

A Project Report
On
**“A COMPARATIVE ANALYSIS OF WORKING CAPITAL
MANAGEMENT OF CEMENT HOME, NAGPUR FOR THE YEAR
2020-21 AND 2021-22”**

Submitted to:
DMSR
G. S. College of Commerce and Economics, Nagpur
(An Autonomous Institution)

In partial fulfillment for the award of the degree of
Master of Business Administration

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Academic Year 2022-2023

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Academic Year 2022-2023

CERTIFICATE

This is to certify that **KAUSAR MAKDA** has submitted the project report titled, **“A Comparative Analysis of Working Capital Management of Cement Home, Nagpur for the Year 2020-21 and 2021-22.”** towards the partial fulfillment of **MASTER OF BUSINESS ADMINISTRATION** degree Examination. This has not been submitted for any other examination and does not form part of any other course under gone by the candidate.

It is further certified that he has ingeniously completed his project as prescribed by **DMSR, G. S. College of Commerce and Economics, Nagpur, (NAAC Reaccredited "A" Grade Autonomous Institution)** affiliated to **Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.**

Prof. Leena Kapse

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Place: Nagpur

Date:

**Department of Management Sciences and Research,
G.S. College of Commerce & Economics, Nagpur
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Academic Year 2022-2023

DECLARATION

I here-by declare that the project with title **"A Comparative Analysis of Working Capital Management of Cement Home, Nagpur for The Year 2020-21 And 2021-22."** has been completed by me in partial fulfillment of **MASTER OF BUSINESS ADMINISTRATION** degree examination as prescribed by **DMSR, G. S. College of Commerce and Economics, Nagpur, (NAAC Reaccredited "A" Grade Autonomous Institution)** affiliated to **Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur** and this has not been submitted for any other examination and does not form the part of any other course undertaken by me..

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Place: Nagpur

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Academic Year 2022-2023

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I will fail in my duty if I do not thank the non-Teaching staff of the college for their Co-operation.

I would like to thank all those who helped me in making this project complete and successful.

KAUSAR MAKDA

Place: Nagpur

Date:

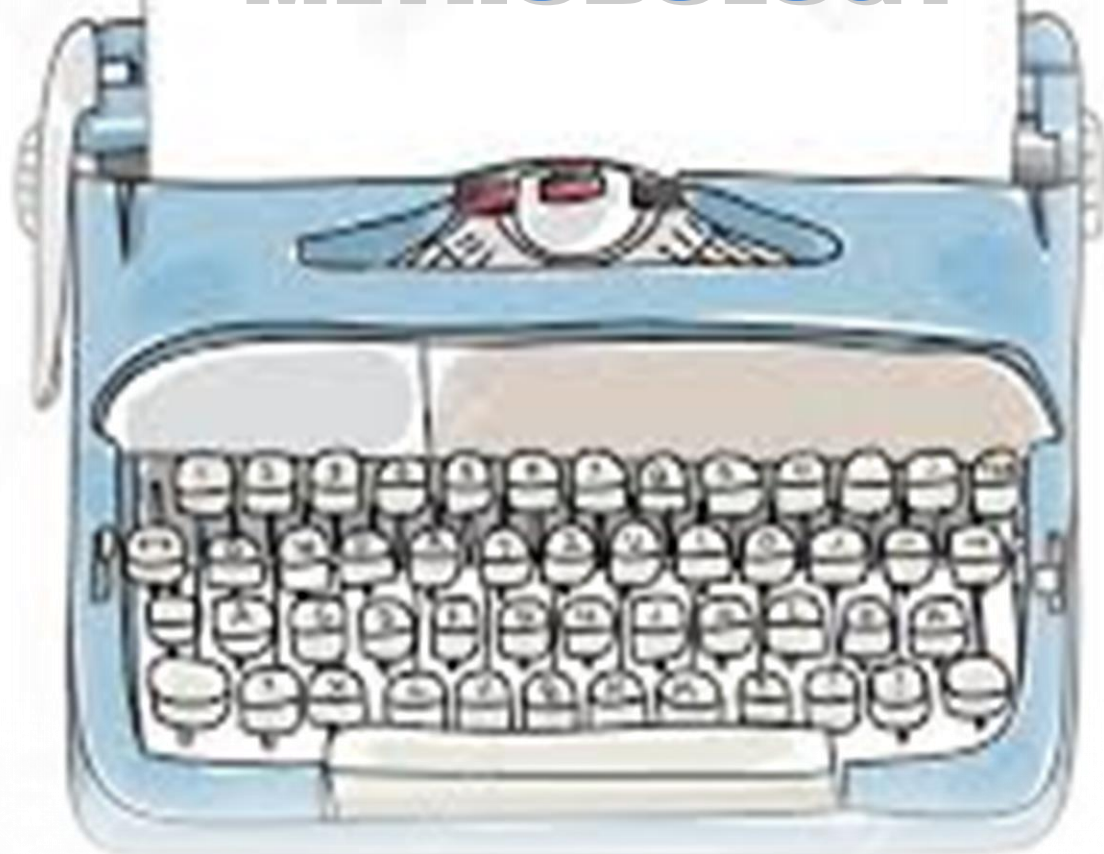
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**INTRODUCTION
AND
RESEARCH
METHODOLOGY**



INTRODUCTION & RESEARCH METHODOLOGY



1.1 INTRODUCTION

Working capital is a financial metric which represents operating liquidity available to a business, organization, or other entity, including governmental entities. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. Gross working capital is equal to current assets. Working capital is calculated as current assets minus current liabilities. If current assets are less than current liabilities, an entity has a working capital deficiency, also called working capital deficit.

A company can be endowed with assets and profitability but may fall short of liquidity if its assets cannot be readily converted into cash. Positive working capital is required to ensure that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash.

Working capital is also known as net working capital.

INTRODUCTION AND RESEARCH METHODOLOGY

Working capital is computed as the sum of: Inventories (+) Trade receivables (+) Cash (-) Trade payables. The working capital cycle (**WCC**), also known as the cash conversion cycle, is the amount of time it takes to turn the net current assets and current liabilities into cash. The longer this cycle, the longer a business is tying up capital in its working capital without earning a return on it. Companies strive to reduce their working capital cycle by collecting receivables quicker or sometimes stretching accounts payable. Under certain conditions, minimizing working capital might adversely affect the company's ability to realize profitability, e.g., when unforeseen hikes in demand exceed inventories, or when a shortfall in cash restricts the company's ability to acquire trade or production inputs.

INDUSTRY PROFILE

Cement industry of India is the second largest producer of cement in world. In financial year 2012-2013, the total cement production capacity is about 347 million tonnes. It contributes very high in Indian GDP. Housing is the major sector of cement consumption about 67% of the total consumption. Cement industry is very vast and higher revenue is being paid by this sector to government of Rajasthan.

Last decade cement industry has a compound growth of 8% with increase in housing sector. In recent years the growth is not so good as compared to earlier decade, because of slow economic growth. Cement, being a bulk commodity, the per capita consumption is still very less, and because of this there is high possibility of growth of cement industry. At present Lafarge, Ultratech and Wonder cement have installed high capacitive plants which will further increase the production of cement in India. India is very vast

And this makes cement industry to divide in five regions. North, East, West, South and Central region, so that transport and logging can be easy for cement dealers and consumers. The south region has the highest installed capacity of cement from other regions. One third of total capacity is produced by southern region. Large cement and other cement companies have ventured into Indian market with new highly capacitive plants. Holmic has acquired the two major cement companies and now become the leader of one third of the total cement production. At present the economy is likely to remain sluggish for cement industry, but with the increase in GDP, cement production and consumption both will rise with a boost. Overall growth of Indian economy affects the housing sector and it directly affects cement consumption rate in India. India is producing 350 million tonnes per year and it is expected to grow to 550 million tonnes by financial year 2020. India is very vast, so the development of cities and rural areas will certainly start from infrastructure and demand of cement will increase also.

As economy will rise, development of cities and rural areas would increase cement demand in India. Cement industry plays an important role in development of a country and has a correlation with Indian GDP also. Projects are coming to make the world's highest bridge over Himalayas, expecting to be completed in 2016.

INTRODUCTION AND RESEARCH METHODOLOGY

Indian cement industry will be soon among the highest contributor in the growth of economy. As potential market of cement is increasing day by day, production of cement will raise and drive our economic growth also. It is expected that in the coming years cement industry will have high market share because of the upcoming housing projects and infrastructure development programs in India. Ultratech cement, Ambuja cement, J.K.cement, Shree cement and ACC cement are the top players of cement industry in India.3 FDI worth Rs 13,546.47 crore was attracted by gypsum and cement in the year 2000 June and July 2014 Ambuja cement is going to invest approximately 800 crore in various regions of India. Ultratech will start its third plant in adityapuram with a very high-capacity production plant

COMPANY PROFILE

Good home needs a good planning. Established on 18th January 2000 as Cement Home, a proprietary concern. A prominent trader and supplier of Ultratech Cement. It is widely demanded across diverse industries and assures absolute quality compliance.

Cement Home cover the whole of Nagpur District for instance in Nagpur, Kanhaan, Wadi, Hingna and many more. The superior range of cement is offered and it also makes sure that the products are packed properly for safety during storage and transits.

This product fulfils the varied requirements of the institutional, infrastructural an industrial sector. The unassailable positions have been gained over the years. Hard work done for so many years is the instrument in the success and is vital for growth in the cement domain.

1.2 INTRODUCTION TO 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. Research is a careful investigation or inquiry specifically through search for new facts in any branch of knowledge.

1.3 RATIONALE OF STUDY

This study is important for the working capital structure in major aspects. It gives understanding of practical approach or implementation overview. It also provides comparative overview of working capital structure, provision in cement industries. So, the significance of this study is very high and vital. It may also be useful to make further policies in the company to achieve ideal working capital

1.4 PROBLEM STATEMENT

After going through existing literatures, reviewing various guides and knowledgeable discussion with the concerned respected guide, also after considering available information, data, existing literature, external sources of information the following problem statement was framed to work on: A comparative analysis of working capital management of Cement Home, Nagpur for the year 2020-21 and 2021-22

1.5 OBJECTIVES

1. To study the concept of working capital management.
2. To study various factors affecting working capital.
3. To measure and analyze the working capital of Cement Home for the year 2020-21 and 2021-22.
4. To compare the working capital of Cement Home for the year 2020-21 and 2021-22.

1.6 RESEARCH DESIGN

“The research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”.

The research design followed to study the working capital management is

- **MEASUREMENT TOOL**

Ratio analysis

1.7 DATA COLLECTION

- ❖ **PRIMARY DATA:** Primary data was collected from financial statements of 2020-21 & 21-22 for analysis of working capital.
- ❖ **SECONDARY DATA:** The secondary data are those which have already collected and stored. Secondary data easily get those secondary data from records, journals, annual reports of the company etc. It will save the time, money and efforts to collect the data. Secondary data also made available through trade magazines, annual reports, books etc.

This project is based on secondary data collected through annual report from 2020-21 & 21-22 of the proprietary concern. The data collection was aimed at study of working capital management of the concern

1.8 HYPOTHESIS TESTING

Hypothesis 1:

Null Hypothesis (H_0): There is no positive relationship between working capital and profitability of a business.

Alternate Hypothesis (H_1): There is a positive relationship between working capital and profitability of a business.

Hypothesis 2:

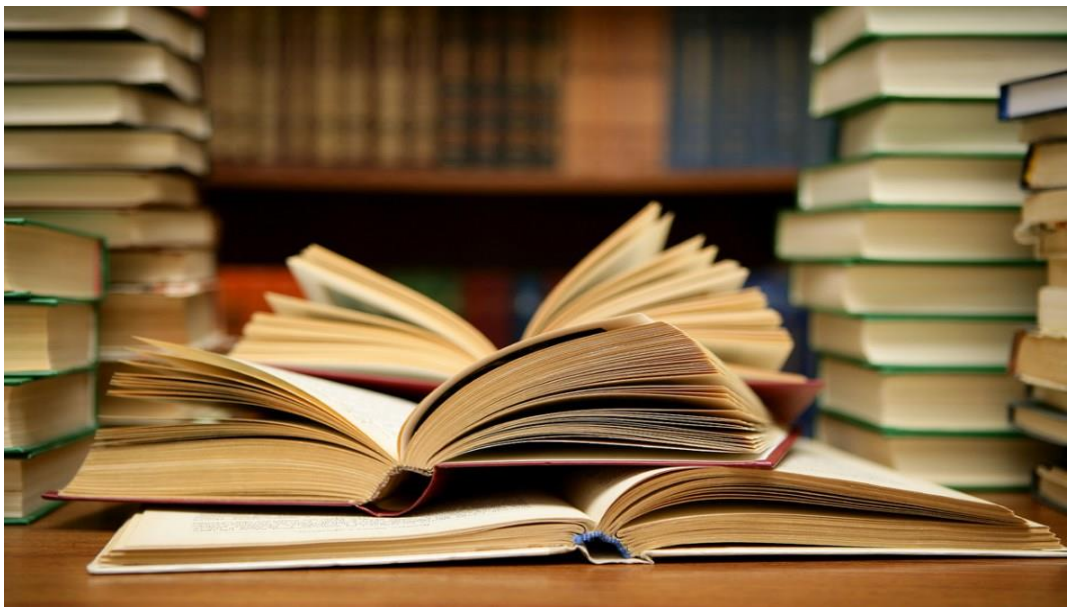
Null Hypothesis (H_0): There is no significant difference in the current ratio of the year 2020-21 and 2021-22.

Alternate Hypothesis (H_1): There is a significant difference in the current ratio of the year 2020-21 and 2021-22

1.9 LIMITATIONS

1. Time is the major limitation for the project for the data collection.
2. Limited area of study for the project for the data collection.
3. Project is limited to financial year 2020-21 and 2021-22.

REVIEW OF LITRATURE



REVIEW OF LITERATURE



A literature review or narrative review is a type of review article. A literature review is a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature review are secondary sources, and do not report new or original experimental work. Most often associated with academic-oriented literature, such reviews that may also appear in the same publication. Literature reviews are basis for research in nearly every academic field.

- **Pass C.L, Pike R.H: “An overview of working capital management and corporate financing” (1984).** Studied over the past 40 years major theoretical developments have occurred in the areas of longer-term investment and financial decision making. Many of these new concepts and the related techniques are now being employed successfully in industrial practice. By contrast, far less attention has been paid to the areas of short-term finance, in particular that of working capital management. Such neglect might be acceptable were working capital considerations of relatively little importance to the firm, but effective working capital management has a crucial role to play in enhancing the profitability and growth of the firm.

Indeed, experience shows that inadequate planning and control of working capital is one of the more common causes of business failures.

- **Hardcastle J: “Working capital management” (2009).** Studied that working capital, sometimes called gross working capital, and simply refers to the firm’s total current assets (the short-term ones), cash, marketable securities, account receivables, and inventory. While long-term financial analysis primarily concerns strategic planning, working capital management deals with day-to-day operations. By making sure that the production lines do not stop due to lack of raw material, that inventories do not build up because production continues unchanged when sales dip, that customers pay on time and that enough cash is on hand to make payments when they are due. Obviously without good working capital management, no firm can be efficient and profitable.
- **Thachappilly G: “Working capital management manages flow of funds” (2009).** Describes that working capital is the cash needed to carry on operations during cash conversion cycle, i.e., the days from paying for raw material to collecting cash from customers.
Raw material and operating suppliers must be bought and stored to ensure uninterrupted production. Wages, salaries, utility charges and other incidentals must be paid for converting the material into finished products. Customers must be allowed a credit period that is standard in the business. Only at the end of this cycle does cash flows in again.
- **Dubey R: “Working capital management- an effective tool for organisational success” (2008).**
Studied that working capital in a firm generally arises out of four basic factors like sales volume, technological changes, seasonal, cyclical changes and policies of the firm. The strength of the firm is dependent on the working capital as discussed earlier but this working capital is itself dependent on the level of sales volume of the firm. The firm requires current assets to support and maintain operational or functional activities. By current assets we mean the assets which can be converted readily into

cash say within a year such as receivables, inventories and liquid cash. If the level of sales is stable and towards growth the level of cash, receivables and stock will also be on the high

- **McClure B: “Working capital works” (2007).**

Describes that cash is the lifeline of the company. If this lifeline deteriorates, so does the company’s ability to fund operations, reinvest and meet capital requirements and payments. Understanding a company’s cash flow health is essential for making investment decisions. A good way to judge a company’s cash flow prospect is to look at its working capital management. Cash is king, especially at a time when fund raising is harder than ever. Letting it slip away is an oversight that investors should not forgive. Analysing a company’s working capital can provide excellent insight into how well a company handles its cash and whether it is likely to have any on hand to fund growth and contribution to shareholders value.

- **Gass D: “How to improve working capital management” (2006).**

Studied “Cash is the lifeblood of business” is an often-repeated maxim amongst financial managers. Working capital management refers to the management of current or short-term assets and short-term liabilities. Components of short-term assets include inventories, loans, advances, debtors, investments and cash and bank balances. Short-term liabilities include creditors, trade advances, and borrowings and provisions. The major emphasis is however, on short-term assets. It is important that companies minimize risk by prudent working capital management.

- **Thomas M. Kruger: “An analysis of working capital management results across industries” (2005).**

He studied distinct level of working capital management measures for different industries, which tends to be stable over time. Many factors help to explain this discovery. The improving economy during the period of study may have resulted in improved turnover in some industries, while slowing turnover may have been a signal of trouble ahead. Our results should be interpreted cautiously. Our study takes place over a short time frame during a generally improving market. In addition, the survey

suffers from survivorship bias- only the top firms within each industry are ranked each year and the composition of those firms within the industry can change annually

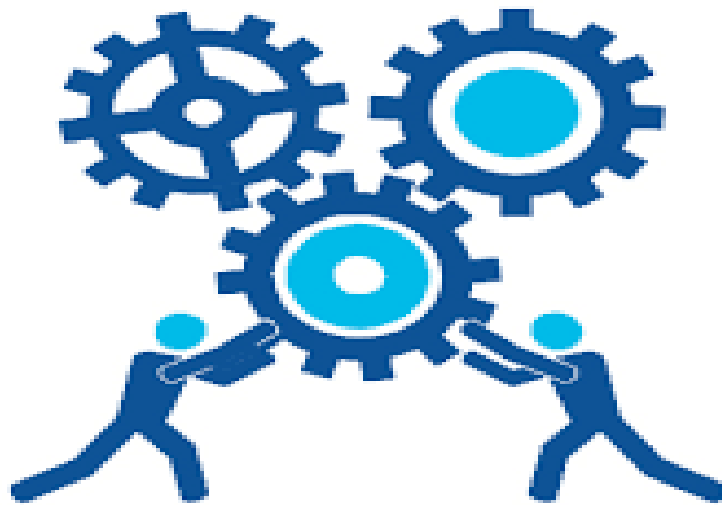
- **Kouma Guy: “Working capital management in healthcare” (2001).**

Working capital is required to finance the day-to-day operations of an organisation. Working capital may be required to bridge the gap between buying of stocked items to eventually payment for goods sold on account. Working capital also has to fill the gap when products are on hand but being held in stock. Products in stocks are at full cost, effectively they are company’s cash resources which are out of circulation therefore additional working capital is required to meet this gap which can be reclaimed when the stock are sold and payment for them is received. Working capital requirements have to do with profitability and much more to do with cash flow.

- **Eljelly: “Cash conversion cycle” (2002).**

Euphorically examined the relationship between profitability and liquidity. As measured by current ratio and cash gap on a sample of certain companies using correlation and regression analysis. Found significant negative relationship between the firm’s profitability and its liquidity level, as measured by current ratio and long cash conversion cycle. At the industry level, however, he found that the cash conversion cycle or the cash gap is of more importance as a measure of liquidity than current ratio that affects profitability. The firm size variable was also found to have significant effect on profitability at the industry level.

WORKING CAPITAL



WORKING CAPITAL MANAGEMENT



MEANING & DEFINATION:

Working Capital is basically an indicator of the short-term financial position of an organization and is also a measure of its overall efficiency. Working Capital is obtained by subtracting the current liabilities from the current assets. This ratio indicates whether the company possesses sufficient assets to cover its short-term debt. Working Capital indicates the liquidity levels of companies for managing day-to-day expenses and covers inventory, cash, accounts payable, accounts receivable and short-term debt that is due.

ACCORDING TO WESTON AND BRIGHAM:

“Working capital refers to firm investment in short term assets, cash, short term securities account receivable and inventories”.

CONCEPT OF WORKING CAPITAL:

The funds invested in current assets are termed as working capital. It is the fund that is needed to run the day-to-day operations. It circulates in the business like the blood circulates in a living body. Generally, working capital refers to the current assets of a company that are changed from one form to another in the ordinary course of business, i.e. from cash to inventory, inventory to work in progress (WIP), WIP to finished goods, finished goods to receivables and from receivables to cash.

There are two concepts in respect of working capital:

(i) Gross working capital and

(ii) Networking capital

Gross Working Capital:

The sum total of all current assets of a business concern is termed as gross working capital.

So, Gross working capital = Stock + Debtors + Receivables + Cash.

Net Working Capital:

The difference between current assets and current liabilities of a business concern is termed as the Net working

Hence, Net Working Capital = Stock + Debtors + Receivables + Cash – Creditors – Payables.

NATURE OF WORKING CAPITAL

1. It is used for purchase of raw materials, payment of wages and expenses.
2. It changes form constantly to keep the wheels of business moving.
3. Working capital enhances liquidity, solvency, creditworthiness and reputation of the enterprise.
4. It generates the elements of cost namely: Materials, wages and expenses.
5. It enables the enterprise to avail the cash discount facilities offered by its suppliers.
6. It helps improve the morale of business executives and their efficiency reaches at the highest climax.
7. It facilitates expansion programs of the enterprise and helps in maintaining operational efficiency of fixed assets.

NEED OF WORKING CAPITAL

1. Adequate working capital is needed to maintain a regular supply of raw materials, which in turn facilitates smoother running of production process
2. Working capital ensures the regular and timely payment of wages and salaries, thereby improving the morale and efficiency of employees.
3. Working capital is needed for the efficient use of fixed assets.
4. In order to enhance goodwill a healthy level of working capital is needed. It is necessary to build a good reputation and to make payments to creditors in time.
5. Working capital helps avoid the possibility of under-capitalization.
6. It is needed to pick up stock of raw materials even during economic depression.
7. Working capital is needed in order to pay fair rate of dividend and interest in time, which increases the confidence of the investors in the firm.

IMPORATANCE OF WORKING CAPITAL

It is said that working capital is the lifeblood of a business. Every business needs funds in order to run its day-to-day activities.

The importance of working capital can be better understood by the following:

1. It helps measure profitability of an enterprise. In its absence, there would be neither production nor profit.
2. Without adequate working capital an entity cannot meet its short-term liabilities in time.
3. A firm having a healthy working capital position can get loans easily from the market due to its high reputation or goodwill.
4. Sufficient working capital helps maintain an uninterrupted flow of production by supplying raw materials and payment of wages.
5. Sound working capital helps maintain optimum level of investment in current assets.
6. It enhances liquidity, solvency, credit worthiness and reputation of enterprise.
7. It provides necessary funds to meet unforeseen contingencies and thus helps the enterprise run successfully during periods of crisis.

COMPONENTS OF WORKING CAPITAL

- **Current Assets:**

Current assets are the one side of working capital formula. They can be defined as, type of assets which are easily convertible to cash in less than one year are called current assets Current assets are mainly utilized to meet the requirements of daily operations of the business.

Working capital management is mainly controlled by managing current assets of the business. Current assets are composed of cash and bank balances, trade receivables, short term advances, prepaid expenses, inventory and short-term investments. Let us understand some of components in the below section

- **Cash and Cash Equivalents**

You will see the term cash under the current assets in the balance sheet. This is the most liquid of funds and very essential for every business to maintain the smooth operations of their business. Sufficient amount of cash should be present with the company to fill any unexpected gaps in the production and sales cycle.

- **Account Receivables:**

The account receivable is the amount of money receivable from clients arises due to credit sales by the company in the normal course of business. You will find account receivables on the company's balance sheet under the current assets. The important point is that they are classified as assets but in real, they are not available for usage until realized in more liquid form. This is an important component of working capital management and should be efficiently managed improves the financial health of the company's operations.

- **Inventory:**

Stock / Inventory are the goods, which purchased by company with a view to resell in the market and earn profits. The turnover of inventory determines how the successful the business is.

- **Accounts Payable:**

Accounts payable are the obligation upon company to pay off its debt due from its creditors, and suppliers. Accounts payable comes under the head of current liabilities and one of the major components of working capital management. Accounts payable can be managed through negotiations with creditors to extend the payment period. Like the management of account receivable and inventory, accounts payable management is also a key component in managing working capital. If the company fails to get a longer period for its short-term debts while its own collection period is slightly longer as compared, then there is a chance that shortage of cash may arise. This may lead to financial crises.

TYPES OF WORKING CAPITAL

1. Permanent Working Capital

It is otherwise called as **Fixed Working Capital**. Tandon committee has referred to this type of working capital as **Hard-Core Working Capital**.

Permanent working capital implies the base investment amount in all types of current resources which is respected at all times to carry on business activities. The value of current assets has been increased or decreased over a period of time. Even though, there is a need of having minimum level of current assets at all times in order to carry on the business activities effectively.

2. Temporary Working Capital

It is otherwise called as Fluctuating or Variable Working Capital. There is a close relationship prevailing between temporary working capital and the level of production and sales. There is no uniform production and sales throughout the year. If heavy order is received for production and there is a large amount of credit sales, there is a need of more amount of temporary working capital. At the same time, if production is carried on in anticipation of demand in near future, temporary working capital is required. In nutshell, temporary working capital is an **extra working capital** required to support the changing production and sales activities.

3. Gross & Net Working Capital

Gross working capital is the sum of all of a company's current assets (assets that are convertible to cash within a year or less). Gross working capital less current liabilities is equal to net working capital, or simply "working capital", a more useful measure for balance sheet analysis

4. Negative Working Capital

Sometimes, the value of current assets is less than the current liabilities, it shows negative working capital. If such type of situation arises, the firm is going to meet the financial crisis very shortly.

5. Reserve Working Capital

It is otherwise called as **Cushion Working Capital**. It refers to the short term financial arrangement made by the business units to meet uncertain changes or to meet uncertainties. A firm is always working with the expectation of some risks which may be controllable or uncontrollable. The reserve working capital can be used in order **to meet the uncontrollable risks** and sustain in the business world

6. Regular Working Capital

The minimum amount of working capital to be maintained in normal condition is called Regular Working Capital.

7. Seasonal Working Capital

Some products have seasonal demand. Seasonal demand arises due to festival. In this way, seasonal working capital means an amount of **working capital maintained to meet the seasonal demand** of the product

8. Special Working Capital

Special programs may be conducted for business development. The programs may be advertisement campaign, sales promotion activities, product development activities, marketing research activities, launching of new products, expansion of markets and the like. Therefore, special working capital means an amount of working capital maintained to meet the expenses of special programs of the company.

DETERMINANTS OF WORKING CAPITAL

1. Nature of business:

It is an important factor for determining the amount of working capital needed by various companies. The trading or manufacturing concerns will require more amount of working capital along-with their fixed investment of stock, raw materials and finished products. Public utilities and railway companies with huge fixed investment usually have the lowest needs for current assets, partly because of cash, nature of their business and partly due to their selling a service instead of a commodity. Similarly, basic and key industries or those engaged in the manufacture of producer's goods usually have less proportion of working capital to fixed capital than industries producing consumer goods.

2. Length of period of manufacture:

The average length of the period of manufacture, i.e., the time which elapses between the commencement and end of the manufacturing process is an important factor in determining the amount of the working capital.

If it takes less time to make the finished product, the working capital required will be less. To give an example, a baker requires one night time to bake his daily quota of bread. His working capital is, therefore, much less than that of a shipbuilding concern which takes three to five years to build a ship. Between these two cases may fall other business concerns with varying periods of manufacture requiring different amounts of working capital.

3. Volume of business:

Generally, the size of the company has a direct relation with the working capital needs. Big concerns have to keep higher working capital for investment in current assets and for paying current liabilities.

4. The proportion of the cost of raw materials to total cost:

Where the cost of raw materials to be used in manufacturing of a product is very large in proportion to the total cost and its final value, working capital required will also be more.

That is why, in a cotton textile mill or in a sugar mill, huge funds are required for this purpose. A building contractor also needs huge working capital for this reason. If the importance of materials is less, as for example in an oxygen company, the needs of working capital will be naturally not more.

5. Use of Manual Labour or Mechanization:

In labour intensive industries, larger working capital will be required than in the highly mechanized ones. The latter will have a large proportion of fixed capital. It may be remembered, however, that to some extent the decision to use manual labour or machinery lies with the management. Therefore, it is possible in most cases to reduce the requirements of working capital and increase investments in fixed assets and vice versa.

6. Need to keep large stocks of raw materials of finished goods:

The manufacturing concerns generally have to carry stocks of raw materials and other stores and also finished goods. The larger the stocks (whether of raw materials or finished goods) more will be the needs of working capital.

In certain lines of business, e.g., where the materials are bulky and have to be purchased in large quantities, (as in cement manufacturing), stock piling of raw-material is used.

Similarly, in public utilities, which must have adequate supplies of coal to assure regular service, stock piling of coal is necessary. In seasonal industries finished goods stocks have to be stored during off seasons. All these require large working capital.

7. Turnover of working capital:

Turnover means the speed with which the working capital is recovered by the sale of goods. In certain businesses, sales are made quickly and the stocks are soon exhausted and new purchases have to be made. In this manner, a small amount of money invested in stocks will result in sales of much larger amount.

Considering the volume of sales, the amount of working capital requirements will be rather small in such type of business. There are other businesses where sales are made irregularly.

For example, in case of jewelers, costly jewellery may remain locked up in the show-window for a long period before it catches the fancy of a rich lady.

In such cases, large sums of money have to be kept invested in stocks. But a baker or a news-hawker may be able to dispose of his stocks quickly, and may, therefore, need much smaller amounts by way of working capital.

8. Terms of Credit:

A company purchasing all raw-materials for cash and selling on credit will be requiring more amount of working capital. Contrary to this, if the enterprise is in a position to buy on credit and sell it for cash, it will need less amount of working capital. The length of the period of credit has a direct bearing on working capital.

The essence of this is that the period which elapses between the purchase of materials and sale of finished goods and receipts of sale proceeds, will determine the requirements of working capital.

9. Seasonal Variations:

There are some industries which either produce goods or make sales only seasonally. For example, the sugar industry produces practically all the sugar between December and April and the woolen textile industry makes its sales generally during winter.

In both these cases the needs of working capital will be very large, during few months {i.e., season). The working capital requirements will gradually decrease as and when the sales are made.

10. Requirements of Cash:

The need to have cash in hand to meet various requirements e.g., payment of salaries, rents, rates etc., has an effect on the working capital. The more the cash requirements the higher will be working capital needs of the company and vice versa

11. Other Factors:

In addition to the above-mentioned considerations there are also a number of other factors which affect the requirements of working capital. Some of them are given below.

- i. Degree of co-ordination between production and distribution policies.
- ii. Specialization in the field of distribution.
- iii. Developments of means of transportation and communications.
- iv. The hazards and contingencies inherent in the type of business.

DATA INTERPRETATION



DATA INTERPRETATION



- WORKING CAPITAL**

The capital of a business which is used in its day-to-day trading operations, calculated as the current assets minus the current liabilities.

WORKING CAPITAL = CURRENT ASSETS − CURRENT LIABILITIES



Working Capital
Formula



Current Assets



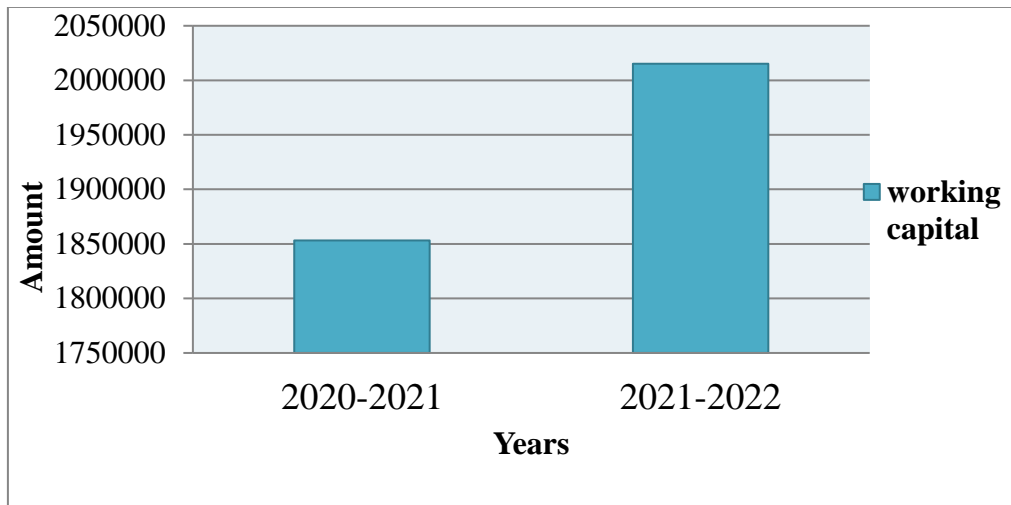
Current Liabilities

= Current Assets – Current Liabilities

TABLE: 4.1(WORKING CAPITAL)

	2020-2021	2021-2022
Current Assets	19,35,787	22,46,814
Current Liabilities	82,707	2,31,536
Working Capital	18,53,080	20,15,278

GRAPH: 4.1(WORKING CAPITAL)



Interpretation: The working capital was calculated by subtracting current liabilities from current assets. It is a measure of balance sheet analysis.

Cement Home has a working capital in the year 2020-21 recorded as 18,53,080 and in the year 2021-22 it was 20,15,278. The increasing trend was observed in working capital as the working capital of year 2021-22 exceeds 2020-21 by 162,198.

• **CURRENT RATIO**

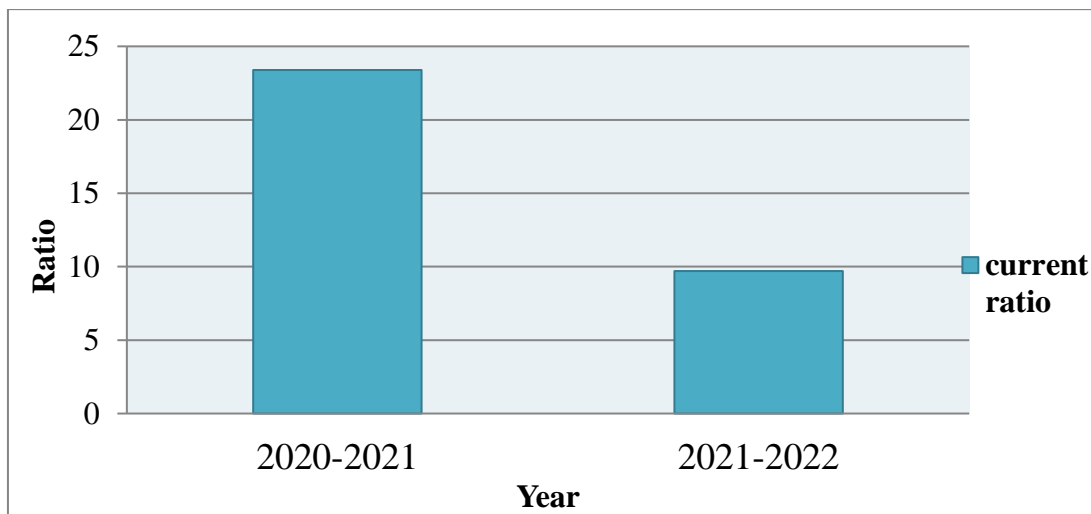
Current ratio is a liquidity ratio that measures a company’s ability to pay short-term obligations or those due within one year. It indicates the financial health of a company. It is calculated by dividing current assets by current liabilities.

$$\text{CURRENT RATIO} = \frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}}$$

TABLE: 4.2(CURRENT RATIO)

	2020-2021	2021-2022
Current Assets	19,35,787	22,46,814
Current Liabilities	82,707	2,31,536
Current ratio	23:40	9:70

GRAPH: 4.2(CURRENT RATIO)



Interpretation: The current ratio is calculated by dividing current assets with current liabilities. It is a measure of firm’s short-term solvency. As conventional rules a current ratio of 2:1 is satisfactory. Cement Home has a current ratio in the year 2020-21 as 23.40 and in the year 2021-22 it was 9.70. As observed it was in a decreasing trend but the ratio is above the standard ratio.

• **ABSOLUTE LIQUIDITY RATIO**

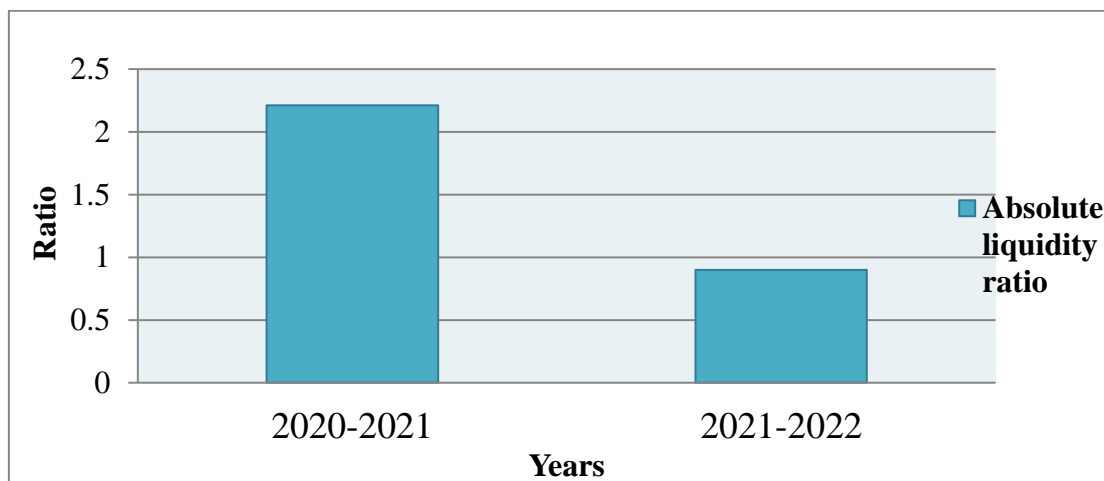
Absolute liquid ratio relates cash, bank and marketable securities to the current liabilities; it means absolute liquid assets worth one half of the value of current liabilities are sufficient for satisfactory liquid position of a business.

$$\text{ABSOLUTE LIQUID RATIO} = \frac{\text{CASH IN HAND+BANK}}{\text{CURRENT LIABILITIES}}$$

TABLE: 4.3(ABSOLUTE LIQUIDITY RATIO)

	2020-2021	2021-2022
Cash in hand + bank	1,83,224	2,09,572
Current Liabilities	82,707	2,31,536
Absolute liquid ratio	2.21	0.90

GRAPH: 4.3(ANBSOLUTE LIQUIDITY RATIO)



Interpretation: The absolute liquidity ratio was 2.21 for the year 2020-21 and 0.90 for the year 2021-22 here; the absolute liquidity ratio of 2021-22 is less than that of 2020-21

The absolute liquidity ratio is above the standard of 0.5:1. Hence, it shows that the liquidity position of the concern is good. Additional cash balance need not to be maintained by the company.

• **WORKING CAPITAL TURNOVER RATIO**

Working capital turnover ratio is also referred to as net sales to working capital. It indicates company’s effectiveness in using its working capital. The working capital turnover is calculated by dividing annual sales by net working capital.

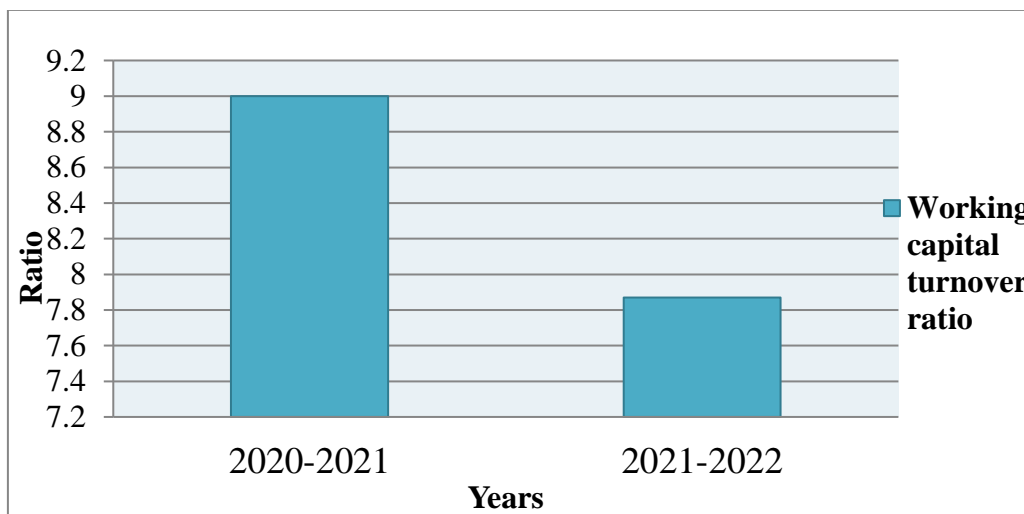
WORKING CAPITAL

$$\text{TURNOVER RATIO} = \frac{\text{SALES/ INCOME}}{\text{NET WORKING CAPITAL}}$$

TABLE: 4.4(WORKING CAPITAL TURNOVER RATIO)

	2020-2021	2021-2022
Sales/ income	1,66,88,926	1,58,63,732
Net working capital	18,53,080	2,015,278
Working capital turnover ratio	9.00	7.87

GRAPH: 4.4(WORKING CAPITAL TURNOVER RATIO)



Interpretation: The working capital turnover ratio was 9.00 for the year 2020-21 and it considerably decreased to 7.87 in the year 2021-22, which shows that the organization is not able to utilize its working capital properly. It should always be positive as it is the ability to generate sales per rupees of working capital.

• **DEBTORS TURNOVER RATIO**

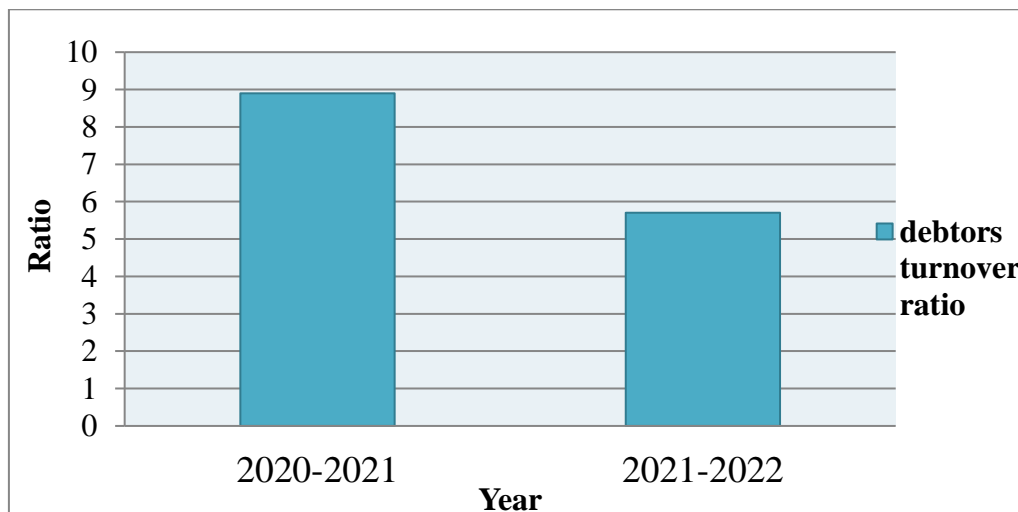
The debtors’ turnover ratio is also called as receivables turnover ratio. It shows how quickly the credit sales are converted into the cash. This ratio also measures the efficiency of a firm in managing and collecting the credit issued to the customers.

$$\text{DEBTORS TURNOVER RATIO} = \frac{\text{NET CREDIT SALES}}{\text{AVERAGE DEBTORS}}$$

TABLE: 4.5(DEBTORS TURNOVER RATIO)

	2020-2021	2021-2022
Net credit sales	1,66,88,926	1,58,63,732
Average debtors	18,57,168	27,71,183
Debtors’ turnover ratio	8.9	5.7

GRAPH: 4.5(DEBTORS TURNOVER RATIO)



Interpretation: Debtors’ turnover ratio shows how many debtors are converted into cash in a particular year.

The debtor turnover ratio for the year 2020-21 is 8.9 and for the year 2021-22 is decreased to 5.7, which shows that the company is not making all the efforts to speed up the collection process.

• **DEBTORS CONVERSION PERIOD**

The debtor conversion period indicates the average time taken to collect trade debts.

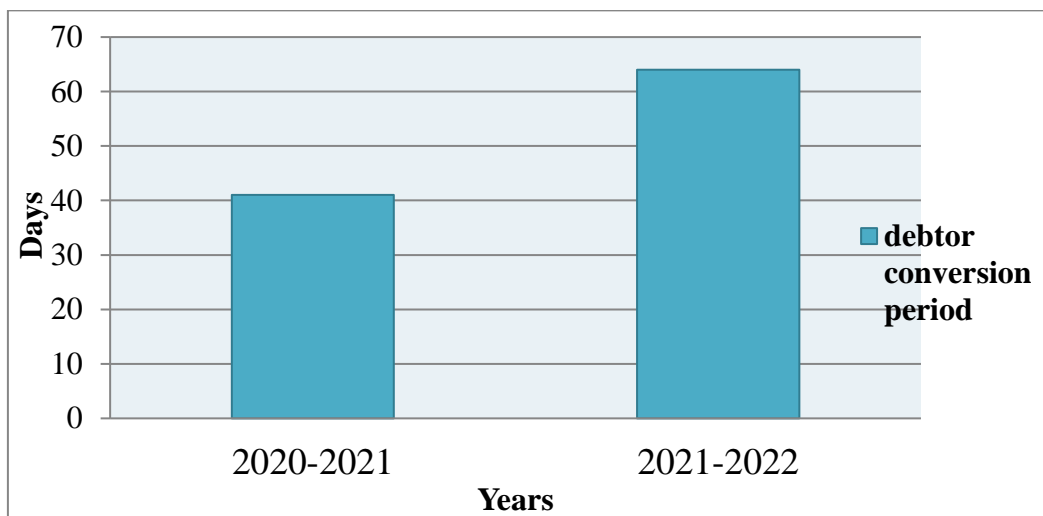
In other words, a reducing period of time is an indicator of increasing efficiency.

$$\text{DEBTORS CONVERSION PERIOD} = \frac{\text{NO.OF DAYS IN A YEAR}}{\text{DEBTORS TURNOVER RATIO}}$$

TABLE: 4.6(DEBTORS CONVERSION PERIOD)

	2020-2021	2021-2022
No. of days in a year	365	365
Debtors’ turnover ratio	8.9	5.7
Debtors’ conversion period	41days	64days

GRAPH: 4.6(DEBTORS CONVERSION PERIOD)



Interpretation: The debtors’ conversion period was 41 days in the year 2020-21 and it increased to 64 days in the year 2021-22. The conversion period of 30 days is ideal, if it is less than 30 it indicates the efficiency whereas, if it is more than 30 days it shows the inefficiency of the firm. Hence, the company is unable to make efforts to its fullest to speed up the collection process.

• **CREDIT TURNOVER RATIO**

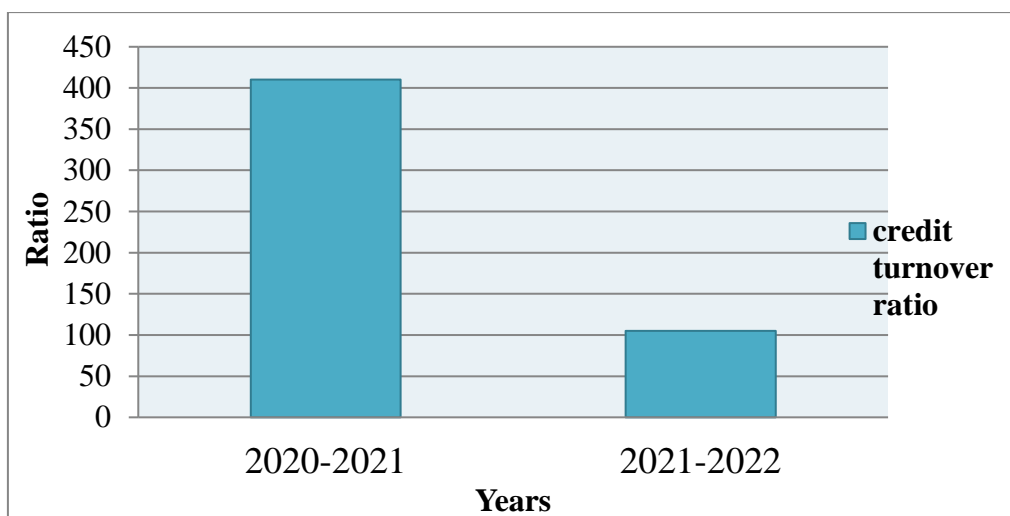
Credit turnover ratio is also called as payable turnover ratio. It is a liquid ratio that shows a company’s ability to pay off its account payable by comparing net credit purchases to the average of creditors or account payables during a period.

$$\text{CREDIT TURNOVER RATIO} = \frac{\text{NET CREDIT PURCHASE}}{\text{AVERAGE CREDITORS}}$$

TABLE; 4.7(CREDIT TURNOVER RATIO)

	2020-2021	2021-2022
Net credit purchase	1,66,86,775	1,53,16,636
Average creditors	40,697	1,44,975
Credit turnover ratio	410	105

GRAPH: 4.7(CREDIT TURNOVER RATIO)



Interpretation: The creditor turnover ratio was 410 times in the year 2020-21 and then it decreased to 105 times in the year 2021-22. Generally, lower the ratio better is the liquidity position of the firm and vice versa. But lower ratio also implies lower discount facilities available or higher price paid for the credit goods. It is an important tool of analysis as a firm can reduce its requirements of current assets by relying on suppliers’ credit.

• **CURRENT ASSETS RATIO**

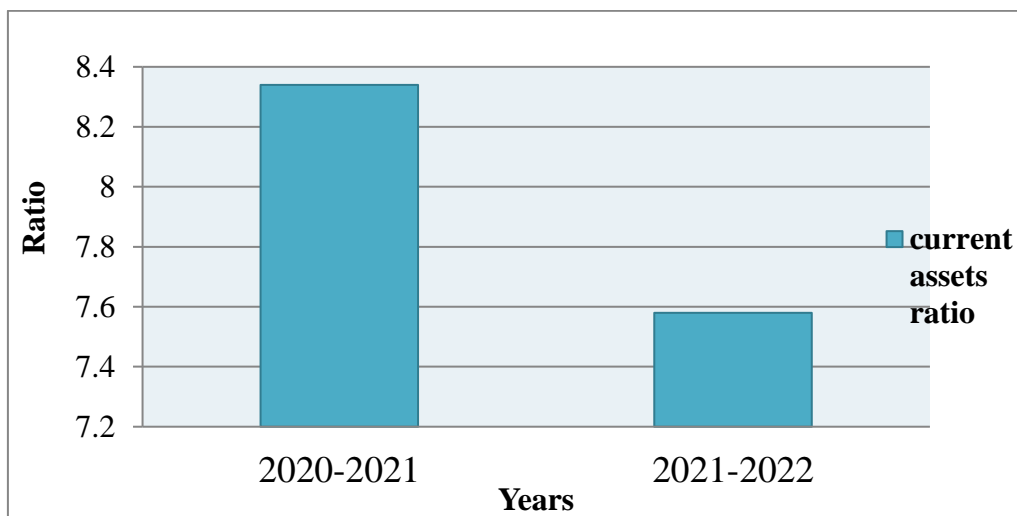
This ratio measures sales per rupees of investment in current assets. This ratio measures the efficiency with which current assets are employed- a high ratio indicated a high degree of efficiency in asset utilization and a low ratio reflects inefficient use of current assets.

$$\text{CURRENT ASSETS RATIO} = \frac{\text{NET SALES}}{\text{AVERAGE CURRENT ASSETS}}$$

TABLE: 4.8(CURRENT ASSETS RATIO)

	2020-2021	2021-2022
Net sales	1,66,88,926	1,58,63,732
Average current assets	19,98,856.5	20,91,300
Current assets ratio	8.34	7.58

GRAPH: 4.8(CURRENT ASSETS RATIO)



Interpretation: The current asset ratio for the 2020-21 was 8.34 and the same for the year 218-19 was decreased to 7.58. The current asset ratio shows the relationship or elasticity of assets and sales and depicts how efficient current assets are employed in an organization to boost the sale.

Hence, the increase in the ratio shows the efficient use of assets in the firm.

TESTING OF HYPOTHESIS



TESTING OF HYPOTHESIS



Hypothesis testing is a process by which an analyst tests a statistical hypothesis. The methodology employed by the analysts depends on the nature of the data used, and the goals of the analyst. The goal is to either accept or reject the null hypothesis.

Hypothesis testing is used to infer a result of a hypothesis performed on sample data from a larger population.

Hypothesis 1:

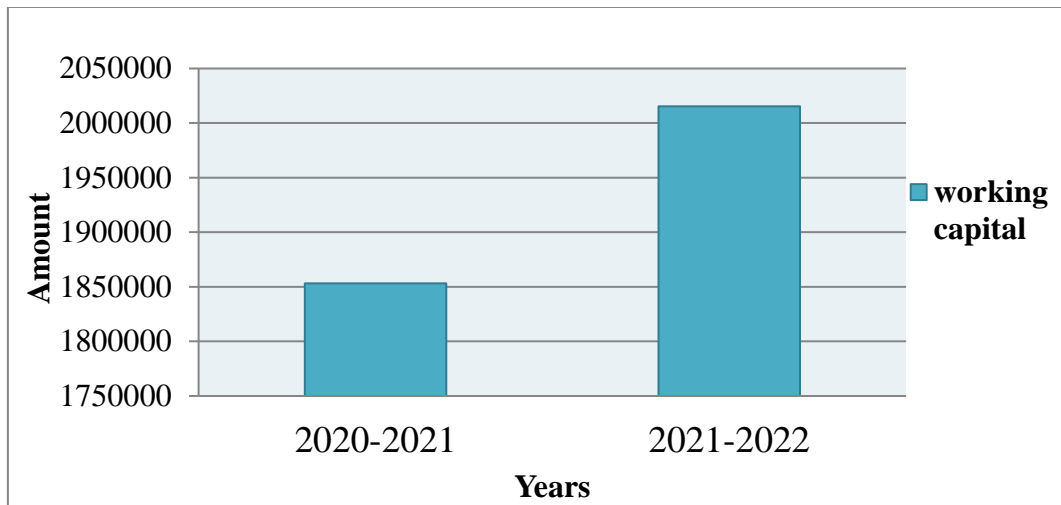
Null Hypothesis (H₀): The working capital management for the year 2021-22 is more ideal.

Alternate Hypothesis (H₁): The working capital management for the year 2021-22 is not ideal.

TABLE: 5.1(WORKING CAPITAL)

	2020-2021	2021-2022
Current Assets	19,35,787	22,46,814
Current Liabilities	82,707	2,31,536
Working Capital	18,53,080	20,15,278

GRAPH: 5.1(WORKING CAPITAL)



The above table and graph contain the detail about the working capital of the year 2020-21 and 2021-22.

From the calculation the working capital of the year 2020-21 and 2021-22 is 18, 53,080 and 20, 15,278 respectively. As there is increase in both assets and liabilities but, comparatively assets are increasing more. This shows the increase in the working capital of 2021-22.

Hence, the null hypothesis (H_0) stating that “The working capital management for the year 2021-22 is more ideal.” is accepted.

Hypothesis 2:

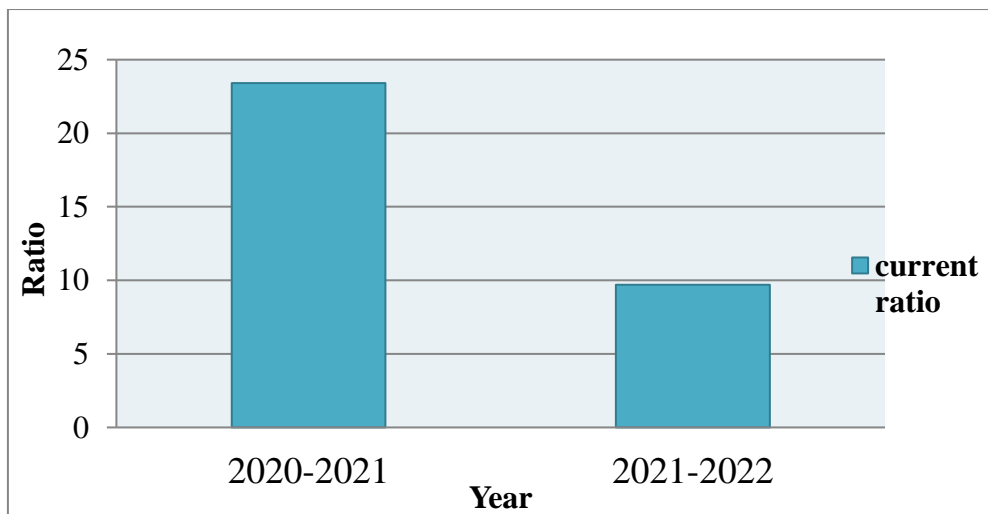
Null Hypothesis (H₀): There is no significant difference in the current ratio of the year 2020-21 and 2021-22.

Alternate Hypothesis (H₁): There is a significant difference in the current ratio of the year 2020-21 and 2021-22.

TABLE: 5.2(CURRENT RATIO)

	2020-2021	2021-2022
Current Assets	19,35,787	22,46,814
Current Liabilities	82,707	2,31,536
Current ratio	23.40	9.70

GRAPH: 5.2(CURRENT RATIO)



The above table and graph contain the detail about the current ratio of the year 2020-21 and 2021-22.

From the calculation the current ratio of the year 2020-21 and 2021-22 is 23.40 and 9.70 respectively. This is because there was a sudden increase in the liability of the firm.

TESTING OF HYPOTHESIS

Current ratio of both the year is above the standard ratio but, show a significant difference due to sudden increase in the liability of year 2021-22.

Hence, the null hypothesis (H_0) stating “There is no significant difference in the current ratio of the year 2020-21 and 2021-22.” is rejected and alternate hypothesis (H_1) stating “There is a significant difference in the current ratio of the year 2020-21 and 2021-22.” is accepted.

CONCLUSION



CONCLUSION:



On the basis of data analysis on working capital management in Cement Home, the following conclusions arrived.

- The company has gross profit for the year 2020-21 & 2021-22 as 2,151 and 5, 47,095 respectively. In the year 2020-21 the current liabilities were 82,707 in comparison to current assets positioned to rupees 19,35,787. Hence, this shows a smooth working capital management. Also in the year 2021-22, the current liabilities were 2, 31,536 and the current assets were positioned at rupees 22, 46,814 which also shows the smooth management of working capital.
- Due to sudden increase in the current liabilities for the year 2021-22 the current ratio came down to 9.70 from 23.40 (2020-21). Though the current liabilities of the firm increased and led to the fall in the current ratio, still the company is in manageable position.

CONCLUSION

- The absolute liquidity ratio for the year 2020-21 also came down to 0.09 from 2.21 but the ratio is above the standard ratio of 0.5:1. Hence it shows that the liquidity position of the concern is good and additional cash need not to be maintained by the company.
- The working capital turnover ratio in the year 2021-22 considerably decreased to 7.87, which is less than the working capital turnover ratio in the year 2020-21. This shows that the concern is not able to utilize its working capital properly.
- In 2020-21 more no. of debtors were converted into cash as compared to 2021-22, as the debtors turnover ratio of 2020-21 & 2021-22 was 8.9 and 5.7 respectively.
- In 2020-21 and 2021-22 the concern took 41 days and 64 days to collect a trade debt which is more than the ideal conversion period of 30 days. Hence, it shows the inefficiency of the firm to collect trade debts, and the company is unable to make efforts to its fullest to speed up the process.

SUGGESTIONS



SUGGESTION:



Keeping in view the above observations relating to the study, the following measures are suggested which would go a long way to improve the management of working capital in the company.

1. In order to ensure liquidity and quick cash collection the company can go for factoring techniques, through which the company can get immediate cash for its accounts receivables and employ it in business and thereby improving its profitability.
2. During the course of investigation, it has been found that sometimes more attention is given to the liquidity aspect of working capital management, which may lead to the decline in the profitability of the company.
3. There should be the change in attitude of the management they should be more aggressive in management of working capital by giving equal weightage to both liquidity and profitability aspect of working capital.
4. In order to improve and enhance its profitability and working capital management the company should ensure that the entire debt obligation is met on time.

SUGGESTIONS

5. Company should use electronic payment system to ensure timely payments and avoid situations that delay payments and attract penalty.
6. The company has to constantly monitor its cash flow, there should be enough funds for meeting short term debts but that should not come at the cost of losing return on investments in assets
7. The working capital position can always be improved by earning higher profits, issuing stocks, and selling assets for cash. However these strategies should be considered as the last resort.

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BIBLIOGRAPHY



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ANNEXURE

ANNEXURE



CEMENT HOME, NAGPUR

TRADING AND PROFIT & LOSS ACCOUNT

FOR THE YEAR ENDED ON 31st MARCH, 2021

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
To Purchases	1,66,86,775	By sales	1,66,88,926
To Gross Profit	2,151		
TOTAL:	<u>1,66,88,926</u>	TOTAL:	<u>1,66,88,926</u>
To Rent, Rates & Taxes	72,000	By Gross Profit	2,151
To Interest & Bank Charges	2,47,711	By Discount & Incentives	13,82,162
To Electricity Exp	3,600	By Other Income	1,500
To Postage & Telephone	16,310	By Interest Received	34,673
To Audit Fees	18,400		
To Business Promotions	18,132		
To Good Outward Exp	6,96,695		
To Office & Misc Exp	9,731		
To Professional Tax	2,500		
To Travelling & Conveyance	2,197		
To Depreciation	11,562		
To Net Profit Transferred to Proprietor's capital	3,21,648		
TOTAL:	<u>14,20,485</u>	TOTAL:	<u>14,20,485</u>

BALANCE SHEET OF
CEMENT HOME, NAGPUR
AS ON 31st MARCH, 2021

LIABILITIES		AMOUNT		ASSETS		AMOUNT	
<u>PROPRIETORS' CAPITAL ACCOUNT:</u>				Fixed Assets		65,097	
Opening Balance	12,26,844						
<u>Add:</u>				<u>CURRENT ASSETS:</u>			
Profit for the year	3,21,648			Sundry Debtors	17,52,563		
	15,48,492			Cash & Bank Balance	1,83,224	19,35,787	
<u>Less:</u>				<u>LOANS & ADVANCES:</u>			
Withdrawal	2,91,480			Advances	3,92,878		
LIP Paid	34,141			Deposits	5,57,448	9,50,325	
Tuition Fees	3,284						
Self Asst Tax	7,010						
Advanced Tax	6,512	12,06,066					
<u>LOANS</u>							
Secured loans		3,88,936					
Unsecured loans		12,73,500					
<u>CURRENT LIABILITTIES:</u>							
Sundry Creditors	45,907						
Liabilities for Exp	36,800	82,707					
TOTAL:		<u>29,51,209</u>		TOTAL:		<u>29,51,209</u>	

CEMENT HOME, NAGPUR

TRADING AND PROFIT & LOSS ACCOUNT

FOR THE YEAR ENDED ON 31st MARCH, 2022

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
To Purchases	1,53,16,636	By sales	1,58,63,732
To Gross Profit	5,47,095		
TOTAL:	<u>1,58,63,732</u>	TOTAL:	<u>1,58,63,732</u>
To Rent, Rates & Taxes	72,000	By Gross Profit	5,47,095
To Interest & Bank Charges	2,13,848	By Discount & Incentives	6,88,816.67
To Electricity Exp	3,600	By Other Income	-
To Postage & Telephone	10,908	By Interest Received	-
To Audit Fees	15,000	By Cheque return charges	505
To Business Promotions	30,605.58	By Commission	21,330.50
To Good Outward Exp	4,33,130		
To Office & Misc Exp	8,859.46		
To Professional Tax	-		
To Travelling & Conveyance	1,068.90		
To Depreciation	19,690		
To Legal Exp	5,000		
To Round off	41.83		
To Net Profit Transferred to Proprietor's capital	4,43,995.13		
TOTAL:	<u>12,57,747.96</u>	TOTAL:	<u>12,57,747.96</u>

BALANCE SHEET OF
CEMENT HOME, NAGPUR
AS ON 31st MARCH, 2022

LIABILITIES		AMOUNT		ASSETS		AMOUNT	
<u>PROPRIETORS' CAPITAL ACCOUNT:</u>				Fixed Assets		1,11,327	
Opening Balance	12,06,066						
<u>Add:</u>				<u>CURRENT ASSETS:</u>			
Deposit	5,371.57			Sundry Debtors	20,37,241		
Profit for the year	4,43,995			Cash & Bank	2,09,572	22,46,814	
	16,55,432			Balance			
<u>Less:</u>				<u>LOANS & ADVANCES:</u>			
Withdrawal	1,38,140			Advances	1,84,872		
LIP Paid	94,660			Deposits	5,80,816	7,65,688	
Tuition Fees	-						
Self Asst Tax							
Advanced Tax		14,22,632					
<u>LOANS</u>							
Secured loans		1,24,776					
Unsecured loans		13,44,884					
<u>CURRENT LIABILITTIES:</u>							
Sundry Creditors	1,98,137						
Liabilities for Exp	33,400	2,31,536					
TOTAL:		<u>31,23,830</u>		TOTAL:		<u>31,23,830</u>	

