becoming blurred between the direct growth of technology and the indirect influence it has on every business and every facet of life.

Data from the consulting firm Bain & Company shows how technology has led the way in global economic growth. The largest growth comes from "born tech" companies, which have technology as a central part of their identity. These firms have contributed 52% of total market value growth since 2015. Another 20% of market value growth has come from companies with a tech-led strategy that augments more traditional models.

Along the same lines, CompTIA's Cyberstates report describes the economic impacts of the technology industry. The direct economic impact—the dollar value of goods and services produced during a given year—amounts to 10.5% of U.S. economic value, which translates to over \$2.0 trillion. Beyond this, there are indirect impacts, such as every job in IT services and custom software development leading to an estimated 4.8 additional jobs created or supported through direct, indirect or induced means.

Employment is one of the most significant aspects of the technology industry. For many years, technology employment has been more robust than overall employment, with lower unemployment rates and stronger job prospects. Looking forward, tech occupation employment is expected to grow at about twice the rate of overall employment in the U.S., with many occupations.

In terms of industry specifics, IDC projects that the technology industry is on pace to exceed \$5.3 trillion in 2022. After the speed bump of 2020, the industry is returning to its previous growth pattern of 5%-6% growth year over year. The United States is the largest tech market in the world, representing 33% of the total, or approximately \$1.8 trillion for 2022.

Among global regions, western Europe remains a significant contributor, accounting for approximately one of every five technology dollars spent worldwide. As far as individual countries go, China has clearly established itself as a major player in the global tech market. China has followed a pattern that can also be seen in developing regions, where there is a twofold effect of closing the gap in traditional categories such as IT infrastructure, software and services, along with staking out leadership positions in emerging areas such as 5G and robotics.

GLOBAL IT INDUSTRY

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a pattern that can also be seen in developing regions, where there is a twofold effect of closing the gap in traditional categories such as IT infrastructure, software and services, along with staking out leadership positions in emerging areas such as 5G and robotics.

There are a number of taxonomies for depicting the information technology space. Using the conventional approach, the market can be categorized into five top-level buckets. The traditional categories of hardware, software and services account for 56% of the global total. The other core category, telecom services, accounts for 25%. The remaining 19% covers various emerging technologies that either don't fit into one of the traditional buckets or span multiple categories, which is the case for many emerging as-a-service solutions that include elements of hardware, software and service, such as IoT, drones and many automating technologies.

The allocation of spending will vary from country to country based on a number of factors. In the mature U.S. market, for example, there is robust infrastructure, a large installed base of users equipped with connected devices and abundant bandwidth for these devices to communicate. This paves the way for investments in the software applications and technology services that sit on top of this foundation.

1.3 COMPANY PROFILE

Ara is a leading provider for customized software solutions in Windows, Web & DOS bases platforms. Established in 2004, operating out of its technology centre in Chennai, the Company has been promoted by highly experienced Professionals dedicated to provide customized software development services under one roof Within the first few years of its operations. ara has carved a niche for itself in the IT industry and has increased its business by acquiring some major domestic projects.

PHILOSOPHY

The business quotient of the company is to lay emphasis on Human Values and Personal Relations. 'At ara – Customer satisfaction is most valued and aim is to have our customers develop & achieve great heights in their business verticals.' Great stress is laid on proper communication, transparency and human relations, which forms an integral part of the corporate culture. At ara, we not only develop products but we develop relationships.

MISSION

At Ara we understand the need to automate businesses & provide solutions which caters exactly to the need of the customer. With technical proficiency and expertise, we cohesively develop the software solutions with user friendly design, interactive programming & database driven content.

Products

All Ara products are developed according to the global industry standards. These packages can be used as it is or we can customize the product tailored to your needs. Our projects are simple yet innovative and unique. A considerable number of projects completes by us have been intellectually challenging and stimulating. They involved considerable programming skills, back-end manipulation and security cover, besides, of course the creative inputs.

- **araERP**

Enterprise resource planning or ERP software is a suite of applications that manages core business processes, such as sales, purchasing, accounting, human resource, customer support, CRM and

inventory. It's an integrated system as opposed to individual software designed specifically for business process

- **araFLEET**

All your fleet & the logistical nightmares associated with it can be reduced by employing our package. Fleet-tracker provides reliable, cost-effective fleet monitoring and management. With an easy-to-use web-based management application, the Fleet –tracker ensures constant, on-demand access to fleet information at any time, from any place. Our customized package allows fleet managers to improve driver safety, route management, fuel monitoring, and overall fleet productivity. Fleet- Tracker is a complete fleet management system that will give greater visibility to the safety and security of drivers and vehicles.

- **araTRAVELS**

Radio is our cutting-edge travel management system that supports the wide range of management and distribution aspects of your travel business. Deployed with the innovative Software as a Service (SaaS) model, our tour operator software is quick to launch, and easy to use. Our absolutely secure hosting services simplify your IT requirements and reduce operational costs.

- **araPAYROLL**

Payroll is defined as the total amount of wages paid by a company to its employees and other workers. Your company's payroll may be your firm's largest business expense, and processing payroll is complicated. You must collect insurance premiums, retirement plan contributions and tax withholdings from employee pay. While hiring full-time employees can help your business grow, it also adds complexity and cost to the operation. This shouldn't deter from your hiring, but you should understand how much each worker will cost beyond their salary, as well as the work involved in managing payroll.

- **araHMS**

E- Medic is an efficient, multi-level healthcare management software that serves general and multi-speciality hospitals, high-tech labs, medical stores and all types of health centers. It provides applications to automate a variety of healthcare facilities, customizable features to meet the unique

needs of your organization and robust reporting and interactive features that provide a high return on investment.

- **araPHARMACY**

Pharmacy is the science and technique of preparing, dispensing, and reviewing drugs and providing additional clinical services. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to health care, including clinical services, reviewing medications for safety and efficacy, and providing drug information.

1.3.1 SERVICE PROFILE

SERVICES OF ARA SOFTWARES

1. Domain and hosting

➤ Domain and Email Registration Services

Domain registration is a foremost step to create an online presence. A good domain name can make you touch the sky whereas an ineffective domain registration can lose your potential customers. Picking out the correct domain is very essential to the prospective of the site and sooner or later, that of the company. There are a lot of proven tricks that can be kept in mind while picking out your domain name. These tricks are not the words of god, however will surely assist you make an informed decision.

In India, several web-based companies are engaged in providing domain registration and web hosting services. Hiring a professional company will always be better to get the domain name registered, but your involvement also plays an essential in finding the correct the domain name.

➤ Bulk Domain Registration

Bulk domain search is a helpful solution for those businesses that want to register multiple domain names together. It comes in handy in situations like the ones below:

Setting up multiple websites or a multisite network of a main brand and sub-brands.

Registering domain names with different top-level domain extensions (TLDs) such as .com, .net, .blog, .studio, .fashion, .coffee, and more.

Finding valuable domains to buy, park, and sell later through a domain broker.

Many domain search tools like Namecheap and Domain.com will show you the pricing information along with other domain name suggestions.

➤ Windows & Linux Hosting

The main differences when pitting Windows vs Linux hosting is to always compare stability, security, costs and efficiency. Linux servers are streamlined and can handle server load without compromising security. Modifications can be implemented without having to restart the entire server.

Windows servers have relatively more background processes, which compromises their performance under extreme stress. Linux is also cheaper, since it is open source, which eliminates the capital for

purchasing licensing. It is perfect for shared hosting where clients require a cost effective yet scalable web hosting package.

2. Digital marketing

➤ Search Engine Optimization

Ara provides strategy, consulting, management and implementation services for brands want to participate in the social media. We help brands to listen, understand and engage in conversations in social media. We can facilitate brands in leveraging their social networking presence by creating innovative, unique user relationships with greater effectiveness than traditional media. We create two directional communication avenues so brands can engage in social media by having meaningful conversations with people who have opinions about their brand, whilst providing quantifiable metrics to measure the success. By providing groundbreaking strategies and functional concepts, ara can assist in the adoption and implementation of new media and social networking technologies as apart of an overall integrated digital marketing campaign.

➤ Social Media Optimization

Ara provides strategy, consulting, management and implementation services for brands want to participate in the social media. SMO (Social Media Optimization) is an important factor in your internet search rankings. In social media, there are two important search engines you have to optimize for:

- 1.The search function within each social network.
- 2.Google search.

Social sharing tools should be integrated in your site architecture. Include direct web links to your social media channels from your website and from your social profiles back to your website. You can also add social media sharing buttons to individual blog posts.

➤ Social Media Marketing

Social media marketing is the use of social media platforms and websites to promote a product or service. Although the terms e-marketing and digital marketing are still dominant in academia, social media marketing is becoming more popular for both practitioners and researchers. Most social media platforms have built-in data analytics tools, which enable companies to track the progress, success, and engagement. Companies address a range of stakeholders through social media marketing,

including current and potential customers, current and potential employees, journalists, bloggers, and the general public.

➤ **WhatsApp Marketing**

WhatsApp is a free mobile app that uses your phone's internet connection to let you chat with other WhatsApp users, without SMS text message charges. The app also lets you share files and images, and supports free voice and video calls. Its support for a wide range of phones has made it especially popular in areas with high SMS charges, including Brazil, and Malaysia—where 60 percent of the population uses WhatsApp.

3. Cloud and dedicated server

➤ **Domain and Cloud Hosting**

SAFER

On the cloud your website is more reliable. Your data is automatically mirrored across three distinct devices. Should hardware issues arise at one, our fail over technology automatically designates one copy of your website to keep functioning while the other two copies work to rebuild.

FASTER

No more long load times. Along with premium hardware and low-density servers, our cloud platform includes a varnish caching layer and global to ensure your server resources are focused where they should be. Static website content is managed more efficiently so dynamic requests can be processed quicker than ever.

SIMPLER

Understand your sites performance at a glance. Simple yet useful dashboards provide a quick view into usage trends, page download speed, uptime, global reach, and more. And with instant resource management, you will never need to worry about your site going down due to traffic spikes again.

BIGGER

More web traffic should never slow you down. Cloud hosting servers run on isolated virtual instances. Thus, you'll have total control of all resources and limits. Dedicated IP included.

➤ **E-Mail Solution**

Email is the most wanted trait in today's situation because a large number of population in the world uses email to get connected. At Ara Innovative Solutions Technologies we have an expertise team to

handle, monitor, maintain and upgrade your business through E-mail solution. It helps larger concerns by reducing their workload on IT team and smaller concerns need not recruit IT team. Get your email accessed through all kind of web connecting devices. Experience clean and fast email solutions with efficient feature that matches your business.

4. VPS & Dedicated Server

➤ Shared Hosting

Shared Hosting includes our Business Class Hosting Plans. Shared Hosting is very similar to living in an Apartment Complex. All residents are in the same location and must share the available resources with everyone. These may include such things as the pool, parking lot, and playground. In shared hosting, all accounts must share the available resources with all the other accounts on the server. These include CPU time, memory, and disk space.

➤ VPS Hosting

VPS Hosting includes our 4GB, 6GB, and 8GB VPS Hosting Plans. VPS Hosting is similar to owning a Condo. While you still share things on the property, you are ultimately responsible for maintaining your own property and repairs inside the condo. There is also significantly fewer residents per building and assigned parking. On a Virtual Private Server, you are allotted resources that are not shared by everyone. The overall CPU time and memory are shared across all accounts on the machine, but at the same time, portions of those resources are always dedicated to each account.

➤ Dedicated Hosting

Dedicated Hosting includes our Essential, Advanced, and Elite Dedicated Server Hosting Plans. Dedicated Hosting can be compared to owning a house. You are allowed and have access to all resources available on the machine. No one else account resides on the machine (your house) and would not be capable of tapping into your resources.

➤ Shared Server

A Linux shared hosting plan is the preferred choice for most individuals small and medium scale enterprises. It is an ideal hosting plan for first time website owners or those with limited budgets. Linux hosting provides rock solid stability and a highly customizable technology backend at very reasonable costs. Being an open source platform, it is a favorite with website designers and developers globally.

ara provides highly resilient, scalable and affordable Linux shared hosting solutions to power our client websites. Our plans are loaded with a bunch of attractive features that make hosting simple, easy and fast. All our Linux hosting plans are bundled with free Unlimited Traffic, Unlimited Space and Unlimited email and Chat Support. In addition, we possess the expertise to host enterprise software and applications based on individual client request and requirements.

5. SMS/ Email marketing

➤ Bulk SMS

ara SMS is web based bulk sms service and provide an easy solution to connect to your customer. At Sms Solution we not only believe in sending sms but delivering them on time. We offer different route to our clients on basis of there requirement and all our routes include real time delivery reports.

Bulk sms, an innovative way of marketing. Delivery of large number of SMS messages to a large group of customers within a few seconds. Bulk SMS services are widely used by corporates, banks and businesses to send alerts, notifications, reminders and transaction details, etc.

➤ Bulk Email

We offer easy to use web based Mailing solutions with simple control panel with do it yourself email marketing system with required all technical support, in which you can create or manage your mailing list, your email campaigns or email newsletters and can also check various graphical reports of your account statistics. To ensure Super Quality of bulk mailing services we have world class and reliable cloud based SMTP infrastructure backed with Multiple IP address to ensure optimal delivery rates for our bulk mail services. This mailing solution will be completely automated with your CRM via API interface.

➤ Bulk WhatsApp Messages

Take your business to the next level by taking advantage of the benefits offered by the bulk message sender applications. Social media platforms are the prime medium for communication these days and to stay ahead of the competition, it is important to make use of such tools.

➤ Bulk Voice Messages

Just imagine your company is conducting an event and need to inform a bunch of people about some change in schedule or any important information. In this scenario, recording a message and broadcasting to a group that is voice SMS service is the best option. However in current costly world,

when we have to pay so much for single text message then think of sending thousands of sms every day.

6. Mobile app

➤ Mobile Innovation Strategy

ara Innovative Solutions in Chennai is an Indian based company for Mobile Application services as listed as IOS Applications, Mobile Applications, Blackberry Applications, windows Applications, HTML5 Applications, and Cross Platform Applications. We develop our product in a new cutting edge technology to get more effective and user-friendly for all end Users.

ara Innovative Solutions develop for Our applicants best custom mobile apps to friendly incorporate their data origin to securely handle each mobile application from a best online CMS, Our experts has 5+ years experience in Mobile app development.

➤ Native App Development

Native app development means using the native programming languages of the devices to build the app. For iPhone, the native programming language is Objective C and the new Swift. For Android, the native programming language is Java.

Hybrid apps are developed using web technologies: HTML5, CSS and JavaScript, then put inside a native container such Adobe PhoneGap. These native containers run the web application code and package it into an app. Both technologies: hybrid (HTML5, CSS and Javascript) and native can creates apps that are downloadable for iPhone and Android, at Google Play or apple iTunes app Store.

➤ IOS

ara offers best IOS Development company in Chennai in Native Platform for Android, Windows, IOS & Black Berry Developments. We offer complete procedure of iOS applications with multi hours of testing from our team and client's end.

➤ Android

Android management software helps administrators easily deploy, manage, and secure their organizations' devices and applications. Whether a company is large or small, Android management software supports all organizational needs. It helps to set up the enterprise policies required to manage Android devices deployed in any organization.

Android management software provides several key functions such as enrolling newly-acquired devices, managing Android devices from a centralized console, setting device policies with ease, enforcing security, and mandating device password policies. Plus, this kind of software can wipe data from a particular app or an entire device remotely if required.

1.4 STATEMENT OF THE PROBLEM

The development of industries depends on several factors such as finance, personnel, technology, quality of the product and marketing. Out of these, financial and operating aspects assume a significant role in determining the growth of industries. All of the company's operations virtually affect its need for cash. Most of the data covering operational areas are however outside the direct responsibility of the financial executive. Unless the top management appreciates the value of a good financial and operating analysis, there will be continuing problems for the financial executives to find the profitability position of the concern.

In this context the researcher is interested in undertaking an analysis of the financial performance of IT company Ara Software. Hence, the present study entitled "A study on financial performance analysis of Ara Software" been undertaken.

1.5 OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE

To analyse the financial performance of Ara software for the five years from 2017 – 2018 to 2021 - 2022

SECONDARY OBJECTIVES

- To analyse the profitability position of Ara Softwares
- To analyse the liquidity position of Ara Softwares
- To analyse the working capital condition of Ara Softwares
- To offer suggestions to enhance the financial performance of Ara Softwares

1.6 NEED FOR THE STUDY

- Financial Statement analysis is an important tool for measuring the financial Statement of any company.
- The main aspect of financial management is working capital management and it should be done on day-to-day basis.
- Hence the company permits me to do in the area of finance. This study helps to review the financial Statement of the company.

1.7 SCOPE OF THE STUDY

- The present study aims at assessing the profitability position of selected Organisation Ara Softwares in Chennai. The study could help the company as well as the investors to understand its financial efficiency.
- It aims to help the management to find out its financial problems at present and the specific areas in the business, which might need some effort for more effective and efficient utilization of its resources.
- The study is conducted for a selected period of five years from 2017 – 2018 to 2021 - 2022

1.8 LIMITATIONS OF THE STUDY

While ratios are very important tools of financial analysis, they do have some limitations, such as

- The firm can make some year-end changes to their financial statements, to improve their ratios. Then the ratios end up being nothing but window dressing.
- Ratios ignore the price level changes due to inflation. Many ratios are calculated using historical costs, and they overlook the changes in price level between the periods. This does not reflect the correct financial situation.
- Accounting ratios completely ignore the qualitative aspects of the firm. They only take into consideration the monetary aspects (quantitative)
- There are no standard definitions of the ratios. So, firms may be using different formulas for the ratios. One such example is Current Ratio, where some firms take into

consideration all current liabilities but others ignore bank overdrafts from current liabilities while calculating current ratio

- And finally, accounting ratios do not resolve any financial problems of the company. They are a means to the end, not the actual solution.

CHAPTER 2

CHAPTER 2

REVIEW OF LITERATURE

Elijelly (2004) in the study on “Liquidity – profitability trade-off: An empirical investigation in an emerging market” empirically examined the relation between profitability and liquidity, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia. The study found significant negative relation between the firm’s profitability and its liquidity level, as measured by current ratio.”

Beneda (2006) investigated returns, bankruptcies and firm distress for new US public companies that issued IPOs from 1995 through 2002. Beneda found that the average first year returns for IPO companies underperformed the market and that Ohlson's model was effective in identifying companies that had a higher probability of bankruptcy and financial distress and earned lower than average returns.

Raheman and Nasr (2006) discussed working capital management and its effect on liquidity as well as on profitability of the firm. They have studied the effect of different variables of working capital management including the Average collection period, Inventory turnover in days, Average payment period, Cash conversion cycle and Current ratio on the net operating profitability of Pakistani firms. Debt ratio, size of the firm (measured in terms of natural logarithm of sales) and financial assets to total assets ratio have been used as control variables. The results found that there is a strong negative relationship between variables of the working capital management and profitability of the firm. It means that the cash conversion cycle increases it will lead to decreasing profitability of the firm, and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level. They found that there is a significant negative relationship between liquidity and profitability. They also found that there is a positive relationship between size of the firm and its profitability. There is also a significant negative relationship between debt used by the firm and profitability.

Singh and Pandey (2008) suggested that, for the successful working of any business organization, fixed and current assets play a vital role, and that the management of working capital is essential as it has a direct impact on profitability and liquidity. They studied the working capital components and found a significant impact of working capital management on profitability for Hindalco Industries Limited.

Kevin and Young (2009) in their article, “Need Cash? Look Inside Your Company” had taken a hard look at the way company manages its working capital. He identified that a lot of capital tied

up in receivables and inventory could be turned into cash by challenging the working capital practices and policies of the company. He had explored six common mistakes that companies make in managing working capital. He says that the simple act of correcting them could free up enough cash to make the difference between failure and survival in the current recession.

James Clausen (2009) in his article briefly expressed about the liquidity ratios. Investors and lending institutions will often use ratio analyses of the financial statements to determine a company's profitability and liquidity. If the ratios indicate poor performance, investors may be reluctant to invest. Therefore, the current ratio or working capital ratio, measures current assets against current liabilities. The current ratio measures the company's ability to pay back its short-term debt obligations with its current assets. He thinks a higher ratio indicates the company is better equipped to pay off short-term debt with current assets. Therefore, the acid test ratio or quick ratio, measures quick assets against current liabilities. Quick assets are considered assets that can be quickly converted into cash. Generally they are current assets less inventory.

Gopinathan Thachappilly(2009) stated that even if a business has high profitability, it can face short-term financial problems and its funds are locked up in inventories and receivables not realizable for months. Any failure to meet the obligations can damage its reputation and creditworthiness and in extreme cases even lead to bankruptcy. In addition to, liquidity ratios are work with cash and near-cash assets of a business on one side, and the immediate payment obligations (current liabilities) on the other side. The near-cash assets mainly include receivables from customers and inventories of finished goods and raw materials.

Sherin (2010) in her article on "Liquidity v/s profitability - Striking the right balance" writes about the implications of liquidity and profitability in a pharmaceutical company. A firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers. A proper management of the same could result in the desired impact on either profitability or liquidity.

Rohit and Vipin (2012) investigated on determinants of corporate liquidity in India for a sample of 100 firms in Indian market over the period 1999-2008. It was found that size of firm has no impact on liquidity.

Sandhar et.al (2013) examined the relationship between liquidity and profitability of selected Indian cement companies using regression analysis and revealed that current ratio and liquid ratio are negatively associated with return on assets (ROA), return on investment (ROI) and cash turnover ratio is negatively associated with ROI and ROA.

Neeraj and Devesh (2013) studied liquidity position and impact on profitability of Tata Steel and steel authority of India. The study found that liquidity position can be improved with the help of low average collection period and average collection can be reduce by proper coordination between sale, production and finance department, lastly conclude that study found positive impact of liquidity position on profitability with the help of various techniques.

Ashok Kumar (2013) studied liquidity position of five leading companies which cover period of 10 years from 2000-2010. It has been found that the liquidity position of small companies are better as compared to big ones .Lastly, it is concluded that companies should maintain an ideal current and liquid ratio.

Sarvanan and Abarna (2014) conducted study on liquidity analysis of selected automobile companies in India using Anova and found that there is significant difference among the absolute liquid ratios of the selected automobile companies.

V. Vijayalakshmi and M. Srividya (2014) in their study stated that the financial health plays a significant role in the successful management of a company. The analysis practically reveals that gross profit ratio, operating ratio, return on equity capital, and earnings per share, have significant effect on the net profit ratio of the selected pharmaceutical companies during the study period. However, profitability of the selected pharmaceutical companies in India during the study period is satisfactory. During the period of study there were a few ups and downs in the profitability but it did not affect the operations of the company to a great extent. If the Pharmaceutical Industry has to perform well, it has to invest more capital and has to do more sales, only then it will improve its performance level.

Mohmad and Dr. Syed (2016) analyzed the liquidity and profitability of selected companies and more specifically it seeked the comparison between the liquidity and profitability performance of selected companies. There is significant difference between the performances of pharmaceutical companies on the basis of Quick Ratio. The performance of Cipla is better than that of Dr. Reddy's labs in terms of profitability.

Nizam Mohammed (1985) in his study entitled "Indian Pipes Industry: Heading for a Bright Future" has analyzed the causes of low capacity utilization during the 1970s. He observes that the major problem which causes the relatively low capacity utilization include the shortage of raw materials, inadequate supply of power, coal and transport bottlenecks. He has also observed that the capacity utilization in pipes industry is influenced by several factors.

Bansal and Gupta (1985) in their study entitled, "Financial Ratio Analysis and Statistics" enlightened that the coefficient of variation in the study period had a wide gap varying between 7.1

per cent and 51.3 per cent for current ratio and ratio of fixed assets to sales. The correlation of components of short term liquidity ratio generally possesses low correlation as against long term solvency ratio components but the components of both ratios independently possess quite satisfactory correlation in cotton textile industry. The profitability ratio elements in the industry also have quite high correlation in cotton industry as compared to synthetic industry

Arun Ghosh (1987) in his article entitled “ Education and Environment Contribution of the Pipes Industry” has reported that the growth of the pipes industry was impressive and that the annual growth rate over the period 1951-1986 was 8.7 per cent for capacity and that of production, 7.4 per cent. He has observed that the overall capacity utilization had been declined from ninety six per cent in 1951 to sixty per cent in 1986. He has also observed that the capacity utilization was not in accordance with the growth of capacity of the pipes industry.

Kulkarni (1989) in his article entitled “Pipes and Pipes Board” has examined the capacity utilization of the Indian Pipes Industry during the two decades. He has observed that the capacity utilization declined very sharply from 82.3 per cent to 66.4 per cent during the first decade and to 60.41 per cent during the second decade of the study. He has further found the installed capacity was increased to 28.51 lakh tonnes per annum during the year 1988 as against the installed capacity of 9.54 lakh tonnes in the year 1971. The production of pipes and pipes boards was also increased in a similar manner as from 7.75 lakh tonnes to 17.20 lakh tones during the same period. Thus, it is noted that the capacity utilization of the pipes industry has an inverse relationship with the installed capacity and production.

Khan and Mohol Tutail Khan (1990) in their study, “Pipes Industry: An appraisal” pointed out that the pipes industry is a highly capital intensive industry. Due to steady rise in the cost of inputs, heavy overheads, paucity of power and adverse impact of control orders over the industry, this industry has been unable to function vigorously. They have selected some of the important companies for the analysis during the period 1980-81 to 1985-86. The statistical analysis shows that the profitability of these companies during the period under review is not satisfactory. The profitability of these companies has been hampered because of controls over prices and production of printing pipes. The study concluded that the control over price and production of printing pipes should be removed.

Praveen Kumar Jain (1993) conducted a study among seven pipes companies in India to “Analyze the basic components of Working Capital”. The study revealed that the current ratio in public sector undertakings during the study period was found to be highly erratic while the same in private sector undertakings registered continuous decrease. As far as the inventory was concerned, the study revealed that it was highly unplanned in public sector undertaking units when compared to private

sector units. The study contributed much in terms of realizing the importance of effective management of working capital.

Srinivasa Rao and Indrasena Reddy (1995) in their study entitled “Financial Performance in Pipes Industry- A Case Study” stated that the financial position of the company had been improving from year to year. The company’s performance in relation to generating internal funds in the form of reserves and surplus was excellent and also was doing well in mobilizing outside funds. The liquidity position of the company was sound as it was revealed by current and liquid ratios which were above the standard. The solvency ratios showed that the company had been following the policy of low capital gearing from 1990-91 as these ratios had been decreasing from this year. The performance of the company 22 in relation to its profitability was not up to the expected level. The company’s ability to utilize assets for generation of sales had not been improved much during the study period as it was revealed by its turnover ratios.

Sukamal Datta (1995) in his study entitled “Working Capital Management through Financial Statements: Analysis of Pipes Industry in West Bengal” found that most of the firms were suffering from shortage of working capital. One of the primary causes of such shortage of working capital was that most of the firms under study were not capable of earning adequate profit and were also suffering from losses. The expansion of fixed assets also caused the working capital crisis. The utilization of fund had not been covered by sufficient amount of fund by way of long-term investment.

Roger M. Shelor & et al. (1998) this study examines changes in “Operating Performance among Real Estate Investment Trusts” following an Initial Public Offering (IPO). The purpose is to determine whether there is an enhancement in the value of the underlying asset that is related to the IPO. They analyze equity, mortgage and diversified REITs separately. They also compare the operating performance of recent IPOs to those of earlier years to address the impact of the 1993 Revenue Reconciliation Act on institutional investors’ demand for REIT stock. Unlike previous analyses of industrial firms, REITs were found to have significant increases in return on Assets and selected measures of financial performance. The post-IPO cumulative stock price decline and recovery is illustrated.

Gangadhar (1998) has made an attempt on “Financial Analysis of Companies in Criteria: A Profitability and efficiency focus” one of the objectives of the study is to analyze the liquidity position of the companies and to point out the factors responsible for such a position. It is concluded that the liquidity position was quite alarming since these are facing chronic liquidity problems. Their proportion current assets in relation to the current liabilities are very low. It is suggested that, they

may be improved by reducing excessive burden of current liabilities or increasing the level of current assets depending upon the requirements.

Muhammad Rafiqul Islam (2000) “Working Capital Management of Pipes Mills in Bangladesh- An Overall View” concluded that all the units of the pipes industry had failed to manage their working capital requirements properly. The reasons for working capital crisis were improper use of short-term funds, operating losses, over stocking to stores and spares; and non-availability of rawmaterials.

Harris (2001) analyses the link between market orientation and performance has been claimed largely on the basis of the analysis of subjective measures of performance. Consequently, the aim of this study is to examine the links between market orientation and objectively measured financial performance. The pipes begins with a brief examination of the definition and components of market orientation. Thereafter, extant research into the consequences of developing market orientation is reviewed critically, leading to the development of a number of research hypotheses. After detailing the research design and methodology adopted in this study, the findings of a survey of UK industry are presented. Briefly, the results indicate that when subjective measures of performance are adopted, market orientation is associated with company performance in certain environmental conditions. However, when objective measures of performance are adopted, there is a narrower range of environmental conditions where market orientation is positively associated with performance. The pipes concludes with a series of implications for both theorists and practitioners.

Mahes Chand Garg and Chander Shekhar (2002) found that the asset composition is to be significantly negatively related with total Debt equity and long term dept equity in cement industries. Value of the assets and life of the company were significantly positively related to total debt equity. Life of the 24 company was significantly positively related with long term debt equity in cement industries. The regression coefficient of collateral value of assets was significant at 10 per cent level and was positively associated with total debt equity.

Bortolotti & et al. (2002) examine the financial and operating performance of thirty one national telecommunication companies in twenty five countries that were fully or partially privatized through public share offering. Using conventional pre-versus post-privatization comparisons and panel data estimation techniques, they find that the financial and operating performance of telecommunications companies improves significantly after privatization, but that a sizable fraction of the observed improvement results from regulatory changes-alone or in combination with major ownership changes-rather than from privatization alone.

Sahu (2002) in his article titled “A Simplified Model for Liquidity Analysis of Pipes Industry” has examined the liquidity of pipes industry. The model developed by him has been based on the assumption that the liquidity management of a company in a particular year is effective if its“ earnings before depreciation is positive and not effective if its“ earnings before depreciation is negative. The findings have revealed a very high predictive ability of the estimated discriminant function.

Feroz & et al. (2003) Ratio analysis is a commonly used analytical tool for verifying the performance of a firm. While ratios are easy to compute, which in part explains their wide appeal, their interpretation is problematic, especially when two or more ratios provide conflicting signals. Indeed, ratio analysis is often criticized on the grounds of subjectivity that is the analyst must pick and choose ratios in order to assess the overall performance of a firm. In this pipes they demonstrate that Data Envelopment Analysis (DEA) can augment the traditional ratio analysis. DEA can provide a consistent and reliable measure of managerial or operational efficiency of a firm. They test the null hypothesis that there is no relationship between DEA and traditional accounting ratios as measures of 25 performance of a firm. Their results reject the null hypothesis indicating that DEA can provide information to analysts that is additional to that provided by traditional ratio **analysis**.

Anshan Lakshmi (2003) made “A Study of the Financial Performance with Reference to Steel Industries Kerala Ltd”. This study covered from 1977-1998 to 2001-2002. The objectives of the study was to analyze and evaluate the working capital management, to analyze the liquidity position of the company, to evaluate the receivables, payables and cash management and to suggest ways and means to improve the present date of working capital. The major tools used for the analysis said that the working capital management suggested that the inventory management have to be corrected.

Sudarsana Reddy (2003) under took a study on “Financial Performance of Pipes Industry in Andhra Pradesh” for the period from 1989-90 to 1998-99. The primary objective of the study was to analyze the investment pattern and utilization of fixed assets, ascertaining the working capital condition, reviewing the profitability performance and suggesting measures to improve the profitability. He concluded that the introduction of additional funds along with restructuring of finances and modernization of technology were needed for better operating performance.

Sukudev Singh & et al. (2003) undertook a study entitled “Status and Growth of Pipes and Pulp Board Industry in North India – A Case study”. The study has revealed that due to the availability of raw materials and labour, eighty per cent of the mills are running with the optimum capacity utilization. The authors have observed that more than three thousand people have got employment in

ten pipes and pipes board mills with proportion of thousand eight hundred skilled workers and thousand two hundred unskilled labors. The authors have found out that the major problem faced by the industry is frequent breakdown of pipes production especially during the summer season due to scarcity of power supply.

Alovsat Muslumov (2005) “The Financial and Operating Performance of Privatization Companies in Turkish Cement Industry”. This pipes examines the post- privatization performance of privatized companies in the Turkish cement industry. The findings indicate that, when performance criteria for both the state and private enterprises are considered, privatization in the cement industry results in significant performance deterioration. Total value added and the return on investment declines significant after privatization. This decrease mainly stems from deterioration in asset productivity. The decline in asset productivity, however, is not caused by an increase in capital investment, since post- privatization capital investment did not change significantly. Significant contraction in total employment and an increase in financial leverage after privatization are among the key research findings. Privatization through public offering, gradual privatization and domestic ownership are found to stimulate the financial and operating performance of firms.

Ooghe & et al. (2006) in their pipes examine the financial performance of the acquiring firm after the acquisition, using statistical analysis of industry adjusted variables. Their findings show that following: the acquisition, the profitability, the solvency and the liquidity of most of the combined companies decline. This decline is also reflected in the failure prediction scores. With respect to the added value, acquisitions are found to be accompanied by increases in the lab our productivity, but this is caused by the general improvement of gross added value per employee of Belgian companies in the last ten years. So, it seems that, contrary to the general expectations and beliefs, acquisitions usually do not seem to improve the acquirer's financial performance.

K Maran, R Anitha (2015) Made an attempt to analyze the financial soundness of the Hero Honda motors limited have identified three factors, namely liquidity position, solvency position and profitability position based on the study of period 2002 to 2010 using ratio analysis.

K Maran, L Sujatha, TP Kumar (2017) done a comparative financial performance of Maruti Suzuki and Tata motors ltd. The financial data and information required for the study are drawn from the various annual reports of companies. The liquidity and leverage analysis of both the firms are done. To analyze the leverage position four ratios are considered namely, capital gearing, debt-equity, total debt and proprietary ratio. The result shows that Tata motors ltd has to increase the portion of proprietor's fund in business to improve long term solvency position.

C Padma Prabha, K Maran, CR Senthilnathan (2021) - Author has selected 87 companies out of 242 companies in capital line database to discuss the standard current ratio of automobile industry is matched with tractor and four sectors like engine parts, lamps, gears and ancillaries with standard norms.

Zafar Tariq S.M. & Khalid S.M. (2012) Author has made conceptual model to outline the impact of capital structure on the financial performance i.e. capital structure is independent variable that value is measured by using four ratios namely, financial debt, total debt equity, total asset debt and interest coverage ratio where as financial performance is dependent variable that value is measured by using four ratios as return on assets, return on equity , operating profit margin and return on capital employed. Researcher has selected 13 major steel industries and applied various statistical tools like standard deviation, correlation matrix, anova etc are employed for testing hypothesis with help of SPSS22.

S Sankar, K Maran (2015) This study tries to evaluate the profitability & financial position of selected companies of Indian automobile industry using statistical tools like, ratio analysis, mean, standard deviation, correlation.

R Udhayasankar, K Maran (2018) The study has been made through using different ratios , mean, standard deviation and Altman's Z score approach to study the financial health of the company. The study reveals there is a positive correlation between liquidity and profitability ratios except return on total assets as well as Z score value indicate good health of the company.

P Venkatesh, DS Revathi (2020) examine the qualities & quantities performer of maruti Suzuki co. & how had both impact on its market share in India, For this study secondary data has been collected from annual reports, journals, report automobile sites. Result shows that MSL has been successfully leading automobile sector in India for last few years.

Kishore Kumar Das & Rupsa Mahapatra (2021) carried out the study on Financial Performance of MSME sector. MSME is an important pillar of Indian economy as this sector is continuously contributing greatly to the growth and development of Indian economy by creating around 70 million employment, manufacturing more than 6000 products, contributing more than 45% of manufacturing production and 40% from exports. This study is done to evaluate the financial performance of MSME Sector. The study is to know about the financial performance and trends, there are different statistical tools such as correlation, regression, ANOVA are being used for the analysis and interpretation. This sector is showing best results and the policies, innovative plans, are implemented in this sector. This study concluded that MSME sector is the most demandable and emerging sector which contribute the most towards national development and financial growth. And also here is a significant change in the performance of MSME sector is an incremental way which is a good sign.

Chandrasekaran. S (2021) Study focused on the Financial performance Analysis of XI Dynamics India Private Limited. The company is providing Housing loans and mortgage loans to affordable segments. This study is to analyze the financial position, identifying the strength and weakness of the firm and identify the difficulty of the processing in mortgage. The study has been evaluated through secondary data and used various application tools to evaluate the financial performance like ratio analysis, and comparative balance sheet. And concluded that the company's financial performance is very good and also they are trying to generate more funds from other sources in order to expand the business.

Nirmala. M & Pavithra. K (2020) The research was conducted to investigate the determinants of the financial performance on selected cement companies in India. Infrastructure is the first key role of demand in the production of cement. For this study, the analysis was done by ratio analysis. The data for this research used secondary data in nature and data taken from 2009-2010 to 2018-2019. This study concludes that some comparative ratios showing the negative relationship and the companies have to concentrate and improve in those particular ratios. This study helps the financial investors, cement companies to know and take decision for future process in the concern.

Andal. V & Suganya. S & et al (2020) carried out the study on Financial Performance Analysis of Puma, manufacturer of sports apparels and sports equipment company. The analysis done by using vertical and horizontal and also financial ratios have been prepared to know the overall performance of the company. These analysis and ratios will help the company for the future growth and to improve the market share of the company. This study finally concludes that the company is performing well, and it will continue to make profit and revenues for the next financial years. The current ratio of PUMA has only reduced and in all other contexts, The financial position of puma is satisfactory.

Muthusamy. A & Karthika. S (2019) examined a study on financial performance of selected cement companies in India to evaluate the liquidity and profitability of two selected cement firms, their paper on convenience sampling method was treated. The study analyses the financial performance of two major Cement companies via., UltraTech Cement Limited and Shree Cement Limited. Statistical instruments such as the descriptive and correlation approach used and the five year data outcome measure suggest that the profitability position in the two companies is fulfilled, but the liquidity position in the two companies is not fulfilled.

Kanagavalli. G & Devi R.S. (2018) examined a study on Financial Performance of selected automobile companies. The purpose of the study is to evaluate and compare the financial performance of selected three companies to rate their financial performances for the period of 5 years from 2013-2017 by ratio analysis. The aim of the study is to analyze by comparing the risk of different companies, on their strengths and weaknesses. Ratio analysis helps to compare the financial

statements of the firms and comparison of financial performance also investigated over a period of time. The study found that there is the positive strong relationship of liquidity ratio. The Profitability Ratios of Hero Motocorp is higher than other automobile companies. It shows Hero Motocorp earned high profit and it is good for the company. After analyzing all the aspects, concern with this research, we can say that Bajaj Auto and TVS Mot

Sheela christina (2017) carried out the study on Financial performance of Wheels India Limited Chennai. The study deals with analytical type of research design with the help of secondary data collection for this purpose the researcher took past 5years data and also checked out the validity and reliability before conducting the study. The researcher used the following financial tool namely ratio analysis, comparative balance sheet, and DuPoint analysis and also statistical tools such as trend analysis, and correlation. Profitability ratios indicate there is a decrease in the profit level, utilization of fixed assets and working capital in the last financial year. Thus, the company can take necessary steps to improve sales and profit. Finally, reveals that the financial performance is satisfactory.

CHAPTER 3

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RESEARCH METHODOLOGY

3.1 RESEARCH METHODOLOGY

The process used to collect information and data for the purpose of making business decisions. The methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information.

3.2 DATA COLLECTION

It is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. The data collection component of research is common to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same.

Data collection is the systematic approach to gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest. Data collection enables a person or organization to answer relevant questions, evaluate outcomes and make predictions about future probabilities and trends

3.2.1 TYPES OF DATA

- **PRIMARY DATA**

Data collected by the investigator himself/ herself for a specific purpose. Example Data collected by a student for his/her thesis or research project.

- **SECONDARY DATA**

Data collected by someone else for some other purpose, but it being utilized by the investigator for another purpose. Example Census data being used to analyse the impact of education on career choice and earning.

DATA USED IN THIS STUDY

In this study only secondary data has been used. Secondary data has been collected from Company's financial books, various journals, websites etc

3.3 STATISTICAL TOOLS

Mathematical concepts, formulas, models, techniques used in statistical analysis of random data. In comparison, deterministic methods are used where the data is easily reproducible or where its behaviour is determined entirely by its initial stage and inputs.

STATISTICAL TOOLS USED

The data collected was analysed by employing the following statistical techniques.

RATIO ANALYSIS

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement.

Ratio analysis compares line-item data from a company's financial statements to reveal insights regarding profitability, liquidity, operational efficiency, and solvency. Ratio analysis can mark how a company is performing over time, while comparing a company to another within the same industry or sector. While ratios offer useful insight into a company, they should be paired with other metrics, to obtain a broader picture of a company's financial health.

Ratio analysis compares line-item data from a company's financial statements to reveal insights regarding profitability, liquidity, operational efficiency, and solvency. Ratio analysis can mark how a company is performing over time, while comparing a company to another within the same industry or sector.

In this study, Profitability ratios, liquidity ratios have been calculated in order to analyse the company's financial condition.

LIQUIDITY RATIO

Liquidity is a very critical part of a business. Liquidity is required for a business to meet its short term obligations. Liquidity ratios are a measure of the ability of a company to pay off its short-term liabilities. Liquidity ratios determine how quickly a company can convert the assets and use them for meeting the dues that arise. The higher the ratio, the easier is the ability to clear the debts and avoid defaulting on payments. This is a very important criterion that creditors check before offering short term loans to the business. An organisation which is unable to clear dues results in creating impact on the creditworthiness and also affects credit rating of the company.

Types of Liquidity Ratio

There are following types of liquidity ratios:

1. Current Ratio or Working Capital Ratio
2. Quick Ratio also known as Acid Test Ratio
3. Net Working Capital Ratio

Current Ratio

The current ratio is a measure of a company's ability to pay off the obligations within the next twelve months. This ratio is used by creditors to evaluate whether a company can be offered short term debts. It also provides information about the company's operating cycle. It is also popularly known as Working capital ratio. It is obtained by dividing the current assets with current liabilities. A higher current ratio around two(2) is suggested to be ideal for most of the industries while a lower value (less than 1) is indicative of a firm having difficulty in meeting its current liabilities.

Ideal value of current ratio is 2:1

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liability}}$$

Liquid Ratio / Quick Ratio

The quick ratio is an indicator of a company's short-term liquidity position and measures a company's ability to meet its short-term obligations with its most liquid assets. Since it indicates the company's ability to instantly use its near-cash assets (assets that can be converted quickly to cash) to pay down its current liabilities, it is also called the acid test ratio. An "acid test" is a slang term for a quick test designed to produce instant results.

The quick ratio measures the dollar amount of liquid assets available against the dollar amount of current liabilities of a company. Liquid assets are those current assets that can be quickly converted into cash with minimal impact on the price received in the open market, while current liabilities are a company's debts or obligations that are due to be paid to creditors within one year.

The ideal value of quick ratio is 1:1

$$\text{Quick ratio} = \text{Quick assets} / \text{Quick Liabilities}$$

Quick assets = Current assets – (Stock + Prepaid expenses)

Quick liabilities = Current liabilities – Bank overdraft

Net Working Capital Ratio

Net working capital ratio shows how much of a company's current liability can be met with the company's current assets. The net working capital ratio is the measure of a company's capability in meeting the obligations that must be paid within the foreseeable future. Therefore, it shows the liquidity that is available with the company to meet the liabilities.

In other words, the net working capital ratio provides the stakeholders of a business with the idea of the business's liquidity by showing how effective it is in paying off the current liabilities or the short-term debt using its current assets. The values of the denominator and numerator of net working capital ratio are available on the balance sheet of the company.

Net working capital ratio = Current Asset – Current Liabilities

LEVERAGE / SOLVENCY RATIO

Solvency or Leverage ratios are used to analyse the long-term financial position of the firm. In other words, these ratios are used to analyse the capital structure of a firm. A leverage ratio is any one of several financial measurements that look at how much capital comes in the form of debt (loans) or assesses the ability of a company to meet its financial obligations. The leverage ratio category is important because companies rely on a mixture of equity and debt to finance their operations, and knowing the amount of debt held by a company is useful in evaluating whether it can pay off its debts as they come due.

Too much debt can be dangerous for a company and its investors. However, if a company's operations can generate a higher rate of return than the interest rate on its loans, then the debt may help to fuel growth. Uncontrolled debt levels can lead to credit downgrades or worse. On the other hand, too few debts can also raise questions. A reluctance or inability to borrow may be a sign that operating margins are tight. There are several different ratios that may be categorized as a leverage ratio, but the main factors considered are debt, equity, assets, and interest expenses.

A leverage ratio may also be used to measure a company's mix of operating expenses to get an idea of how changes in output will affect operating income. Fixed and variable costs are the two

types of operating costs; depending on the company and the industry, the mix will differ.

Finally, the consumer leverage ratio refers to the level of consumer debt compared to disposable income and is used in economic analysis and by policymakers.

Solvency Ratio

Solvency ratio is one of the various ratios used to measure the ability of a company to meet its long-term debts. Solvency ratio is also called leverage ratio. It focuses on the long-term sustainability of a company instead of the current liability payments.

A solvency ratio is one of many metrics used to determine whether a company can stay solvent in the long term. A solvency ratio is a comprehensive measure of solvency, as it measures a firm's actual cash flow, rather than net income, by adding back depreciation and other non-cash expenses to assess a company's capacity to stay afloat.

It measures this cash flow capacity versus all liabilities, rather than only short-term debt. This way, a solvency ratio assesses a company's long-term health by evaluating its repayment ability for its long-term debt and the interest on that debt.

Solvency ratios vary from industry to industry. A company's solvency ratio should, therefore, be compared with its competitors in the same industry rather than viewed in isolation.

A solvency ratio terminology is also used when evaluating insurance companies, comparing the size of their capital relative to the premiums written, and measures the risk an insurer faces on claims it cannot cover.

$$\text{Solvency Ratio} = \frac{\text{Total Asset}}{\text{Total Debt}}$$

Fixed Asset to Net Worth Ratio

Fixed assets to net worth ratio show the relationship between fixed assets and shareholder's fund. Usually, fixed assets are purchased by using owner's fund such as equity capital, reserves and surplus, retained earnings etc. If the ratio is less than 100%, it implies that owner's fund are more than total fixed assets and part of the working capital is financed by shareholders fund and vice versa. Ideal ratio is considered as 60% to 65%.

The ideal value for this ratio is 67:1

$$\text{Fixed Asset to net worth ratio} = \frac{\text{Fixed Asset}}{\text{Net worth / capital}}$$

PROFITABILITY RATIO

Profitability ratio measures the ability of the firm to earn an adequate return on sales, total assets and invested capital.

Profitability ratios can shed light on how well a company's management is operating a business. Investors can use them, along with other research, to determine whether or not a company might be a good investment.

Broadly speaking, higher profitability ratios can point to strengths and advantages that a company has, such as the ability to charge more (or less) for products and to maintain lower costs.

A company's profitability ratios are most useful when compared to those of similar companies, the company's own performance history, or average ratios for the company's industry. Normally, a higher value relative to previous value indicates that the company is doing well.

Types of Profitability Ratios

Profitability ratios generally fall into two categories—margin ratios and return ratios.

Margin ratios give insight, from several different angles, into a company's ability to turn sales into a profit. Return ratios offer several different ways to examine how well a company generates a return for its shareholders using the money they've invested.

Some common examples of the two types of profitability ratios are:

- Gross margin
- Operating margin
- Net profit margin
- Return on invested capital (ROIC)

Gross profit ratio

Gross profit ratios are calculated in order to represent the operating profits of an organization after making necessary adjustments pertaining to the COGS or cost of goods sold.

Gross profit margin, also known as gross margin, is one of the most widely used profitability ratios. Gross profit is the difference between sales revenue and the costs related to the products sold, the aforementioned COGS. Gross margin compares gross profit to revenue.

A company with a high gross margin compared to its peers likely has the ability to charge a premium for its products. It may indicate the company has an important competitive advantage. On the other hand, a pattern of declining gross margins may point to increased competition.

Some industries experience seasonality in their operations. For example, retailers typically experience significantly higher revenues and earnings during the year-end holiday season. Thus, it would be most informative and useful to compare a retailer's fourth-quarter profit margin with its (or its peers') fourth-quarter profit margin from the previous year.

The formula used for the calculation of gross profit ratio is-

$$\text{Gross Profit Ratio} = (\text{Gross Profit} / \text{Net Sales}) * 100$$

Net profit ratio

Net profit ratios are calculated in order to determine the overall profitability of an organization after reducing both cash and non-cash expenditures.

The net profit margin, or net margin, reflects a company's ability to generate earnings after all expenses and taxes are accounted for. It's obtained by dividing net income into total revenue.

Net profit margin is seen as a bellwether of the overall financial well-being of a business. It can indicate whether company management is generating enough profit from its sales and keeping all costs under control.

Its drawback as a peer comparison tool is that, because it accounts for all expenses, it may reflect one-time expenses or an asset sale that would increase profits for just that period. Other companies won't have the same one-off transactions. That's why it's a good idea to look at other ratios, such as gross margin and operating margin, along with net profit margin.

The formula used for the calculation of net profit ratio is

$$\text{Net Profit Ratio} = (\text{Net Profit} / \text{Net Sales}) * 100$$

Operating profit ratio

Operating profit express the relationship between operating cost and sales. It indicates the overall efficiency in operating in business.

Operating margin is the percentage of sales left after accounting for COGS as well as normal operating expenses (e.g., sales and marketing, general expenses, administrative expenses). It compares operating profit to revenue.

Operating margin can indicate how efficiently a company manages its operations. That can provide insight into how well those in management keep costs down and maximize profitability.

A company with a higher operating margin than its peers can be considered to have more ability to handle its fixed costs and interest on obligations. It most likely can charge less than its competitors. And it's better positioned to weather the effects of a slowing economy

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Net sales}} \times 100$$

Net sales

Return On Investment

It establishes the relationship between return and investment. It is also called accounting rate of return.

This return ratio reflects how well a company puts its capital from all sources (including bondholders and shareholders) to work to generate a return for those investors. It's considered a more advanced metric than ROE because it involves more than just shareholder equity.

ROIC compares after-tax operating profit to total invested capital (again, from debt and equity). It's used internally to assess appropriate use of capital. ROIC is also used by investors for valuation purposes. ROIC that exceeds the company's weighted average cost of capital (WACC) can indicate value creation and a company that can trade at a premium.

$$\text{ROI} = \frac{\text{Profit before interest and tax}}{\text{Capital employed}} \times 100$$

Capital employed

STATEMENT OF CHANGES IN WORKING CAPITAL

A statement of changes in working capital is prepared to measure the increase or decrease in the individual items of current assets and current liabilities. It also shows the net increase or decrease in the working capital during the accounting period.

The Change in Working Capital gives you an idea of how much a company's cash flow will differ from its Net Income (i.e., after-tax profits), and companies with more power to collect cash quickly from customers and delay payments to suppliers tend to have more positive Change in Working Capital figures.

Changes in working capital are reflected in a firm's cash flow statement. The company's working capital would also decrease since the cash portion of current assets would be reduced, but current liabilities would remain unchanged because it would be long-term debt.

Statement of changes in working capital is prepared by recording the changes in current assets and current liabilities during the accounting period. The working capital during the accounting period is bound to change due to increase or decrease in the current assets and current liabilities.

The purpose of preparing this statement is to measure the increase or decrease in the individual items of current assets and current liabilities and calculate the net increase or decrease in the working capital during the accounting period.

General rule

- Increase in current asset increases working capital.
- Decrease in current liability increases working capital
- Decrease in current asset decreases working capital.
- Increase in current liability decreases working capital

While preparing the statement of changes in working capital, the current assets may be shown either at their gross values, showing provisions as current liabilities, or at their net values after deducting such provisions.

The usual items are: provision for doubtful debts, provision for loss of stock, provision for discount on debtors, etc. The purpose of the working capital statement to find out the net change in working capital

CHAPTER 4

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1.1: Current Ratio

Year	Current Asset (in Rs.00's)	Current Liability (in Rs.00's)	Current Ratio (in Rs.00's)
2017 – 2018	179252	49255.3	3.64
2018 – 2019	219363	56745.9	3.86
2019 – 2020	253435.6	26189	9.68
2020 – 2021	375242.4	33248	11.29
2021 – 2022	400457.8	35396.1	11.31
Mean	285550.16	40166.86	7.96

Source: Secondary data

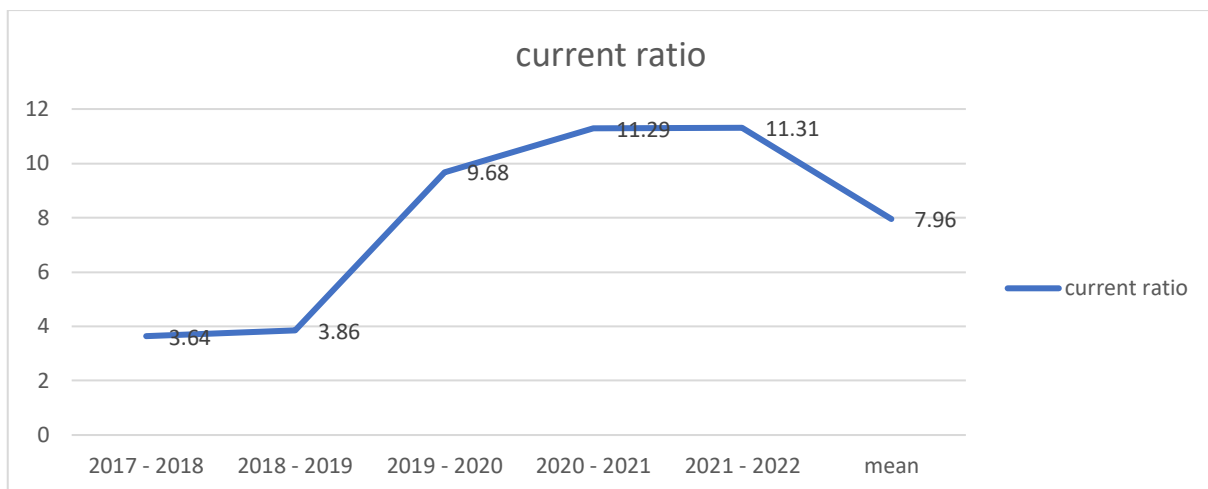


Chart 4.1.1: Current Ratio

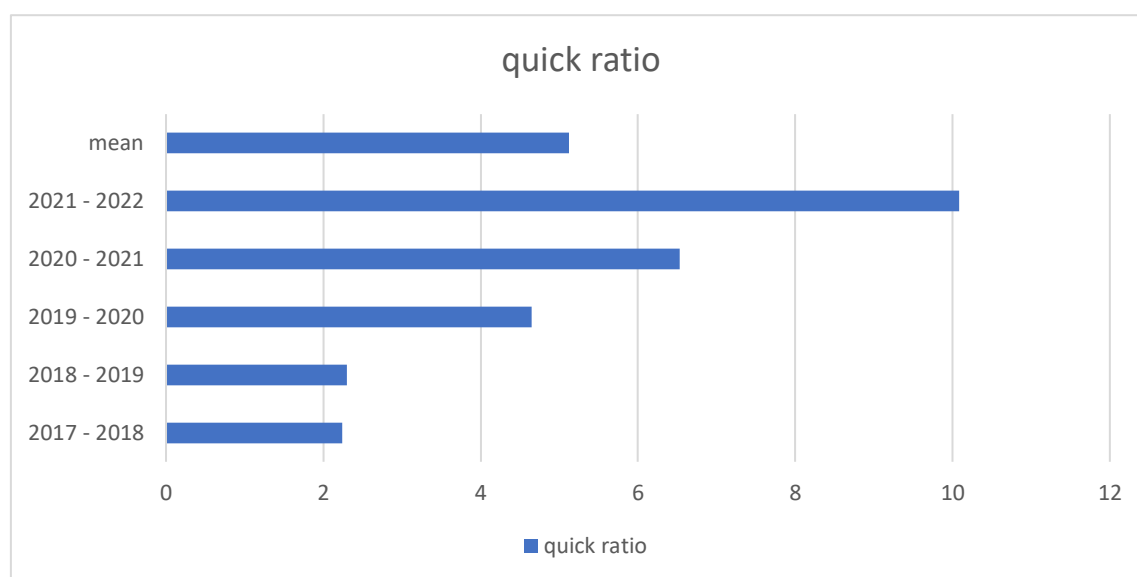
Interpretation

From the above chart, the current ratio during all the five years is above the standard. It is high 11.31 during the period 2021-2022 and it is low during the period 2017-2018. We can conclude that the liquidity of the firm is in increasing trend, where the current assets are increasing and current liabilities are decreasing. The company is able to generate enough from operations to pay for its current obligations with current assets.

Table 4.1.2: Liquid Ratio

Year	Quick Assets (in Rs.00's)	Quick Liability (in Rs.00's)	Quick Ratio (in Rs.00's)
2017 – 2018	96786	43241	2.24
2018 – 2019	115905	50414	2.30
2019 – 2020	121750	26189	4.65
2020 – 2021	211099	33248	6.35
2021 – 2022	356783	35396	10.08
Mean	180464.6	37697.6	5.12

Source: Secondary data



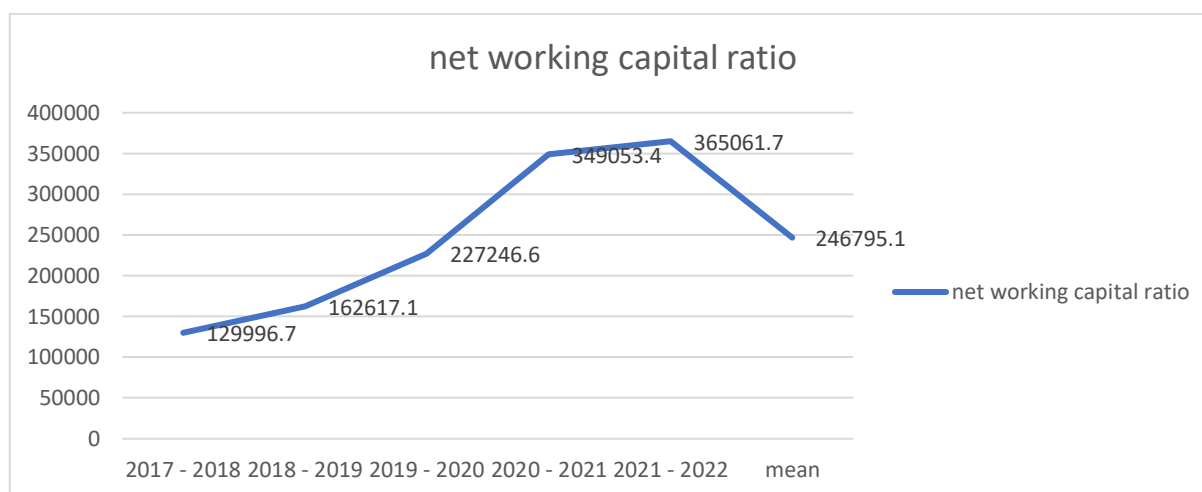
Interpretation

From the above chart, it is inferred that the quick ratio during the year 2021 – 2022 is found to be high 10.08 and during the year 2017 – 2018 is found to be low 2.24. The quick ratio during all the five years is above the standard. The company is able to generate enough from operations to pay for its current obligations with current assets.

Table 4.1.3: Net working capital Ratio

Year	Current Asset (in Rs.00's)	Current Liability (in Rs.00's)	Net Working Capital Ratio (in Rs.00's)
2017 – 2018	179252	49255.3	129996.7
2018 – 2019	219363	56745.9	162617.1
2019 – 2020	253435.6	26189	227246.6
2020 – 2021	375242.4	33248	349053.4
2021 – 2022	400457.8	35396.1	365061.7
Mean	285550.16	40166.86	246795.1

Source: Secondary data

**Chart 4.1.3: Net working capital Ratio**

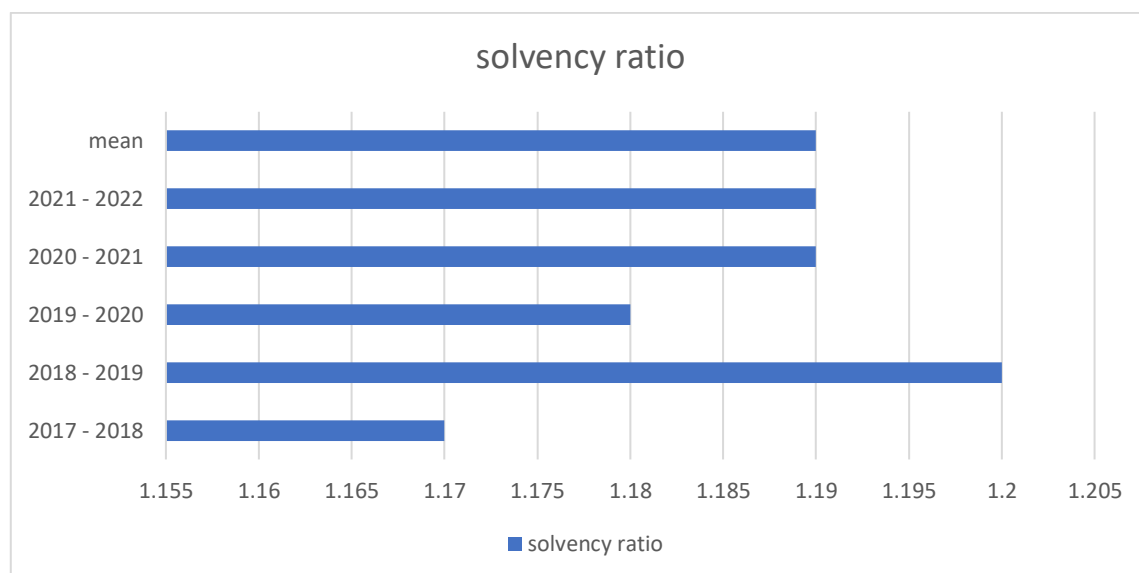
Interpretation

The above table shows the current assets and current liabilities for the past 5 years 2017 – 2018 to 2021– 2022. The current assets got increased all the 5 years on a constant rate. The current liabilities showing a fluctuating manner, during all the 5 years of analysis. The Net Working capital ratio during all the five years of analysis shows that a increasing trend. The net working capital ratio during all the five years is increasing. It is high during the period 2021-2022 and it is low during the period 2017-2018. We can conclude that the liquidity of the firm is in increasing trend, where the current assets are increasing and current liabilities are decreasing. The company has sufficient funds from operations to pay for its current obligations with current assets.

Table 4.1.4: Debt Solvency Ratio

Year	Total Asset (in Rs.00's)	Total Debt (in Rs.00's)	Solvency Ratio (in Rs.00's)
2017-2018	106393	91187	1.17
2018-2019	124454	104022	1.20
2019-2020	153051	129213	1.18
2020-2021	174687	147054	1.19
2021-2022	185423	155987	1.19
Mean	148801.6	125492.6	1.19

Source: Secondary data

**Chart 4.1.4: Solvency Ratio**

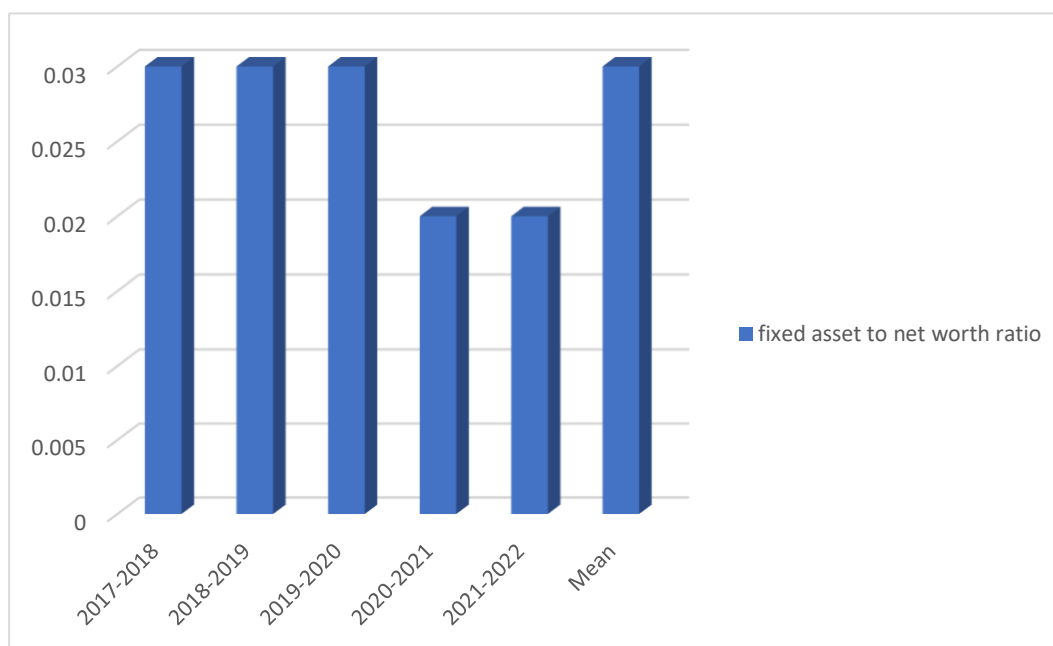
Interpretation

From the figure, we could see that the ratio first increases then decreases and becomes stable for the last two years. Generally, higher the solvency ratio the stronger is its financial position and vice versa. From the above data it is clear that, the assets are more than the outside liabilities. In all year's solvency ratio is above 1:1, it indicates that there is no difficult in paying off its outside liabilities.

Table 4.1.5: Fixed asset to Net worth ratio

Year	Fixed Asset (in Rs.00's)	Net worth (in Rs.00's)	Fixed Asset To Net worth Ratio (in Rs.00's)
	3607	106291	0.03
2018-2019	4030	149209	0.03
2019-2020	4431	170986	0.03
2020-2021	4909	203724	0.02
2021-2022	5347	249737	0.02
Mean	4464.8	175989.4	0.03

Source: Secondary data

**Chart 4.1.5: Fixed Asset to net worth ratio**

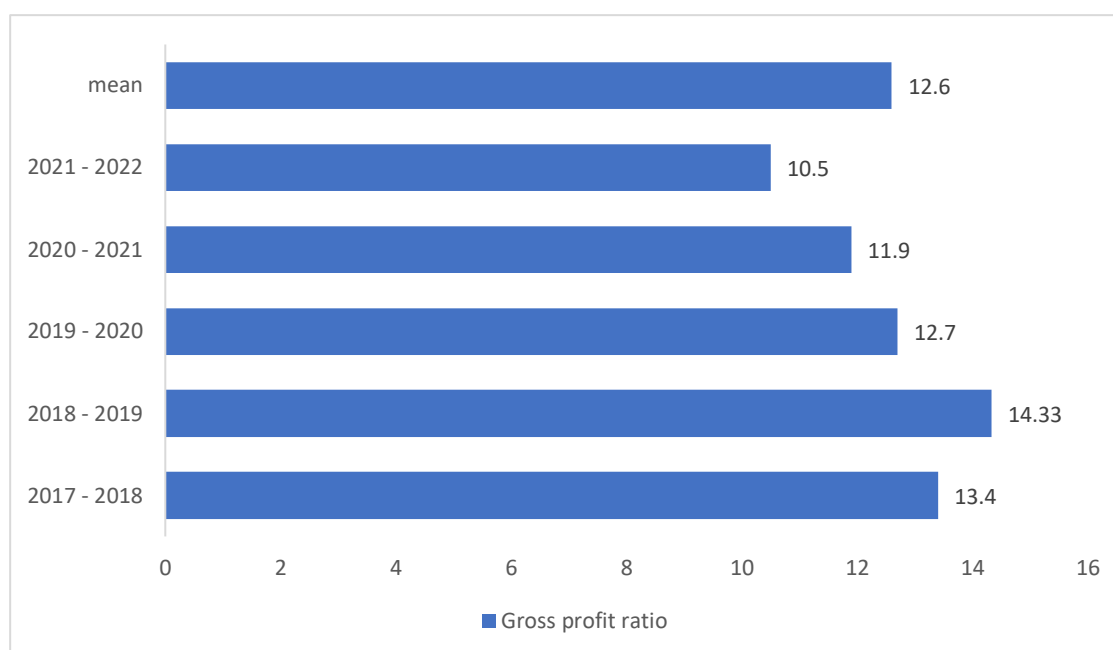
Interpretation

The figure shows fixed assets to net worth ratio of the concern. The ratio is constant 0.03 during the year 2017-2018 to 2019-2020. The ratio is 0.02 for the next two periods 2020-2021 to 2021-2022. Ratio less than 1 indicates that all fixed assets are purchased out of proprietor's fund and a part of proprietor's fund is invested in working capital.

Table 4.1.6: Gross Profit Ratio

Year	Gross profit (in Rs.00's)	Net sales (in Rs.00's)	Gross profit Ratio (in Rs.00's)
2017 – 2018	140567	1047876	13.4
2018 – 2019	150456	1049737	14.33
2019 – 2020	156874	1237490	12.7
2020 – 2021	124850	1047589	11.9
2021 – 2022	125678	1197854	10.5
Mean	139685	1116109.2	12.6

Source: Secondary data

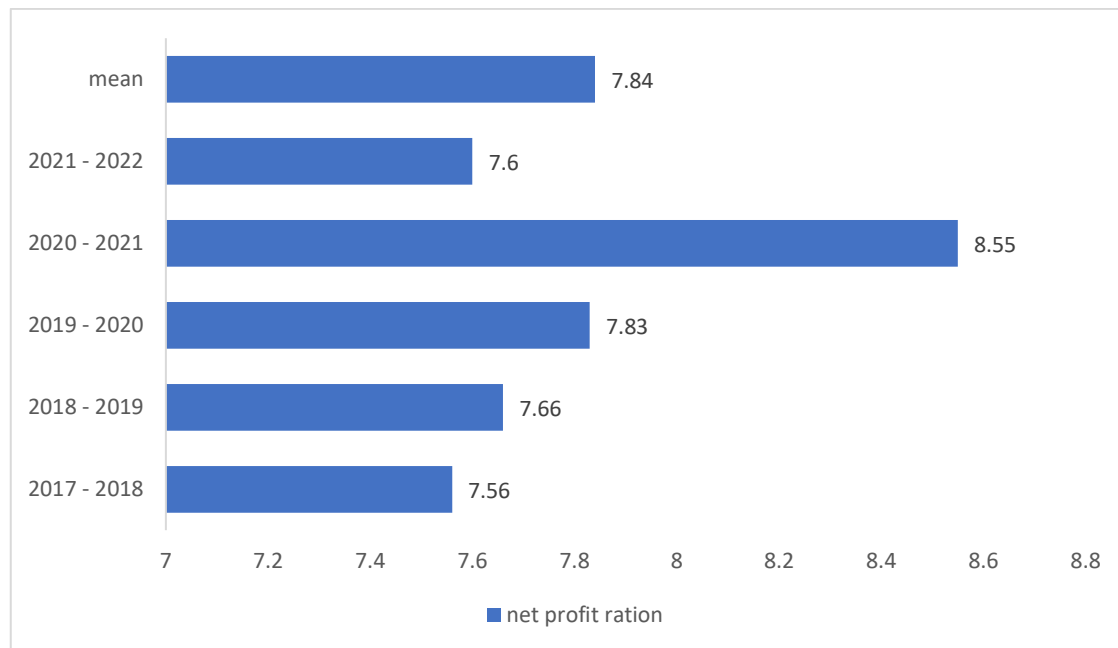
**Chart 4.1.6: Gross Profit Ratio****Interpretation**

From the above chart, it is inferred that the gross profit ratio is found to be high 14.33 during the year 2018 – 2019, while it is found to be low 10.5 during the year 2021 – 2022. The gross profit ratio during the five years has increased for the first year and shows a decreasing trend from the second year. However, the gross profit ratio shows a decreasing trend which may be due to the pandemic.

Table 4.1.7: Net Profit Ratio

Year	Net profit (in Rs.00's)	Net sales (in Rs.00's)	Net profit Ratio (in Rs.00's)
2017 – 2018	79231	1047876	7.56
2018 – 2019	80456	1049737	7.66
2019 – 2020	96874	1237490	7.83
2020 – 2021	89550	1047589	8.55
2021 – 2022	91032	1197854	7.6
Mean	87428.6	1116109.2	7.84

Source: Secondary data

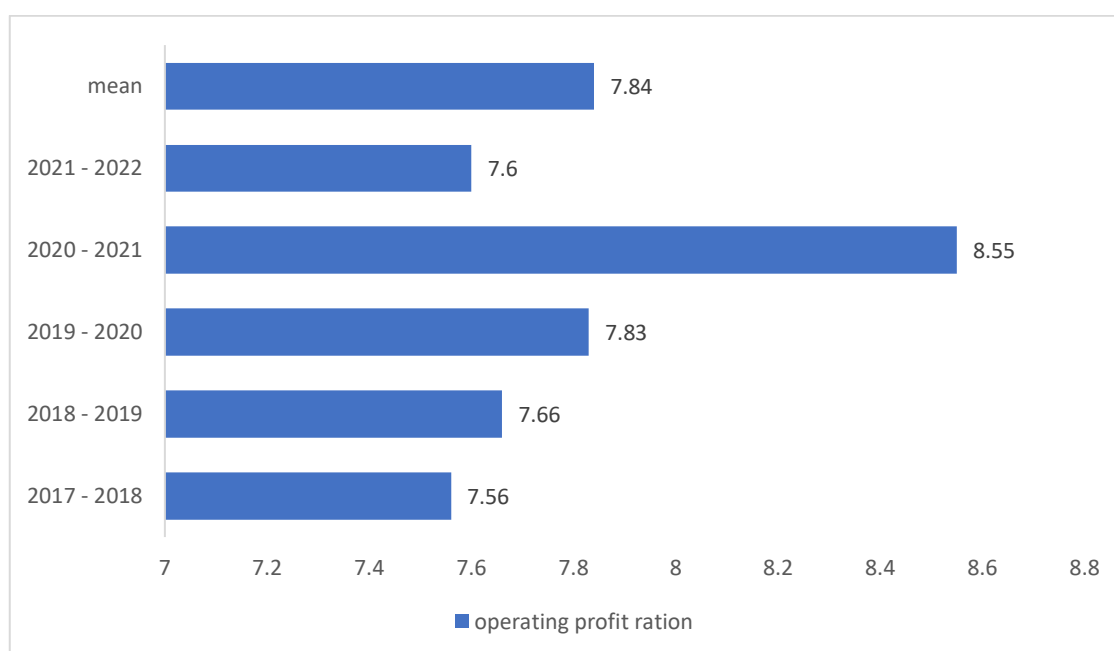
**Chart 4.1.7: Net Profit Ratio****Interpretation**

From the above chart, it is inferred that the net profit ratio is high 8.55 during the year 2020 – 2021 and the ratio is at its lowest 7.6 during the year 2017 – 2018 and 2021 – 2022. The net profit ratio during the first four years it is in increasing trend and it shows a downfall during the last year. This may be due to the covid pandemic.

Table 4.1.8: Operating profit ratio

Year	Operating profit (in Rs.00's)	Net sales (in Rs.00's)	Operating profit Ratio (in Rs.00's)
2017 – 2018	120567	1047876	11.5
2018 – 2019	128456	1049737	12.2
2019 – 2020	133874	1237490	10.8
2020 – 2021	99850	1047589	9.5
2021 – 2022	100678	1197854	8.4
Mean	116685	1116109.2	10.48

Source: Secondary data

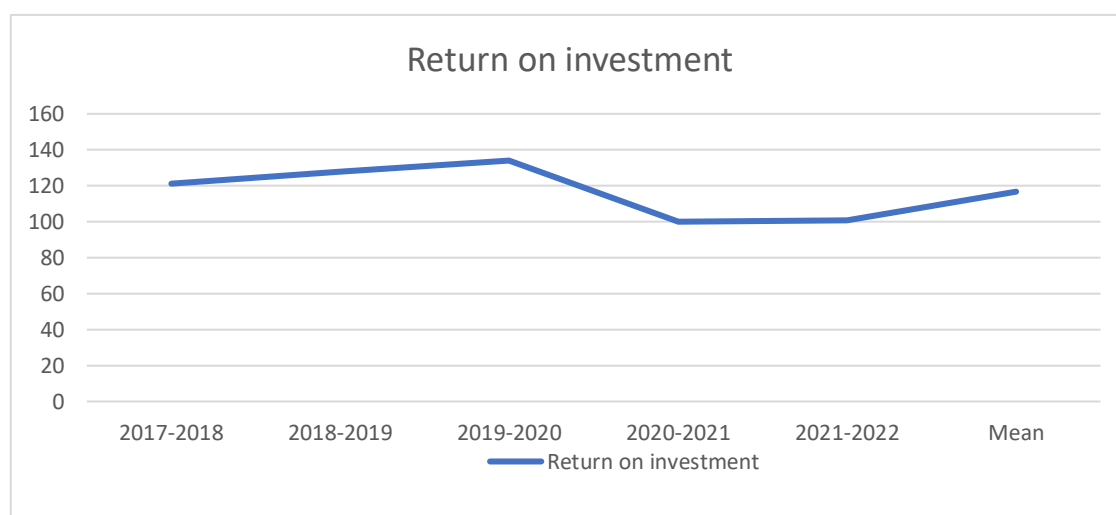
**Chart 4.1.8: Operating Profit Ratio****Interpretation**

From the above chart, it is inferred that the net profit ratio is high 8.55 during the year 2020 – 2021 and the ratio is at its lowest 7.6 during the year 2017 – 2018 and 2021 – 2022. The net profit ratio during the first four years it is in increasing trend and it shows a downfall during the last year. This may be due to the covid pandemic.

Table 4.1.9: Return on Investment

Year	Operating Profit (EBIT) (in Rs.00's)	Capital Employed (in Rs.00's)	Return On Investment (in Rs.00's)
	120567	100000	121
2018-2019	128456	100000	128
2019-2020	133874	100000	134
2020-2021	99850	100000	100
2021-2022	100678	100000	100.68
Mean	116685	100000	116.7

Source: Secondary data

**Chart 4.1.9: Return on Investment**

Interpretation

The figure shows a fluctuating curve, its lowest is during the period 2020-2021. Its highest is during the period 2019-2020. The firm has sufficient return on capital employed. Its ideal ratio is 15% and more. Overall the firm's profitability is very high and shows that there is efficient use of capital employed. The downfall during the year 2020-2021 was due to the pandemic situation.

**Table 4.1.10: STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR
2017 – 18**

PARTICULARS	31/3/2017 (in Rs.00's)	31/3/2018 (in Rs.00's)	INCREASE (in Rs.00's)	DECREASE (in Rs.00's)
Current Assets				
Closing stock	3754	4932	1178	
Deposits	25746	32856	7110	
Sundry debtors	74957	54420.1		20536.9
Cash in hand	2948	1950.7		997.3
Bank accounts	50438	85093.2	34655.2	
A = Total Current Assets	157843	179252		
Current Liabilities				
Outstanding expenses	1784	2706		922
Creditors	40961	46549.3		5588.3
B = Total Current Liabilities	42745	49255.3		
Net Working Capital (A – B)	115098	129996.7	42943.2	28044.5
Increase or Decrease in Working Capital	14898.7			14898.7
	129996.7	129996.7	42943.2	42943.2

Source: Secondary data

Interpretation

The table shows that there is an increase of working capital during the year 2017 – 18. Except cash in hand and sundry debtors, all the other components of current assets increased during the year 2018 when compared to 2017. The current liabilities also got increased during the year 2018 when compared to 2017. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 14898.7

**Table 4.1.11: STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR
2018 – 19**

PARTICULARS	31/3/2018 (in Rs.00's)	31/3/2019 (in Rs.00's)	INCREASE (in Rs.00's)	DECREASE (in Rs.00's)
Current Assets				
Closing stock	4932	6095	1163	
Deposits	32856	49709	16853	
Sundry debtors	54420.1	54635	214.9	
Cash in hand	1950.7	1372.0		578.7
Bank accounts	85093.2	107552	22458.8	
A = Total Current Assets	179252	219363		
Current Liabilities				
Outstanding expenses	2706	3165.9		459.9
Creditors	46549.3	53580		7030.7
B = Total Current Liabilities	49255.3	56745.9		
Net Working Capital (A – B)	129996.7	162617.1	40689.7	8069.3
Increase or Decrease in Working Capital	32620.4			32620.4
	162617.1	162617.1	40689.7	40689.7

Source: Secondary data

Interpretation

The table shows that there is an increase of working capital during the year 2018 – 19. Except cash in hand, all the other components of current assets increased during the year 2019 when compared to 2018. The current liabilities also got increased during the year 2019 when compared to 2018. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 32620.4

**Table 4.1.12: STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR
2019 – 20**

PARTICULARS	31/3/2019 (in Rs.00's)	31/3/2020 (in Rs.00's)	INCREASE (in Rs.00's)	DECREASE (in Rs.00's)
Current Assets				
Closing stock	6095	9048	2953	
Deposits	49709	119356	69647	
Sundry debtors	54635	54927	292	
Cash in hand	1372	3111.6	1739.6	
Bank accounts	107552	66993		40559
A = Total Current Assets	219363	253435.6		
Current Liabilities				
Outstanding expenses	3165.9	500	2665.9	
Creditors	53580	25689	27891	
B = Total Current Liabilities	56745.9	26189		
Net Working Capital (A – B)	162617.1	227246.6	105188.5	40559
Increase or Decrease in Working Capital	64629.5			64629.5
	227246.6	227246.6	105188.5	105188.5

Source: Secondary data

Interpretation

The table shows that there is an increase of working capital during the year 2019 – 20. Except bank accounts, all the other components of current assets increased during the year 2020 when compared to 2019. The current liabilities got decreased during the year 2020 when compared to 2019. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 64629.5

**Table 4.1.13: STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR
2020 – 21**

PARTICULARS	31/3/2020 (in Rs.00's)	31/3/2021 (in Rs.00's)	INCREASE (in Rs.00's)	DECREASE (in Rs.00's)
Current Assets				
Closing stock	9048	7814		1234
Deposits	119356	229054	109698	
Sundry debtors	54927	56596	1669	
Cash in hand	3111.6	578.7		2532.9
Bank accounts	66993	81199.7	14206.7	
A = Total Current Assets	253435.6	375242.4		
Current Liabilities				
Outstanding expenses	500	450	50	
Creditors	25689	32798		7109
B = Total Current Liabilities	26189	33248		
Net Working Capital (A – B)	227246.6	341994.4	125623.7	10875.9
Increase or Decrease in Working Capital	114747.8			114747.8
	341994.4	341994.4	125623.7	125623.7

Source: Secondary data

Interpretation

The table shows that there is an increase of working capital during the year 2020 – 21. Except closing stock and cash in hand, all the other components of current assets increased during the year 2021 when compared to 2020. The current liabilities got increased during the year 2021 when compared to 2020. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 114747.8

**Table 4.1.14: STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR
2021 – 22**

PARTICULARS	31/3/2021 (in Rs.00's)	31/3/2022 (in Rs.00's)	INCREASE (in Rs.00's)	DECREASE (in Rs.00's)
Current Assets				
Closing stock	7814	9456	1642	
Deposits	229054	266923.4	37869.4	
Sundry debtors	56596	29844		26752
Cash in hand	578.7	763	184.3	
Bank accounts	81199.7	93471.4	12271.7	
A = Total Current Assets	375242.4	400457.8		
Current Liabilities				
Outstanding expenses	450	958		508
Creditors	32798	34438.1		1640.1
B = Total Current Liabilities	33248	35396.1		
Net Working Capital (A – B)	341994.4	365061.7	51967.4	28900.1
Increase or Decrease in Working Capital	23067.3			23067.3
	365061.7	365061.7	51967.4	51967.4

Source: Secondary data

Interpretation

The table shows that there is an increase of working capital during the year 2021 – 22. Except sundry debtors, all the other components of current assets increased during the year 2022 when compared to 2021. The current liabilities got increased during the year 2022 when compared to 2021. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 23067.3

CHAPTER 5

CHAPTER 5

FINDINGS AND CONCLUSION

5.1 FINDINGS OF THE STUDY

- The current assets got increased all the 5 years on a constant rate. The current liabilities showing a fluctuating manner, during all the 5 years of analysis. The current ratio during all the five years of analysis showing the values that is higher than the ideal value.
- The current ratio during all the five years is above the standard. It is high 11.31 during the period 2021-2022 and it is low during the period 2017-2018. We can conclude that the liquidity of the firm is in increasing trend, where the current assets are increasing and current liabilities are decreasing. The company is able to generate enough from operations to pay for its current obligations with current assets.
- The quick assets got increased all the 5 years on a constant rate and the quick liabilities showing a fluctuating manner during the years of analysis. The quick ratio during all the five years of analysis showing the values that is higher than the ideal value.
- The quick ratio during the year 2021 – 2022 is found to be high 10.08 and during the year 2017 – 2018 is found to be low 2.24. The quick ratio during all the five years is above the standard. The company is able to generate enough from operations to pay for its current obligations with current assets.
- The current assets got increased all the 5 years on a constant rate. The current liabilities showing a fluctuating manner, during all the 5 years of analysis. The Net Working capital ratio during all the five years of analysis shows that a increasing trend.
- The net working capital ratio during all the five years is increasing. It is high during the period 2021-2022 and it is low during the period 2017-2018. We can conclude that the liquidity of the firm is in increasing trend, where the current assets are increasing and current liabilities are decreasing. The company has sufficient funds from operations to pay for its current obligations with current assets.
- The solvency ratio is almost standard. Both the total assets and the total debt of the firm are in increasing trend. They increase in a standard manner. The solvency ratio is high during the period 2018-2019 and it is low during the period 2019-2020.

- The ratio first increases then decreases and becomes stable for the last two years. Generally, higher the solvency ratio the stronger is its financial position and vice versa. From the above data it is clear that, the assets are more than the outside liabilities. In all year's solvency ratio is above 1:1, it indicates that there is no difficult in paying off its outside liabilities.
- The average Fixed Asset to net worth ratio is 0.03. Both the fixed asset and the net worth of the firm is in increasing trend. For the first three years the ratio is standard and it shows a constant downfall in the next two years.
- The ratio is constant 0.03 during the year 2017-2018 to 2019-2020. The ratio is 0.02 for the next two periods 2020-2021 to 2021-2022. Ratio less than 1 indicates that all fixed assets are purchased out of proprietor's fund and a part of proprietor's fund is invested in working capital.
- The net sales got increased during the year 2017 – 2018 to 2019 - 2020 but show a slight downfall during the year 2020 – 2021. Based on the sales, the gross profit shows an increase during the year 2017 – 2018 to 2019 – 2020, but shows a slight downfall during the year 2020 – 2021. The gross profit ratio shows a decreasing trend during the period 2019 – 2020 to 2021 - 2022.
- The gross profit ratio is found to be high 14.33 during the year 2018 – 2019, while it is found to be low 10.5 during the year 2021 – 2022. The gross profit ratio during the five years has increased for the first year and shows a decreasing trend from the second year. However, the gross profit ratio shows a decreasing trend which may be due to the pandemic.
- The net sales got increased during the year 2017 – 2018 to 2019 - 2020 but show a slight downfall during the year 2020 – 2021. Based on the sales, the net profit shows an increase during the year 2017 – 2018 to 2019 - 2020 but shows a slight downfall during the year 2020 – 2021. The net profit ratio shows an increasing trend during the first four years and shows a downfall in the last year of study.
- The net profit ratio is high 8.55 during the year 2020 – 2021 and the ratio is at its lowest 7.6 during the year 2017 – 2018 and 2021 – 2022. The net profit ratio during the first four years it is in increasing trend and it shows a downfall during the last year. This may be due to the covid pandemic.
- The net sales got increased during the year 2017 – 2018 to 2019 - 2020 but show a slight downfall during the year 2020 – 2021. Based on the operating profit shows an increase during the year 2017 – 2018 to 2019 - 2020 but shows a slight downfall during the year 2020 – 2021.

The net profit ratio shows an increasing trend during the first four years and shows a downfall in the last year of study.

- the net profit ratio is high 8.55 during the year 2020 – 2021 and the ratio is at its lowest 7.6 during the year 2017 – 2018 and 2021 – 2022. The net profit ratio during the first four years it is in increasing trend and it shows a downfall during the last year. This may be due to the covid pandemic.
- The average return on investment is 116.7. Return on investment has increased during the first year and it is constant during the period 2019-2020. It again shows an increasing trend and finally it shows a decreasing trend during the year 2021-2022. The EBIT shows an increasing trend, but shows a decreasing trend during the period 2020-2021
- The return-on-investment curve is a fluctuating curve, its lowest is during the period 2020-2021. Its highest is during the period 2019-2020. The firm has sufficient return on capital employed. Its ideal ratio is 15% and more. Overall, the firm's profitability is very high and shows that there is efficient use of capital employed. The downfall during the year 2020-2021 was due to the pandemic situation.
- There is an increase of working capital during the year 2017 – 18. Except cash in hand and sundry debtors, all the other components of current assets increased during the year 2018 when compared to 2017. The current liabilities also got increased during the year 2018 when compared to 2017. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 14898.7
- There is an increase of working capital during the year 2018 – 19. Except cash in hand, all the other components of current assets increased during the year 2019 when compared to 2018. The current liabilities also got increased during the year 2019 when compared to 2018. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 32620.4
- There is an increase of working capital during the year 2019 – 20. Except bank accounts, all the other components of current assets increased during the year 2020 when compared to 2019. The current liabilities got decreased during the year 2020 when compared to 2019. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 64629.5

- There is an increase of working capital during the year 2020 – 21. Except closing stock and cash in hand, all the other components of current assets increased during the year 2021 when compared to 2020. The current liabilities got increased during the year 2021 when compared to 2020. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 114747.8
- There is an increase of working capital during the year 2021 – 22. Except sundry debtors, all the other components of current assets increased during the year 2022 when compared to 2021. The current liabilities got increased during the year 2022 when compared to 2021. The end result of statement of changes in working capital after comparing all the increases and decreases is the net increase in the amount of working capital. The above table shows that the working capital increased to about Rs. 23067.3

5.2 SUGGESTIONS & RECOMMENDATIONS

The way of working capital was managed has a significant impact on both profitability and liquidity. The company should concentrate on the current ratio by utilizing current asset for productive purpose in order to achieve better results in matching the standard ratio. The company should take necessary steps to make use of the quick asset for the development of the company and should balance with the standard ratio. The net working capital ratio is high, this shows that the firm is highly liquid. More liquidity the company is, show a high risk for the company, as it affects its capital structure. There the firm has to reduce the liquidity by maintaining its standard.

The solvency ratios are above the standard. Both the solvency ratio and the fixed asset to net worth ratio calculated show that the company has sufficient asset to repay its debt. Though, the firm has sufficient asset, it should concentrate on optimum use of its assets by reducing its debts. The profitability ratios calculated show that the firm is in good financial position. A slight downfall can be found during the year 2020-2021. This is mainly because of the pandemic situation. Therefore, the firm has to work harder and stronger to improve its financial conditions.

The changes in working capital show good results but even though the company should concentrate on increasing the current assets and reducing the current liabilities in order to increase the working capital.

5.4 CONCLUSION

The study conducted on financial performance analysis at “Ara software private limited.” gives a view of assessing the performance of working capital management of the company by analysing the financial data with the help of ratio analysis.

During the period of study, there were a few up and downs in the working capital and ratio analysis it will affect the operations of the company but it is observed that the overall financial position is good. The Ara software pvt ltd resources utilization has been very low. The company has to take necessary steps to utilize current asset to improve profitability. The firm should also see to that they reduce their liquidity as it affects their capital structure. The company shows a slight downfall in their financial analysis during the year 2020-2021. This is because of the pandemic situation. It is anticipated that the profitability will improve in the coming years.

Based on the analysis and interpretation findings and suggestions has been given.

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ANNEXURE

CONSOLIDATED BALANCE SHEET OF ARA SOFTWARES FROM 2017 - 2022

Invested capital 10000000
All value in Rs.00's

Date: march 31st, 2022

2017 – 18

CURRENT ASSETS	179252
CURRENT LIABILITIES	49255.3
QUICK ASSETS	96786
QUICK LIABILITIES	43241
GROSS PROFIT	140567
NET PROFIT	79231
NET SALES	1047876
OPERATING PROFIT	120567
TOTAL ASSET	106393
TOTAL DEBT	91187
FIXED ASSET	3607
NET WORTH	106291

2018 – 19

NET SALES	1049737
CURRENT ASSETS	219363
QUICK ASSETS	115905
CURRENT LIABILITIES	56745.9
QUICK LIABILITIES	50414
GROSS PROFIT	150456
NET PROFIT	80456
OPERATING PROFIT	128456
TOTAL ASSET	124454
TOTAL DEBT	104022
FIXED ASSET	4030
NET WORTH	149209

2019 – 20

NET SALES	1237490
CURRENT ASSETS	253435.6
QUICK ASSETS	121750
CURRENT LIABILITIES	26189
QUICK LIABILITIES	26189
GROSS PROFIT	156874
NET PROFIT	96874
OPERATING PROFIT	133874
TOTAL ASSET	153051
TOTAL DEBT	129213
FIXED ASSET	4431
NET WORTH	170986

2020 -21

NET SALES	1047589
CURRENT ASSETS	375242.4
QUICK ASSETS	211099
CURRENT LIABILITIES	33248
QUICK LIABILITIES	33248
GROSS PROFIT	124850
NET PROFIT	89550
OPERATING PROFIT	99850
TOTAL ASSET	174687
TOTAL DEBT	147054
FIXED ASSET	4909
NET WORTH	203724

2021 – 2022

NET SALES	1197854
CURRENT ASSETS	400457.8
QUICK ASSETS	356783
CURRENT LIABILITIES	35396.1
QUICK LIABILITIES	35396
GROSS PROFIT	125678
NET PROFIT	91032
OPERATING PROFIT	100678
TOTAL ASSET	185423
TOTAL DEBT	155987
FIXED ASSET	5347
NET WORTH	249737

