# A STUDY ON CREDIT MANAGEMENT PRACTICES AT JN MACHINERIES, CHENNAI

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## ABSTRACT

Money strengthens every industry to go forward in a competitive world. While business firms would like to sell their goods and services on cash, the pressure of competition and force of custom persuades them to sell on debt. Firms grant debt to facilitate sales.

A firm's investment in accounts receivables depends on how much debt it allows and the time taken to collect these receivables. Accounts receivables constitute the third most important category for business firms, after plant and equipment and inventories. Hence it behooves a firm to manage its debt well.

The objective of the report is to have an overview of Credit management at JN Machineries, Chennai. In order to achieve the above mentioned objective and finish the study to perfection, the methodology used was a balance of primary and secondary sources. Primary sources were the personal visits to the companies and secondary was the information collected from websites.

To facilitate this, I started with reading a few books on Credit management to understand the basic concept of Receivables. I also browsed the net to find more detailed information on specific topics. I practically saw the Finance department at JN Machineries, worked and Later, I studied on various practices to understand the functioning of Finance department at that company.

## CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION

When goods and services are sold under an agreement permitting the customer to pay for them at a later date, the amount due from the customer is recorded as accounts receivables; so, receivables are assets accounts representing amounts owed to the firm as a result of the credit sale of goods and services in the ordinary course of business. The value of these claims is carried on to the assets side of the balance sheet under titles such as accounts receivable, trade receivables or customer receivables. This term can be defined as "debt owed to the firm by customers arising from sale of goods or services in ordinary course of business."

According to Robert N. Anthony, "Accounts receivables are amounts owed to the business enterprise, usually by its customers. Sometimes it is broken down into trade accounts receivables; the former refers to amounts owed by customers, and the latter refers to amounts owed by employees and others".

An account credit is the money owed to a company by a consumer for products and services purchased on credit. This is usually treated as a current asset of accounts credit after the customer is sent an invoice. Accounts credit are known by various names, such as accounts credit aging, accounts payable, days credit, accounts credit turnover and invoice factoring. According to the experts, accounts credit or invoice factoring is one of a series of accounting transactions. These accounting transactions deal with the billing of customers who owe money to a person, company or organization for goods and services purchased. If you are seriously considering using accounts credit as a method of obtaining a more liquid asset, then it is wise to hire accounts Credit management specialists.

Accounts Credit management specialists can help in a variety ways:

- ✔ It can cut and maintain your average collection delay.
- ✔ It can lessen your direct and indirect expenses.
- ✔ It can considerably reduce your bad debt.
- ✔ It can tell you various ways to take advantage of your cash-flow.
- ✔ It can help you capitalize on your internal resources.
- ✔ It can maximize your interventions on sales, service and market share.

The term debtors are defined, as debt owed to the firm by the customers arising from sale of goods or services in the ordinary course of business. Debtors are asset accounts representing amounts owed to the firm by customers from sale of goods or services. It has to be mentioned that the credit that is granted to customers is done in the ordinary course of business. It is done on the open account in the sense that no formal acknowledgement of debt obligation is required. In fact, a credit sale, which leads to debtors, is treated as one of the marketing tools

In India, trade debtors, after inventories, are the major components of current assets. They form about one-third of current assets in India. Granting debt and creating debtors amount to the blocking of the firms funds.

The interval between the sale and the date of payment has to be financed out of working capital. This necessitates the firm to get funds from neither banks nor other sources. Thus, trade debtors represent investment. As substantial amounts are tied up in trade debtors, it needs careful analysis and proper management.

The study highlights on the various aspects like company's ability to get back their loans at agreed duration and installments, the company's ability to retrieve their money from the defaulter or any compensation for the same and any legal actions taken against default customers. The study says about the various debt proposals applied to the company to different customers. The customers who are availing the debt facility from the company are bound to repay it in pre specified duration in agreed installments and interest rates. The present study is confined to the analysis and interpretation of financial statement maintained by the company. The technique employed for the purpose of the study is Trend analysis, comparative study and ratio analysis. The study is meant to throw the light on the Credit management of JN Machineries, Chennai.

This topic is selected after discussion with company project guide considering the aim of JN Machineries to implement account receivable management. It brings the awareness about the importance of accounts receivable management among the employees of the company. The effective management of accounts receivable is of prime importance to the manufacturing concern. Pre-invoicing and post invoicing are the important activities, which controlled and managed effectively. The essence of basic research was that it addressed itself to more fundamental questions and not to the immediate commercial potential. Analysis of data is done by interpretation in various figures and tables.

## 1.1.1 WHAT IS CREDIT MANAGEMENT?

Credit management is critical to ensuring your business has sufficient working capital to reinvest and grow. We have compiled a quick list of 8 steps to ensuring your cashflow management system is as robust as possible to keep your business healthy and growing. The issue of receivables/debts management and the financial risk it involves is a fundamental element

of company management. Especially in the wake of the global economic crisis, it is a very interesting and substantial area of academic research since this phenomenon might potentially lead to adverse effects. The objective of this paper is to present the system of Debt Collection Prevention produced by the author, which is to serve as a model of financial risk- and receivables/debts management as well as protection against the adverse effects of a crisis. The paper analyzes the system in the manner proposed by T. Pszczołowski (1978) by presenting a division of its main components, and structure as well as its interdependence, cause and effect relation, and the system's major functioning mechanisms. The characteristics indicating the formal nature of the system as a method of management consisting of principles, procedures and processes will be described in the course of the paper. It is likely that major distinctions may be determined between financial risk management and managerial decision making processes in this regard with, and without the application of the Debt Collection Prevention system. To make this possible, one has to highlight the praxeological approach understood as the use of standards and the principles of effective and efficient functioning as well as the systematic approach referred to as a course of casually linked events.

## 1.1.2 ADVANTAGES AND DISADVANTAGES OF CREDIT MANAGEMENT

*Debt can easily get out of hand, and may become unmanageable more quickly than you thought possible. A Credit management plan could allow you to make one affordable monthly payment that reflects your financial situation, bringing your finances back under control. However, it is important to understand whether or not a Credit management plan is really right for you, so we will now take a look at some of the advantages and disadvantages of Credit management. Bear in mind that Credit management plans are available from various financial organisations, and different organisations may operate in different ways.*

### Advantages

*On a Credit management plan, you could reduce your monthly outgoings and make just one monthly payment, based on what you can afford today, rather than what you could afford when you took on your debts in the first place. Credit management plans can be flexible. If your circumstances change and you start finding payments difficult to make, then your debt adviser may be able to re-assess your situation and negotiate with your creditors again, asking them to accept lower monthly payments.*

### Disadvantages

- ✔ *Your debts could take longer to pay off as you are repaying smaller amounts each month. Also, the interest could cost you more in the long run, as you are repaying your debt over a longer period of time.*
- ✔ *Your creditors aren't legally obliged to accept any new repayment terms. However, if they believe that agreeing to the new terms is the best way of getting their money back, then they are likely to agree.*

*If you want further information on Credit management (or any other debt solution, such as debt consolidation or IVAs (Individual Voluntary Arrangements)), then you should speak to a professional debt adviser.*

## 1.1.3 OBJECTIVE OF CREDIT MANAGEMENT

*It is not always possible to sell goods on cash basis only, sometimes other firms in that line might have establish a practice of selling goods on credit under these circumstances, it is not possible to avoid credit sales without adversely affecting the sales. Hence the firm is required to allow the credit sale in order to expand its sales volume. The increase in sales is also essential to increase profitability. The sales of goods have become an essential part of the modern competitive economic system. In fact credit sales and receivables are treated as a marketing tool to aid the sale of goods. Credit sale is generally made in an open account in the sense that there is no formal acknowledgement of debt obligation through a financial instrument. As a marketing tool they are indene to promote sales and thereby profits. However extension of credit involves risk and cost. Management should weigh the benefits as well as the costs to determine the goals of Credit management.*

*Thus the objective of Credit management is: "To promote sales and profit until that point is reached where*

*the return on investment in further funding of receivable is less than the cost of funds raised to finance that additional credit(i.e. cost of capital)"*

### Need for granting trade credit:

*Trade credit is an important marketing tool. A policy of trade credit is followed nearly in all capital intensive industries either for sales expansion and /or sales retention. Under any circumstances investment in receivable is growth oriented.*

### 1.1.4 VARIOUS FACTORS THAT FAVOURS DEBT COLLECTION
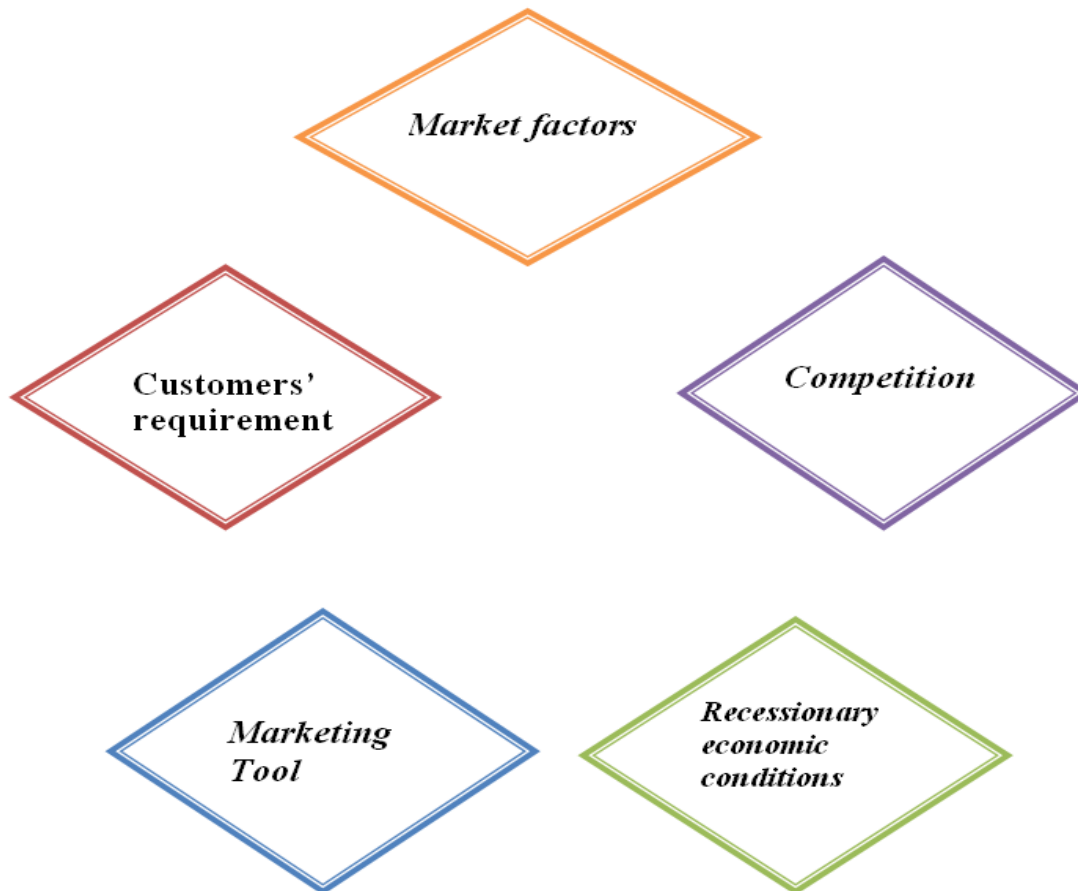


**Market Factor:** *Market factors like price, forces accompany to grant credit. For example, JN Machineries whose price is comparatively higher is forced to grant credit in order to maintain sale.*

**Competition:** *In view of stiff competition from both domestic and international players, the company is left with no option then to grant credit. Competition is another vital factor, which affects the credit policy of a*

*firm, and JN Machineries is not an exception.*

*Customer's Requirement: As the market has changed to the buyer's market, the customers have become kings. If the customer expects credit and is worthy of it, he gets it.*

*Marketing Tool: To push up sales of slow moving products and encourage bulk purchase of fast moving products, credit plays an effective role in this context.*

*Recessionary Economic Conditions: Liquidity crunch forces the company to grant credit.*

### 1.1.5 DETERMINANT OF SIZE OF RECIEVABLES

*Beside sales, a number of factors also influence the size of receivables. The following factors directly or indirectly determine the size accounts receivables.*

*Level of sales: The most important factor in determining the volume of receivable is the level of firm's credit sales. With an increase in the size of the sales, it may bring about a proportional increase in the magnitude of receivable.*

*Credit policies: The firm with the liberal credit policy will have a higher level of receivable than with a conservative or rigid credit policy.*

*Terms of trade: The size of receivables also depends upon the term of trade. The period of credit allowed and rates of discounts given are linked with receivables. If the credit period allowed is more, the receivable will also be more similarly if the rate of discount are reasonable, then also the size of the receivable will increase.*

*Profit: The level of receivables increases as a result of increase in sales. When sales increase beyond a certain level, the additional cost incurred are less than the increase in revenue. It will be beneficial to increase sales beyond a point because it will bring more profit. The increase in profit will be followed by an increase in the size of the receivable.*

*Market: It may be necessary for the firm to explore a new market for its products/services. One of the attractive way in which a firm enters a new market is by giving incentives to the customers in the form of credit facilities. In doing so, the size of receivable will increase.*

*Grant of credit: Size of the receivable depends upon the policies and practices of the firm in determining which customer are to be granted credit.*

*Paying habit of the customer: The paying habits of the customers also have a bearing on the size of receivables. The customers may be in habit of delaying payments even though they are financially sound. In*

*such case, the firm should remain in constant touch with its customers.*

***Collection policies****: The vigour with which affirm collects its dues from the customers also affects its receivables, for if the amounts due are not collected timely; a firm suffers some financial difficulties, if not losses.*

***Operating efficiency****: The degree of operating efficiency in billing, record keeping and other function also exercise some influence on a firm's credit policy which in turn influences its receivables.*

***Credit collection****: The collection of credit should be streamlined. Efficient credit collection machinery will reduce the size of receivable. Individual firm of tern set up their own well organised credit collection department.*

## 1.1.6 COSTS AND BENEFITS ASSOCIATED WITH CREDIT MANAGEMENT
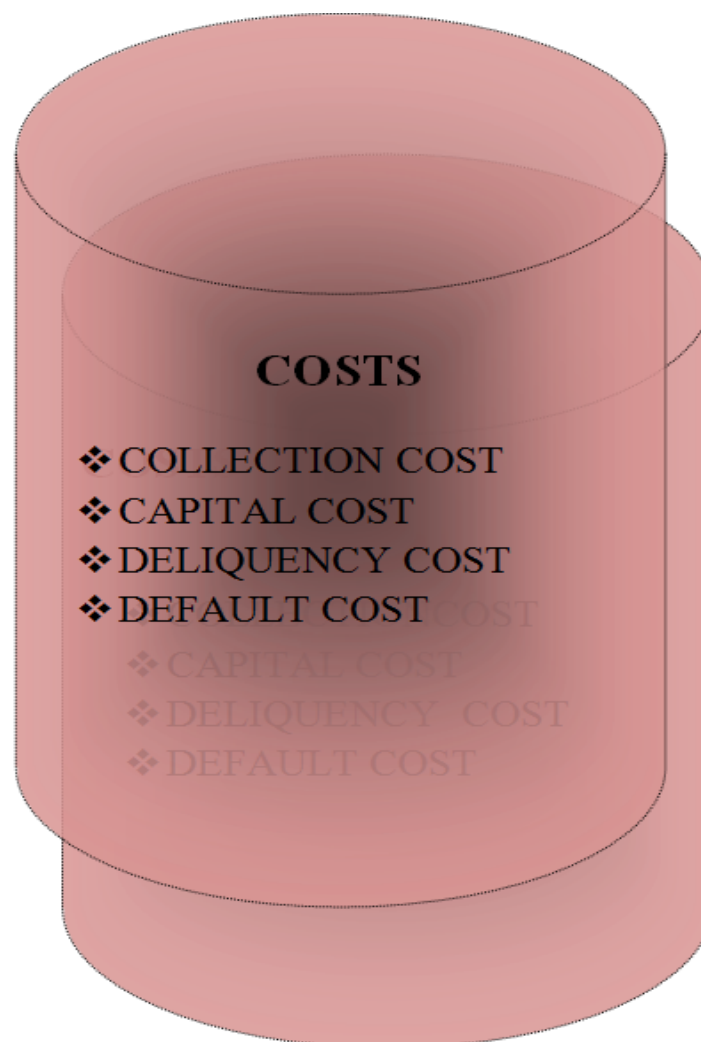
## COSTS:

The major categories of cost associated with extension of credit and receivable are:

Collection cost

Capital cost

Delinquency cost

Default cost

### Collection cost:

These costs are administrative cost incurred in collecting the receivable from the customers. This category includes:

- ✔ Additional expenses on the creation and maintenance of a credit department with staff, accounting, records, stationary, postage and other related items
- ✔ Expenses involved in acquiring credit information either through outside specialist agencies or by the staff of the firm itself.

### Capital cost:

Accounts receivables, being an investment in current assets, have to be financed involving a cost. There is a time lag between the sale of goods to, and the payment by, the customers. Meanwhile the firm has to pay employees and suppliers of raw material i.e. the firm should arrange for additional funds to meet its own obligations. Thus, the cost on the use of additional capital to support credit sales is therefore apart of the cost of extending credit.

### Delinquency cost:

This cost arises out of the failure of the customer to meet their obligations when payment on credit sales becomes due after the expiry of the period of credit. Such cost includes:

- ✔ Blocking up of funds for an extended period
- ✔ Cost associated with steps that have to be initiated to collect the overdue, such as reminders and other collection efforts, legal charges, where necessary , and so on.

### Default Cost

In addition of the above cost the firm may not be able to recover the overdue because of inability  of the customers. Such debts are treated as bad debts and have to be written off, as they cannot be realized. Though a concern may be able to reduce bad debts through efficient collection mechanism, one cannot altogether rule out the possibility of this cost.

### Benefits:

Apart from the cost, another factor that has a bearing on accounts receivable is the benefit emanating from credit sales. The benefits are:

"The **increased sale and thereby profits**"

However, the benefits would depend upon the credit policy adopted by the firm, i.e., a conservative or liberal credit policy. The impact of liberal credit policy is likely to have two forms:-

- ✔ *Sales expansion*
- ✔ *Sales retention*

In sales expansion a firm may grant credit either to increase sales or to attract new customer. This motive is growth oriented; on the other hand the sales retention the firm may grant credit to protect its current sales against emerging competition. No matter whatever is the motive, the result the result of increased sales is the increase the profit of the firm.

## 1.1.7 SOME BASIC DEFINITION

When the buying and selling process steps forward and the customer is not able to pay the total amount, the amount which they are not able to pay at the same time of buying the amount is known as **DEBT.**

In the balance sheet of companies those customers are **DEBTORS**. In their balance sheet company is a **CREDITOR.**

On the basis of market performance and credit rating company decides the time period of payback of the amount. This time period is known as **CREDIT PERIOD.**

The total amount called as debt is called as **OUTSATNDING.** When this total outstanding is not paid within the credit period the amount remained to be collected is called as **OVERDUE.**

The total overdue is divided in different parts such as overdue within **3months,** from **3-6 months,**

**6-12 months, 1 to 2 yrs, 2-3 yrs, above 3yrs, and above 5 yrs.**

When the customer is not able to pay back the due after five years then this amount is known as **BAD DEBTS.**

JN Machineries has kept some amount for this type of time of contingencies. This amount use for decreasing the effect of bad debts is called as **PROVISION.**

**CURRENT ASSETS** are those assets which can be converted into cash within the period of **12 months** starting from the company's financial year.

**CURRENT LIABILITIES** are those liabilities which are repaid within **12 months** starting from company's financial year.

## 1.2 INDUSTRY PROFILE

The Indian diesel genset market estimated to value $1,039.7 million in 2018 is projected to reach $1,518.1 million by 2024, demonstrating a CAGR of 6.5% during the forecast period. This growth is expected to be driven by the high demand and adoption of medium- and high-horsepower diesel gensets across the country. Furthermore, macroeconomic growth, coupled with revival in infrastructure, growth in manufacturing, and increase in commercial construction projects, is expected to boost the demand for these gensets for meeting prime and auxiliary power requirements in several facilities and plants in the coming years. A diesel genset or a diesel generator set is an integrated system comprising a diesel engine and an electric generator that work in conjunction to produce electricity. The electricity produced by the genset is used for meeting power

*requirements.*



INDIA DIESEL GENSET MARKET, BY POWER RATING, UNITS (2014–2024)
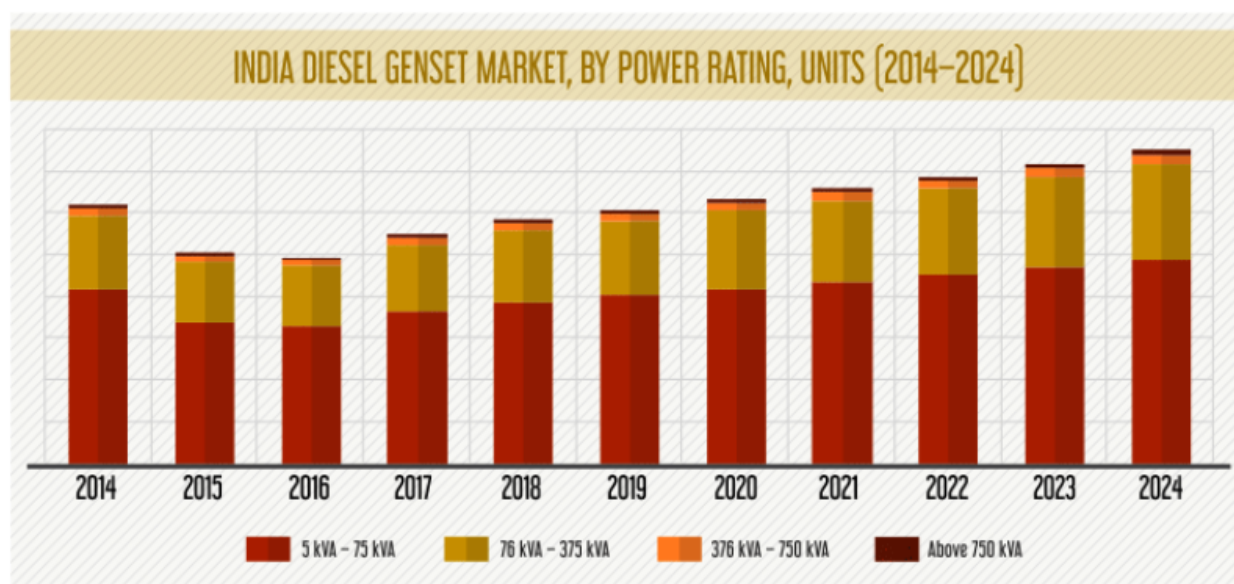
*On the basis of power rating, the market is classified into 5 kVA–75 kVA, 76 kVA–375 kVA, 376 kVA–750 kVA, and above 750 kVA diesel gensets. In terms of volume, the category of 5 kVA–75 kVA gensets is estimated to hold the largest share in the Indian diesel genset market in 2018. These gensets are employed in high volumes at residential and small commercial installations, construction projects, and telecom towers. Besides, since these generators are manufactured by a large number of market players in both organized and unorganized sectors, they are generally competitively priced.*

*Besides, factors such as investments in the telecom sector and growing installation of tower towers for connectivity in remote locations, coupled with improvements in current network capabilities, are expected to support the demand for these gensets in the Indian diesel genset market. The Indian diesel genset market is also categorized into commercial, industrial, and residential applications. Of these, gensets for commercial application are estimated to contribute the largest revenue to the market in 2018. This can be mainly attributed to the high demand for diesel generators in telecom towers, commercial offices, hospitals, and hotels. Additionally, growing cloud adoption by public and public players, increasing focus of telecom companies toward high-speed services, and construction of captive and colocation data centers are expected to drive the demand for these gensets during the forecast period. In terms of volume, nearly half of the demand in the Indian diesel genset market is estimated to be generated by Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, and Uttar Pradesh in 2018. This can be mainly attributed to the high regional demand for these gensets in various application areas, including telecom towers, residential facilities, construction projects, and manufacturing plants, for meeting prime and auxiliary power requirements.*

*India Diesel Genset Market Dynamics*

*Trend*

*The implementation of Bharat Stage VI (BS-VI) emission standards for internal combustion engines in 2016 and their nationwide rollout expected by 2020 can be viewed as a major trend observed in the Indian diesel genset market.*
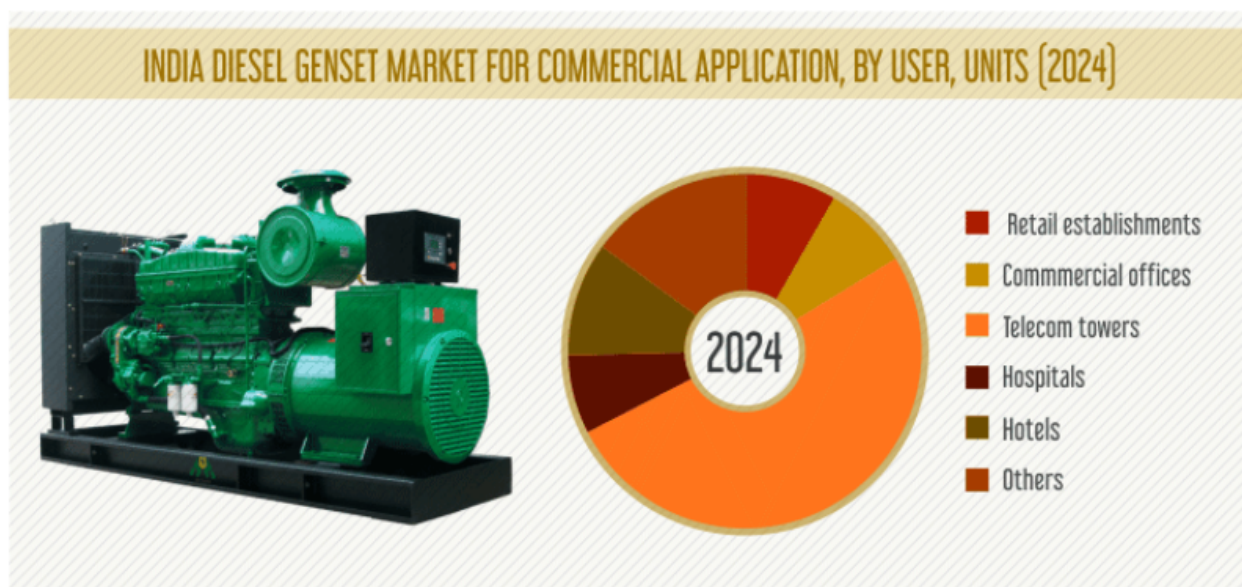
*Under the proposed guidelines, diesel gensets of different power ratings are expected to comply with the*

*smoke limit and other criteria laid out for particulate matter (PM) and gaseous emissions. From a manufacturing standpoint, this is expected to lead to structural reforms and significant technological overhaul in manufacturing and final product configurations. However, the transition is expected to be smooth due to the pre-existing production of standard-compliant products for export markets.*

## Drivers

*Growth in end-use industries such as manufacturing and construction is expected to result in the generation of a high-volume demand for diesel generators for commercial applications, thereby driving the Indian diesel genset market.*

*The Indian manufacturing industry is poised for growth on account of private and public investments, government schemes, development of special economic zones, and improvement in transportation and logistics network. Diesel generators are widely employed in manufacturing facilities owing to uncertainty, power-intensive production lines, and the need for a reliable backup power source. Thus, growth in the manufacturing industry during the forecast period is expected to drive the demand for diesel generators in the country. Besides, growth in the residential and commercial real estate market of India has picked up in recent years, on account of increased transparency, rapid urbanization, and development in the IT/ITeS sector. Increased customer confidence in residential real estate, in coherence with growth in commercial construction projects such as commercial offices, hotels, metros, and telecom towers, is expected to translate into the widespread adoption of diesel generators to meet prime and backup power requirements in the country. Furthermore, construction and localization of data centers is anticipated to act as an inflection point for the generation of a high demand for these generators, thereby positively impacting the Indian diesel genset market.*



INDIA DIESEL GENSET MARKET FOR COMMERCIAL APPLICATION, BY USER, UNITS (2024)

Legend:
- Retail establishments
- Commmercial offices
- Telecom towers
- Hospitals
- Hotels
- Others

*Restraints*

*Increasing penetration of electricity grids and growing implementation of laws and regulations aimed at curbing environmental emissions are expected to hinder the growth of the Indian diesel genset market in the near future.*

*In recent years, the regulatory agencies in India have adopted stringent regulations for diesel generators owing to the detrimental environmental impact and carcinogenic nature of these gensets. Additionally, the country has made significant progress in energy generation, with its grid capacity increasing from 199.9 GW in 2012 to 344.0 GW in 2018, complemented by electrification of over 16.7 million areas during the same period. This shift toward power generation through electricity grids has lowered the traditional dependency on diesel gensets across several regions in the country, thus hampering the growth of the Indian diesel genset market.*

*India Diesel Genset Market Competitive Landscape*

*Some of the major players operating in the Indian diesel genset market are Kirloskar Oil Engines Limited, Ashok Leyland Limited, Greaves Cotton Limited, VE Commercial Vehicles Limited, Mahindra Powerol Ltd., Cummins India Ltd., and Caterpillar Inc.*

*The Indian diesel genset market is characterized by the presence of several organized and unorganized players. The organized sector of the market is highly concentrated, with Cummins India Ltd., Kirloskar Oil Engines Limited, Mahindra Powerol Ltd., and Caterpillar Inc. operating as key players. These players have strong in-house R&D capabilities and offer differentiated portfolios of diesel generator sets. Besides, the Indian diesel genset industry has witnessed a number of product launches in recent years. For instance, in September 2018, Perkins, a subsidiary of Caterpillar Inc., announced the launch of its six-cylinder, 23-liter 4006 electronic engine. The genset is electronically controlled, is compatible with Perkins EST diagnostic tool, and generates 750 kVA of prime power. The product is manufactured at the company's Aurangabad facility in Maharashtra and is expected to serve a vast customer base in the country in the coming years.*

*1.3 COMPANY PROFILE*

*JN Machineries ((Powerica Limited)) was established in the year 1984 under the dynamic leadership of visionary Mr. Naresh Oberoi. It is also promoted by Bharat Naresh Oberoi and Kharatiram Kharak Puri, who have been involved in the diesel generator set business for several decades. JN Machineries Pvt.Ltd has evolved to become a leading end-to-end power solution provider in conventional diesel-based, standby and prime power applications. Dynamic growth across verticals has also led JN Machineries Pvt.Ltd to have a strong footprint in renewable energy projects. JN Machineries's power solutions are provided through its expertise in manufacturing, marketing, installation, commissioning, after-sales servicing & maintenance contracts. All auxiliary systems - acoustic enclosures, fuel & exhaust systems and power & control systems that are required for a complete diesel generator set are manufactured in our factories.*

*Since its inception, JN Machineries Pvt.Ltd formed a strong alliance with Cummins, a global pioneer in engine manufacturing. JN Machineries Pvt.Ltd executes an estimated 1200 MW power with Cummins Diesel Engines annually with the supply & commissioning of over 7,000 DG Sets. Currently, JN Machineries*

*Pvt.Ltd markets the complete range of engines manufactured by Cummins from 7.5kVA to 2750kVA in diesel.*

*Our relationship with Cummins India Ltd. defines us to be the exclusive after-sales service providers. This includes the sale of spare parts for all diesel generator sets powered by Cummins engines installed across the Indian states of Karnataka, Maharashtra, Andhra Pradesh, Pondicherry and Tamil Nadu. These services are also available for all non-DG set applications powered by Cummins engines. JN Machineries Pvt.Ltd also has a lineage of pre-purchase consultancy, design engineering, sale, installation, lease, operation and maintenance of Medium Speed Large Generator (MSLG) sets. After 22 years of vast power provision, JN Machineries Pvt.Ltd set forth to spread its wings in the renewable energy sector in 2006. With its roots set in using elite technology, JN Machineries Pvt.Ltd opted to work with Vestas – the global leaders in wind energy. In 2008 JN Machineries Pvt.Ltd commissioned its first Wind Power project becoming an Independent Power Producer (IPP). We commenced our EPC business for in-house JN Machineries Pvt.Ltd IPP projects in 2012. Starting 2015, JN Machineries Pvt.Ltd has emerged to become an Engineering Procurement and Construction (EPC) developer for other IPP customers.*

### MISSION

*"Engineer excellence in product quality and services to provide end-to-end power solutions across all segments"*

### VISION

- ✔ *JN Machineries Pvt.Ltd endeavors to create a global impact across all verticals of power production*
- ✔ *To design a new definition of customer satisfaction*
- ✔ *With constantly evolving technological advancements being the heart of our focus, we aim to positively steer the renewable energy program in sync with the National Climate Change Green Energy.*
- ✔ *Having built a concrete foundation through conservative values, JN Machineries Pvt.Ltd aims to dynamically improve the quality of life of all stakeholders of the company.*

### ASSOCIATIONS

*JN Machineries Pvt.Ltd enjoys strong alliances with technical partners who are renowned global pioneers in their fields. Cummins, Hyundai and Vestas are among the global leaders in their particular market segments. JN Machineries Pvt.Ltd continues to explore opportunities to expand the scope of their relationship with them. Through these associations, we are now established as market leaders for the diesel generating set business and have further expanded in related power generation and distribution businesses with MSLG and Wind Power.*

### DIESEL GENERATOR SETS

*Our three-decade long associate, Cummins India Ltd. are global leaders in all aspects and areas associated with design, manufacture and servicing of diesel engine. They hold a 33.9% market share in India in 2017.*

*For the financial year 2017-18, JN Machineries Pvt.Ltd has the highest market share in India of 42.8% of these diesel generator sets powered by Cummins engines. We have strengthened our association through a dealership agreement to provide after sales services for the supply of spare parts and service support of engine and alternators during and post warranty in the states of Karnataka, Maharashtra and Tamil Nadu.*

## MEDIUM SPEED LARGE GENERATORS

*In 1996, JN Machineries Pvt.Ltd made its foray into the MSLG line of slow speed captive power plants. We established a significant presence with 149 installed power plants with an estimated output of 500 MW. Extensive experience leading to strong project expertise in the generating set business enables us to provide end to end power solutions from concept to commissioning on a turnkey basis. We are associated with Hyundai Heavy Industries since 2014. We expect to continue to grow our emergency diesel generator set and base load applications business with them in the years to come. Our MSLG Power Plants, powered by engines from M/s HHI are being supplied to our domestic and international clients*

## WIND ENERGY

*In 2008, we began our association with M/s. Vestas, the Global leader in Wind Turbine Technology. We currently have 9 wind farms in India with an installed capacity of 147 MW with Vestas turbines. We have signed a joint venture with M/s. Vestas for the development of 750 MW of wind farms over the next five years in different states of India and a special Co-Development agreement (CDA) of 750 MW. JN Machineries Pvt.Ltd is a focused industrial leader that's earned its unmatched scale and diversity. With unshakable ethical codes, the company has been committed to the industry, and its stakeholder and shareholders. Constantly evolving with the age, JN Machineries Pvt.Ltd has diversified to become a trusted institution to manage high-value critical industries. JN Machineries Pvt.Ltd is the Original Equipment Manufacturer (OEM) in India for Cummins India Limited, the global leaders in the design, manufacture, distribution and servicing of diesel engines.*

*We engage in manufacturing of diesel generating sets, components and erection, supply-installation-testing & commissioning (SITC), operation maintenance, and other services relating to diesel generating sets. These services are provided for diesel generating sets with capacities from 7.5kVA to 2750kVA prime. In addition, we design and manufacture HHP (750kVA to 2000kVA) sound attenuated containerized DG sets that are portable and simple to install & ready to use (RTU) plug-and-play. We cater to customers from Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu and the union territories of Pondicherry and Andaman and Nicobar Islands. Our diesel generator sets are supplied to almost all market segments including industrial and corporate end-users. We power industries such as automotive, realty, electronics, IT, FMCG, Mining, Agriculture, Oil & Gas, Hospitality, Pharmaceutical, Telecommunication, Data Centers and Textile.*

*JN Machineries Pvt.Ltd's wind power division broadly operates under two verticals:*

*Independent Power Producers (IPP): Propelling the sustainable green energy visions of India, JN Machineries Pvt.Ltd directly invests in wind projects and currently owns 152.75MW of wind farms. Wind*
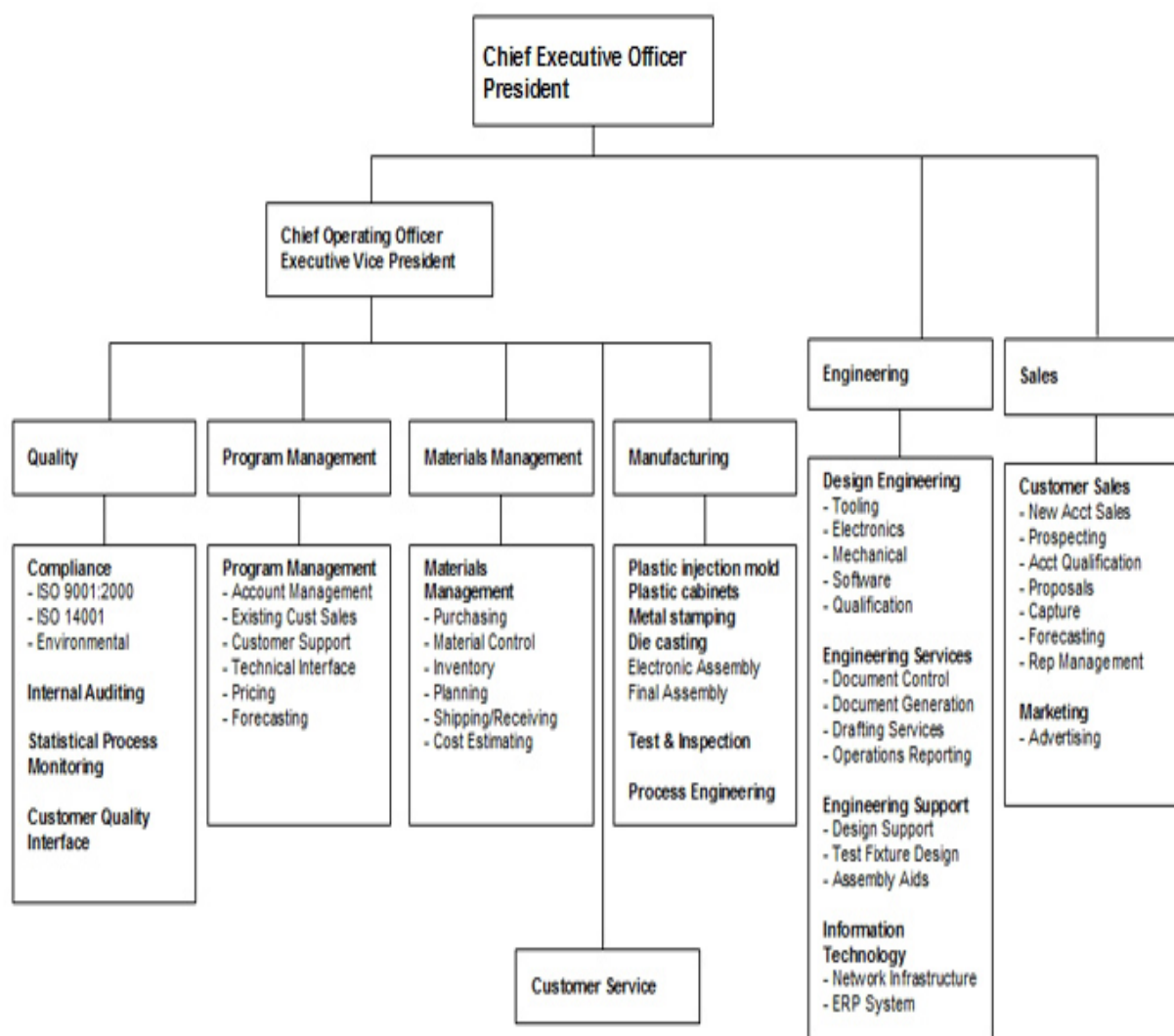
*Farm Development and Balance of Plant-EPC: This vertical enables JN Machineries Pvt.Ltd and IPP customers in the market to commission wind power projects through services provided in-house by us. These entail Wind Research Analysis (WRA), Land and Right of Way (ROW), Power Evacuation, Approvals and Permits, Balance of Plant (BoP) and related integral services.*

## DEPARTMENTS OF THE COMPANY

- *HR & Admin*
- *Finance and Costing*
- *Quality*
- *Manufacturing*
- *Materials Handling*
- *Engineering*
- *Sales & marketing*

## ORGANIZATION CHART OF JN MACHINERIES

## 1.4 PRODUCT PROFILE

*Engine Spares and Filters*

*Battery & Allied Products*

*Pulse range of batteries is specifically designed for Cummins diesel generators.*





*Coil Coolers - Air Cooled Fluid Cooler*

*Coil coolers are one of the eco-friendly cooling systems for heat recovery from the Engines. It is also used to replace the radiators and*

*heat exchangers with cooling towers in after-market.*

### Premium Lubricants for Cummins Engine

- *Premium Blue 7800 plus & power supreme engine oil is specifically blended for Cummins engine.*
- *Premium Blue Rig Xpert is high-quality engine oil exclusively blended for water well rig applications.*
- *Valvoline HLP Oils are premium quality hydraulic oils having excellent anti-wear properties, high oxidation stability, and high load-carrying capacity.*
- *Valvoline EHVI Oils are very high viscosity index products blended with low aromatic high VI base oils and shear stable VI improvers.*
- *Valvoline Greases has excellent anti-corrosion, anti-rust and extreme pressure properties.*

### Excavators

### Mini Excavators R30Z-9AK
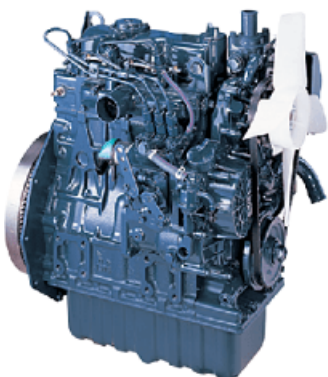
*Innovative hydraulic system technologies make the 9AK series excavator fast, smooth and easy to control. 9AK series is designed for maximum performance to keep the operator working productively. Operating a 9AK series is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.*

### Powerful Engine

*R30Z-9AK features a Tier 4 Final Kubota D1305 4 Cycle, In line, water cooled Diesel with 24.9 HP at 2,350rpm*

## Centralized Monitoring System

The monitoring system of the R30Z-9AK provides the operator with machine status information, including: engine oil pressure lamp, battery charge lamp, engine coolant temperature and a fuel gauge.

## Centralized Lubrication

A centralized lubrication bank is available for faster, easier service and maintenance.

## Dual-lock Coupler

The R30Z-9AK comes equipped with dual locking quick coupler that complies with the latest safety standards and improves the safety when using a coupler with various attachments.

## Mini Excavators R35Z-9



The R35 Z-9 Hyundai excavator is the machine made for agriculture and civil earth-moving activities. Its specifications and features are best-in-class. With this machine, you can be assured that you will always get maximum work done at minimum fuel consumption.

## Powerful Engine

The Tier 4-certified Yanmar 3TNV88 engine is built with a gross power of 27.3 HP @2200 rpm to provide high power output, optimum fuel economy, and reduced noise.

## Boom Swing Function

This function is designed for easier work in congested residential and urban areas. The boom can be offset left or right within an operating

## Upper & Lower Frame

Low stress, high strength steel is integrally welded to form a stronger, more durable upper and lower frame. Structural Integrity was tested by way of Finite Element Methods analysis and long term durability test.

## Energy Management Solutions

The Energy Management System (EMS) typically provides data on overall power consumption, power quality, event alarms, usage trends, track & schedule maintenance. Ems provides necessary data in convenient form to enable the user to make control decisions as per audit requirement through remote monitoring. jnmachineries is one of the leading Energy Management Solutions in - chennai, pondicherry, vellore, Madurai

## Salient Features

- Cloud-Based
- Customised Software
- Generate time-based reports of the performance of the specific sources
- Real-time alerts automated through Email & SMS
- Data Logging with desired timelines

- *EB & DG power outage & restoration data*

- *EB & DG –V, A, KWH, KW, PF & KVA log details can be viewed in real-time*

- *Alert will be triggered whenever the parameter drops below the minimum / exceeds the maximum set value in PC*

- *A vital tool to identify faults & inefficiency in energy distribution*

- *PF can be monitored*

- *Reports can be downloaded in CSV, XLVS, Excel & PDF file formats*

- *Real trend graph for selected parameters*

- *Remote Monitoring*

- *Easy to use*

- *Selected user permissions*

### *Fuel Management Solutions*

*Fuel Management System (FMS) with the help of sensors installed in the fuel tank measures the variation of the diesel level in the day tank. It is designed to give live diesel levels, diesel refilling data and fuel consumption data.*

### *Salient Features*

- *Cloud-Based*

- *Real-time alert warning for low level, high-level threshold limits*

- *Generate period based reports on Fuel consumption, Diesel refilling*

- *Accuracy level 95%+*

- *To achieve accuracy, fuel to be refilled in the day tank only when the DG set is in OFF condition*

- *Remote Monitoring*

- *Reports can be downloaded in CSV, XLVS, Excel & PDF file formats*

- *Customised software*

- *Selected user permissions*

### *Fuel Level Indicator*

### *Salient Features*

- *It is a simple sight level indicator, which is tough in construction and has a transparent acrylic tube with a scale*

- *The float & pointer assembly inside the tube indicates the fuel level at all time*

- *Can be fitted directly into the existing flange plate of the DG set Base tank with minimum or zero modification*

- *This can be primarily used for Gensets with Base fuel tanks ranging from 125 KVA - 500KVA*

- *Reliable measurement of diesel level (in liters) in the base tank : +/- 5%*

### *Diesel Generator acoustics in Chennai*

*JN Machineries has vast experience in providing refurbished acoustic enclosure to generators ranging from 7.5 KVA - 3000 KVA as per OEM specifications and customised room acoustic solutions for higher rating gensets ranging from 750 KVA - 3000 KVA. JN Machineries is one of the leading Diesel Generator acoustics in Chennai.*

*Electrical Project Work*

*We undertake various types of projects on panel up-gradation, PCC conversion, Relocation of Gen-sets and accessories, Relocation of panels, Alternator, and Fuel flow meters.*

**PCC conversion**

pcc3100

pcc2100

powercom

pcc3300

*PowerCommand GenSets₁*
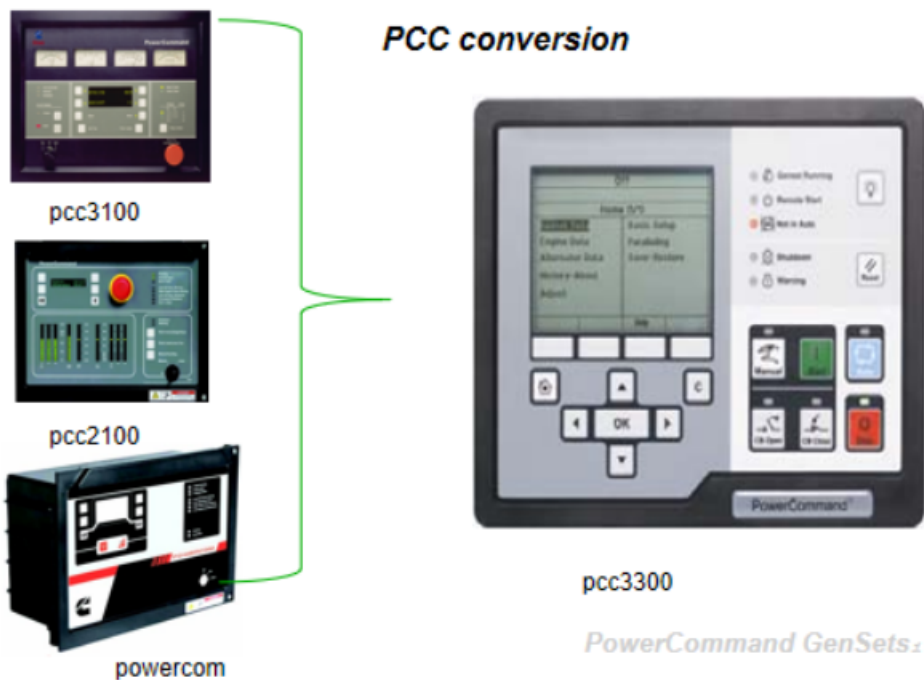
*Electrical Panel Work*
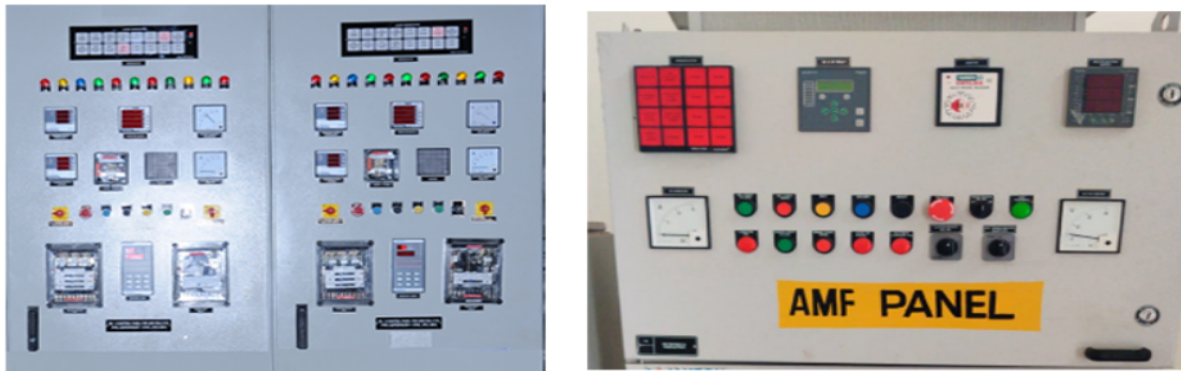


*JN Machineries offers a wide range of new & refurbished electrical panels such as AMF panel, standard panel, sync panel for Genset applications. Firefighting engine control, AMF control panel with mod-bus communication, and also electrical panels for other applications, Site repairs are undertaken in a highly cost-effective manner.*

*Electrical Cabling & Ducting*

*We undertake all kinds of electrical cabling work such as power cable, control cable laying, installation of*

*cable tray, installation of bus ducts, earthing, fresh air and hot air ducting.*



### Exhaust Piping / Stack & Cladding

*We carry out all kinds of genset installation services which includes installation of exhaust pipes, silencer, cladding for exhaust pipes, designing fabrication & installation of exhaust stack.*

### Fuel Tank

*JNM offers new and refurbished fuel tanks made of MS materials as per OEM specification up to 990 liters and provides installation services such as shed for Fuel tanks, Fuel lines and automatic fuel filling systems.*

### 1.5 STATEMENT OF THE PROBLEM

*JN Machineries gets its revenue mainly from the bills collected from its customers. So it is necessary to manage its debts efficiently and effectively. Here an attempt is made to analyze the debts and to suggest some strategies for the proper recovery of debts by managing their credit practices.*

### 1.6 NEED FOR THE STUDY

*This topic is selected after discussion with company project guide considering the aim of JN Machineries to implement account receivable management. These papers critically assess the effects of credit management on liquidity and profitability positions of JN Machineries. It brings the awareness about the importance of credit management among the employees of the company. Thus, the rationale behind for undertaking this study is to deeply investigate the causes of credit*

*management problems and to suggest the possible solutions that enable the organization to run its operation*

*in a safest way as credit is known to be the main stay of all manufacturing organizations.*

## 1.7 OBJECTIVES OF THE STUDY

*Primary Objective*

*To Study on the Credit Management practices at JN Machineries Industries, Chennai*

*Secondary Objectives*

- ✔ *To identify the best way to minimize the debt*
- ✔ *To analyse the settling outstanding balances in credit management*
- ✔ *To find out how to improve cash flow of the company*
- ✔ *To study the credit policy and procedure*
- ✔ *To study the impact of receivable in financial liquidity*
- ✔ *To identify the collection period of receivables.*
- ✔ *To study the monitoring control techniques applied for collection of receivables*

## 1.8 SCOPE & SIGNIFICANCE OF THE STUDY

*JN Machineries gets its revenue mainly from the bills collected from its customers. So it is necessary to manage its debts efficiently and effectively. Here an attempt is made to analyze the debts and to suggest some strategies for the proper recovery of debts. The effective management of accounts receivable is of prime importance to the manufacturing concern. This study will make several contributions to both knowledge building and practice improvement in credit management and financial performance. From a theoretical standpoint, the study proposes a comprehensive framework of studying changes in credit management and financial performance. It also expected that it will aid policy makers in their effort to revamp the sector. It shall be of great relevance to the organizations under study as well as other manufacturing institutions.*

## CHAPTER 2
## REVIEW OF LITERATURE

*1. According to **(Pedro Juan Garcia-2010)**, trade debt occurs when there is a delay between the delivery of goods or the provisions of services by a supplier and their payment. For the seller this represents an investment in account receivable, while for the buyer it is a source of financing that is classified under current liabilities on the balance sheet. The literature offers various theories to explain the use of trade debt based on the advantages for suppliers and for customers from the operational, commercial and financial perspective. Trade debt enables firms to create operating efficiencies and cost improvements by separating the exchange of goods and their payment. This reduces cash uncertainty in their payments and provides more flexibility to respond to variations in demand. From the commercial perspective, trade debt may stimulate sales in a number of ways. Terms of payment make it possible to modify the price of goods sold by increasing the discount for prompt payment, which is an implicit price reduction. Moreover, trade debt can*

be used to maintain long term relationship with customers. Trade debt also allows sellers to offer quality guarantees to buyers so that buyers can assess product quality before.

2. According to the author **Mathew P M (2000),** existing laws often ignore the social framework within which a small entrepreneur must operate. Delayed Payment Act was passed by the Parliament after repeated representations by small entrepreneurs and their associations. But the individual entrepreneurs are reluctant to make use of the provisions of the Act for fear that customers pressed for payment may not place fresh orders. Today, there are several laws applicable to SMEs. However, the entrepreneurs simply do not know the laws and their provisions.

3. **Pedro Juan Garcia Teruel and Pedro Martinez- Solano (2010),** stated that in spite of the importance of trade debt for Organizations, most previous studies those analyzed the determinants of trade debt granted and received, have focused on large firms. Empirical evidence about Credit management of Organizations is scarce. These studies show the important influence of operational, commercial and financial motives on trade debt. It is found that price discrimination was not a determinant of small firms' trade debt policies in Finland. It appears that European Organizations use less trade debt when they have opportunities to obtain external financing at a lower cost, as well as when their capacity to generate internal resources increases.

4. According to **Ira Davidson (2008),** Director of the Small Business Development Center at Pace University, New York, maintaining effective debt policies and collecting on a timely basis are fundamental to good cash management in a small business.

5. **Longenecker et al., (2008)** stated that four factors related to the entrepreneur's decision to extend debt are the type of business, debt policies of competitors, customer's income levels and the availability of working capital.

6. **KhaledSoufani (2002),** in his paper explained the choice of factoring as a financing source and the type of businesses using it in the UK. The tests focused on establishing a profile of borrowers, based on firm's demographic characteristics such as age, turnover, industry, and type of legal ownership, whether there existed any association between the use of factoring and the availability of debt to firms, the collateral requirements by banks and its value, the value of the firm's debt. After a conducting a survey of 3805 companies, it was found 212 were using factoring services.

7. **LeoraKlapper (2006)** in a descriptive research ascertained the factoring turnover, factoring as a GDP percentage, have close empirical relationship to define the futuristic and the prudential benefits of Organizations. Factoring is linked with accounts receivables and the transformation of receivables into suitable collaterals. The research also identified factoring of receivables is not a conspicuous part of bankruptcy. The research also paved the way to exactly estimate how the factoring allows high risk supplier to transfer their debt risk to higher quality buyers. Debt provided by the lender's activity is seen as a balanced factor between the lender and supplier. Factoring process among Organizations in many

*countries identified the poor debt operational system, which leads to the future of Organizations growth. The growth of technology and GDP, due to liberalization, recuperated the scope of Organizations through technological innovations.*

*8. **NicosMichaelas, Francis Chittenden, PanikkosPoutziouris (1999)** anatomically explored the financial policies and existing capital structure of Organizations in the conservative economy of UK. The Credit management is considered as one of the predominant factors in the financial policies of Organizations. It is found that size, profitability, growth opportunities, risk due to receivables contribute significantly in the growth of Organizations.*

*9. **Micah Odhiambo Nyamita Factors influencing debt financing decisions of corporations (2019) Ageing Bucket-** The methodology approach helped in identifying the common applicable conceptual models and the empirical findings related to the factors affecting debt financing of corporations. The factors identified were both firm specific and macroeconomic factors, and the empirical findings showed either positive or negative relationship results.*

*10. **Léonce Ndikumana and James K. Boyce Public Debts and Private Assets: Explaining Capital Flight from Sub-Saharan African Countries (2002) Ratio Analysis-** The growth rate differential between the African country and its OECD trading partners is negatively related to capital flight. We also explore the effects of several other factors – inflation, fiscal policy indicators, the interest rate differential, exchange rate appreciation, financial development, and indicators of the political environment and governance. We discuss the implications of the results for debt relief and for policies aimed at preventing capital flight and attracting private capital held abroad.*

*11. **Michael P. Dooley Credit management and crisis in developing countries (2000) Ratio Analysis-**Credit management policy for governments of developing countries must balance conflicting objectives. The structure of explicit and implicit government debt influences the amount of lending private creditors are willing to extend, contractual debt service costs, the probability of default and the costs of default. Because default is not relevant for governments of industrial countries, their Credit management policies are not a useful guide for developing countries. The model developed suggests that minimizing debt service costs is likely to be a very inefficient policy for governments of developing countries because such a policy increases the cost of default.*

*12. **Jing Jian Xiao and Jiayun Wu Completing Credit management Plans in Credit Counseling: An Application of the Theory of Planned Behavior (2008) Ageing Bucket-** Psychological factors associated with consumer behavior in completing Credit management plans (DMPs) in credit counseling were identified. The study shows that consumers' behavioral intentions directly affect their behavior—in this case, DMP completion. Furthermore, some evidence suggests that satisfaction with plan services increases consumers' intentions to complete a plan, and also that their perceived control directly and positively affects plan completion behavior. Study findings can be used by credit counselors and educators to develop strategies to help clients successfully complete their DMPs.*

**13. Dariusz Stach Debt collection prevention management of receivables/debts in a company (2019) Debt Collection Period-** *The maintenance of financial liquidity, stability, profitability and the value and investment capabilities of a company as well as the avoidance of financial bottlenecks are the most vital objectives of people in charge of a company, especially in times of crisis. This paper presents the receivables/debts management system known as Debt Collection Prevention, which is understood as a method of achieving the above mentioned goals. With the help of analysis and differentiation, the author argues that all individual management activities are short of effectiveness and efficiency unless a systemic approach is applied. To highlight this point, the author has indicated substantial differences in the management of financial risk and in shaping managerial decisions with- and without the application of the Debt Collection Prevention system, which can be characterized as a systemic approach with regard to praxeology.*

**14. Credit management under Optimal Fiscal Policy Ester Faia and Roland Winkler (2010) Collection Matrix-***Constraints with expectations of future marginal utilities (Marcet and Marimon approach, add lagged as co-state) b. Large state space (Sims' method) Fourth paper (still to come): implications for Credit management with optimal fiscal policy under incomplete markets (e.g. transaction costs) and bonds at different maturities*

**15. Maria Gorczyńska (2011)** *The paper aims at presenting the importance of accounts receivable turnover ratio in the credit policy management. In the first section the paper presents core aspects of credit policy management. The second section discusses the computation and purposes of analysis of the accounts receivable turnover ratio and the daily sales outstanding ratio as its variation. Particularly, it indicates that the ratio analysis is purposeful for optimal credit policy modeling and should be constantly reviewed in these terms. As the ratio analysis should be supported with a comparison to the industry level, the third section of the paper presents a brief analysis of the situation of Polish companies operating in the manufacturing industry. The fourth section contains a brief conclusion.*

**16. Ojeka, Stephen A.** *This paper considered the effect of credit policy on the liquidity of manufacturing companies in Nigeria. Credit policy from this perspective was viewed from the angle of controlling or regulating credit sales. The study looked into the problems of non-monitoring and the non- review of the credit policy of organizations as a cause of the liquidity problems associated with credit sales. The study centered majorly on the effects of each of the individual components of credit policy which include the credit standards, the credit period, the cash discount and the collection period on an organization's liquidity. It is also at finding out the type of effects that a company's credit policy has on its liquidity. Four manufacturing companies were selected which include Unilever Nigeria plc, Cadbury Nigeria plc, Nestle Nigeria plc and Nigerian bottling company. The annual reports and accounts of the selected companies as well as questionnaire where relevant data was made use of were statistically analyzed. Analysis of variance (ANOVA) and regression analysis were used in testing the hypothesis. The findings revealed that when a company's credit policy is favourable, liquidity is at a desirable level and lastly, the findings revealed that companies should ensure the monitoring and regular review of their credit policy and the allowance of cash discounts should be minimized as much as possible. We therefore recommended that organization should*

*consider their mission, the nature of their businesses and their business environment before setting up a credit policy.*

*17. **Mary Nelima Sindani (2012)** Microfinance institutions in Kenya experience high levels of non-performing loans. This trend threatens viability and sustainability of MFIs and hinders the achievement of their goals. This study was aimed at assessing the effectiveness of Credit management systems on loan performance of microfinance institutions. Specifically we sought to establish the effect of credit terms, client appraisal, credit risk control measures and credit collection policies on loan performance. We adopted a descriptive research design. The respondents were the credit officers of the MFIs in Meru town. Collection policy was found to have a higher effect on loan repayment with =12.74, P=0.000 at 5% significance level. Further research is recommended on the effectiveness of credit referencing on loan performance of MFIs. This study is informative in terms of public policy adjustments and firm level competences required for better operation of MFIs and it also contributes to Credit management literature.*

*18. **Rosemary, 2011,** Credit management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. Sound Credit management is a prerequisite for a financial institution's stability and continuing profitability, while deteriorating credit quality is the most frequent cause of poor financial performance and condition. As with any financial institution, the biggest risk in microfinance is lending money and not getting it back. The study sought to determine the effect of Credit management on the financial performance of Microfinance Institutions in Kenya. The study adopted a descriptive survey design. The population of study consisted of 59 MFIs in Kenya that are members of AMFI. A census study was used to carry out the research. Primary data was collected using questionnaires where all the issues on the questionnaire were addressed. Descriptive statistics were used to analyze data. Furthermore, descriptions were made based on the results of the tables. The study found that client appraisal, credit risk control and collection policy had effect on financial performance of MFIs in Kenya. The study established that there was strong relationship between financial performance of MFIs and client appraisal, credit risk control and collection policy. The study established that client appraisal, credit risk control and collection policy significantly influence financial performance of MFIs in Kenya. Collection policy was found to have a higher effect on financial performance and that a stringent policy is more effective in debt recovery than a lenient policy. The study recommends that MFIs should enhance their collection policy by adapting a more stringent policy to a lenient policy for effective debt recovery.*

*19. **Raymond, A. Ezejiofor, 2020,** this paper critically assesses the effects of Credit management on liquidity and profitability positions of a manufacturing company. Three hypotheses were formulated in line with the objectives of the study. Descriptive research design was adopted. Samples of two manufacturing companies were selected. Data were obtained from annual accounts of the companies under study. Data obtained were analyzed by use of financial ratios and the three hypotheses formulated were tested with ANOVA using SPSS statistical package 20.0 version. From the analysis made, the researchers found that credit policy can affect*

*profitability management in manufacturing companies in Nigeria and there is a significant correlation between liquidity position and debtors' turnover of the company in Nigeria. Finding also shows that there is a relationship between liquidity management and corporate profitability. Based on the findings, the researcher recommends among others that there is need for companies to maintain adequate liquid assets and eliminate bad debt losses and other associated costs of credit and that company should intensify efforts to engage the services of factoring agents. This will reduce the incidence of bad debts losses and other associated costs of credit.*

*20. Uwalomwa Uwuigbe, 2020, the study critically assessed the effects of Credit management on banks' performance in Nigeria. In achieving the objectives identified in this study, the audited corporate annual financial statement of listed banks covering the period 2007-2011 were analyzed. More so, a sum total of ten (10) listed banks were selected and analyzed for the study using the purposive sampling method. However, in an assessing the research postulations, the study adopted the use of both descriptive statistics and econometric analysis using the panel linear regression methodology consisting of periodic and cross sectional data in the estimation of the regression equation. Findings from the study revealed that while ratio of non-performing loans and bad debt do have a significant negative effect on the performance of banks in Nigeria, on the other hand, the relationship between secured and unsecured loan ratio and bank's performance was not significant. Hence, the study recommends that banks management should put in place or institute sound lending framework, adequate credit administration procedure and an effective and efficient machinery to monitor lending function with established rules.*

*21. Kwaku D. Kessey, 2020, the banking industry of Ghana is faced with several challenges among them is credit risk management notwithstanding the fact that, knowledge and technology in that field have increased. Additionally, many banks have created Credit Risk Management Departments which are responsible for managing the credit risks associated with banking operations. However, available data indicate arise in the value of non-performing loans in recent years. This study therefore focused on challenges of operationalization of credit risk management policies, strategies and implementation in banks. The justification of the study is that some banks could have comprehensive risk management policies and strategies but their implementation might be inappropriate. The research examined critically, the portfolio quality of the bank selected for the study. Again, the credit risk management policies of the bank were analysed with reference to national standards. For in depth analysis, the case study approach was adopted. The study approach was both exploratory and explanatory. The staff of the Credit Risk Management Credit Operations Departments of the bank provided primary data. In addition, secondary data on the bank's loans portfolio was obtained from journals and annual reports. Trend analysis was applied to assess the behavior of some selected variables over period of time.*

*22. Michael Addaney, 2021, This study investigated how Credit management impacts the performance of*

small scale enterprises in the Kumasi Metropolis of Ghana. In total, 120 small scale enterprises were interviewed. The study showed that most small scale businesses lacked in-depth knowledge on the issue of Credit management. The study further revealed that the major cause of debts among small scale businesses were lack of advice on the business type and finances, lack of knowledge on the type of business and poor methods of keeping financial records. The study therefore recommends that Small scale businesses must hire financial experts to help them manage their businesses through prudent record keeping. Moreover, it argues that small scale businesses should work within their budgets in order to avoid higher expenditure and subsequent incurring of debts which could be detrimental to the running of their business. It posits that financial institutions should strive to give expert advice on business management to their clients

23. **M.S.K. Ifurueze, 2013,** *The study examined the impact of effective management of credit sales on profitability and liquidity of Food and Beverage Industries in Nigeria. The study centered mainly on the effect of each of the individual components of credit sales, profitability, liquidity and activity level of the companies under study which include the credit sales percentage, gross profit margin, net profit margin, return on capital employed, debtors collection period, debtors turnover, acid test ratio and return on current assets. Also the credit policy variables were examined which include credit standards, credit terms and collection policy and procedures. Data were obtained from the Annual reports and Accounts of the selected companies of year (2007-2011). The relevant data were subjected to statistical analysis. Analysis of variance (ANOVA) was used in testing the hypotheses. The study revealed that when credit sales are effectively managed profitability is at a desirable level. Lastly, the finding revealed that when a firm's debtor's turnover is favourable, liquidity is at a desirable level.*

24. **Shehzad Mian and Clifford W. Smith,Jr,** *This paper develops and tests hypotheses that explain the choice of accounts receivable management policies. The tests focus on both cross-sectional explanations of policy-choice determinants, as well as incentives to establish captives. We find size, concentration, and credit standing of the firm's traded debt and commercial paper are each important in explaining the use of factoring, accounts receivable secured debt, captive finance subsidiaries, and general corporate credit. We also offer evidence that captive formation allows more flexible financial contracting. However, we find no evidence that captive formation expropriates bondholder wealth.*

25. **Raad Mozib Lalon, 2020,** *This Paper is not only a way for getting acknowledged about the efficiency in managing credit risk of Bangladeshi Banks, but also a conclusive reference for studying how CRM practices helps to increase profitability and long term sustainability of commercial banks. Credit risk management encompasses identification, measurement, matching mitigations, monitoring and control of the credit risk exposures. For conducting this research, I have to collect secondary data relating to the financial status of Basic Bank Ltd.In my analysis I have divulged a comprehensive overview about CRM in different phase of my report. First, I have described about the CRM practice and performance of BBL. Then, I analyze the impact of CRM on financial performance of bank. I have used Ms Excel as well as SPSS software to compare relationship between CRM and banks profitability. After analysis and discussion I have identified*

*some conclusive findings of my research paper*

**26. Sufi Faizan Ahmed, Qaisar Ali Malik, 2020,** *The main aim of the paper is to evaluate the influence of credit risk management practices on loan performance (LP) while taking the credit terms and policy (CTP), client appraisal, collection policy (CP) and credit risk control (CRC) as the dimensions of the credit risk management practices. For statistical evaluation, the primary data in cross sectional form has been taken into consideration. The data is collected from the managerial level credit risk management staff of microfinance banking sector. Multiple regression analysis has been used for empirical relationship evaluation of the credit risk management practices on the performance of loan. The results of the analysis are showing that the credit terms and client appraisal have positive and significant impact on the LP, while the CP and CRC have positive but insignificant impact on LP. The study is helpful for the management to enhance the LP by focusing on the dimension of the credit risk management practices used in the study. Future aspects of the research have also been taken into account and elaborated*

**27.** *According to* **Venkata Ramana; K. Ramakrishnaiah; P.Chengalrayulu (2013)** *in their paper an attempt is made to study the impact of Credit management on Working Capital and Profitability. To accomplish this research objective data have been collected from the annual reports of select cement companies for the period from2001 to 2010. The ratios which highlight the efficiency of Credit management viz., Receivables to Current Assets Ratio, Receivables to Total Assets Ratio, Receivables to Sales Ratio, Receivables Turnover Ratio, Average Collection Period, Working Capital Ratio and Profitability Ratio was used to know the impact on working capital and profitability. Working capital and profitability were considered as dependent variables. The investigation reveals that the receivable management across cement industry is efficient and showing significant impact on working capital and profitability.*

**28.** *According* **Kamar and Ayuma (2021),** *the purpose of was to examine the effect of debt recovery techniques on performance of financial institutions. The study objectives were to examine the effect of account transactions, guarantors, auction and the effect of collateral retention on performance of financial institutions in Eldoret town. The study was guided by customer-supplier relationship theory. The research design adopted a descriptive survey design. The study was conducted on Financial Institutions within Eldoret town, Uasin Gishu County. The target population consisted of 185 employees from the credit and management department of selected financial institutions. The study targeted five commercial banks and four micro-finance institutions. The study used purposive sampling technique to select 125 respondents. The researcher used questionnaire as data collection instruments. The data collected in the study was analyzed by the use of descriptive statistics and inferential statistics. This includes the use of descriptive statistical methods to analyze data consisting of frequency, mean and standard deviation. The relationship between variables was done using multiple linear regression models. Graphs, tables and pie charts were used to present the results. Based on the findings of the study, the study recommended among others that financial institutions should review account histories as suggestion tools for accounts such as savings accounts, investment accounts and also retirement accounts for additional information on customer ability to repay their loans. The study suggests that same study be done in other financial institutions not considered in this*

*study to allow generalizations and also provide rich advances for future studies. Further research is also required to study the factors determining debt recovery in financial institutions*

**29. Claudia et.al., 2019,** *South Africa, like many developing countries has experienced a high number of the delinquent debtors in the collections industry. The focus of this study is on describing the requirements in the training of debt collectors and how it benefits the industry, while suggesting the strategies for improving debt collecting training in South Africa. A theoretical survey and a literature review were undertaken to identify the elements involved in training debt collectors and how it benefits the industry. Firstly, as the content to be presented is debt collection and is not generic in nature, the purpose of this literature study includes the investigation and identification of the elements involved in debt collection services. This includes, inter alia, the study of computing technologies, identification of a design strategy for debt collection systems and identification of a model to define distributed objects as an object-oriented view of distributed systems. This investigation is necessary, since debt collection training and design are important aspects of any lending institution system as it provides a framework for accountability.*

*The principle method of investigation in this study was a quantitative exploration of assessing the degree of how the financial lending institution benefits through the training of debt collectors in South Africa, Johannesburg. The study used the questionnaire approach, particularly closed ended questions.60 respondents were targeted for the study. The 25-34 years category was represented by 26% of respondents meanwhile the 35-44 years group was represented by 11%. These statistical patterns show that most individuals who participated in the study are younger than 25 years whilst age brackets such as 44-54 years had very few individuals. Younger employees may not have the necessary institutional memory to understand all the ramifications involved in debt collection business which calls for training and experience. The results showed that fewer respondents in key management positions such as Branch managers and Training managers are few in number as results there was a gap in terms of proper training and guidance. The implication is that, for every debt collection sector,*

*leadership training should be central. This is because leadership basically deals with the human relations where problem solving, communication and decision making are promoted and cultivated. In debt collection good decision making is demanded. The study indicates that highly effective leaders know many forms of decision-making and are situational sensitive in their selection of a particular approach to decision-making. They are thus very analytical and rational in the way they perceive and perform their functions. The study found that the participation of debt collectors in training could be enhanced by means of management involvement, effective mentoring, programmes for the preparation for leadership, and the assurance of job security. The study brings about an additional importance and understanding of debt collector's training, especially towards facilitating future research on leadership in the debt collection business. The recommendation for the study was for debt collection organisations to quantify their training of staff and ethical practices in such a way that they can evaluate progress towards integrated debt collector training and the zero misconduct strategy.*

**CHAPTER 3**

## RESEARCH METHODOLOGY

*Research can be defined as a systematic and objective process of gathering, recording and analyzing data to guide decision making. It is mainly used to reduce the uncertainty of decisions. The key objective of any research is to obtain accurate, relevant and timely information.*

### 3.1 RESEARCH DESIGN

*The research problem having been formulated in clear in terms, the research will be required to prepare a research design i.e. research design i.e. researcher will have to state the conceptual structure with which research would be conducted. The research method used is analytical research. In this type of research the researcher uses the facts and information already available and analyzes them to make a critical of the material. I have chosen Qualitative method of research for this study. This method developed collecting and analysing unstructured information using manual methods.*

### Target Company

*This study is made at JN Machineries, Chennai*

### 3.2 SAMPLE DESIGN

*This project involves only collection of secondary data*

### 3.3 DATA COLLECTION METHOD

*For the purpose of this study only secondary data have been used to a large extent.*

***Primary Data:*** *Primary data refers to the fresh information and collected for the first time. Thus, this information is happening to be original in chapter. This information is gathered through the interaction.*

*Some of the primary data used in the collection of information in the study are:*

- *Discussion with the finance department*
- *Observation of the activities and actions under taken at the finance department*

***Secondary Data:*** *On the other hand, the secondary data are that information which have already been collected by someone else and recorded. This information is those have already been passed the statistical process*

### 3.4 TOOLS FOR DATA ANALYSIS

#### 1. Ratio Analysis

*Ratio analysis is the comparison of line items in the financial statements of a business. Ratio analysis is used to evaluate a number of issues with an entity, such as its liquidity, efficiency of operations, and profitability.*

*Debtors Turnover Ratio = Turnover / Debtors*

*Debt to Equity Ratio = Total Debt / Net worth*

*Debt to Assets Ratio = Total Debts / Total Assets*

#### 2. Trend Analysis

Trend analysis is a technique that attempts to predict the future movement of selected item in P&L or balance sheet based on recently observed trend data. Trend analysis is based on the idea that what has happened in the past gives traders an idea of what will happen in the future. Trend lines can also be used to estimate the direction of future ratio performance

Trend Line (Yc) = A + BX

Where $A = \sum Y/N$

$B = \sum XY / \sum X^2$

Deviation = Y – Trend Value

Future trend = Trend value of previous year + B

### 3. Comparative Statements

The Accounts Receivable to Sales Ratio is a business liquidity ratio that measures how much of the company's sales occur on credit. The Accounts Receivable to Sales Ratio is useful in evaluating how inclined a company is to conduct business on a credit basis

Comparison of Quarterly Debtors and Sales in Percentage during the current period

Increase / Decrease = Difference between quarterly Sale/Debtor of previous quarter

### 4. Percentage of Debts to sales of customers

The percentage of debts to sales of customers is a business liquidity ratio that measures how much of the company's sales occur on credit. When a company has a larger percentage of its sales happening on a credit basis, it may run into short-term liquidity problems. Such a scenario may happen if a company is running low on cash due to a lack of cash sales in the business cycle. Debt collection period is the subsequent finding of this method

#### Per Day Sales

Per Day Sales = Sales / 90 and Debtors Collection Period = Debtors / per day sales

#### Debt Collection Period

Debtors Collection Period = Debtors / per day sales

### 5. Schedule of change in working capital

The schedule of changes in working capital can be prepared by comparing the current assets and the current liabilities of two periods. It may be in the following form. Rules for preparing the Schedules: Increase in a current asset and decrease in current liabilities, result in increase (+) in "working capital". Vice versa, decrease in current asset and increase in current liabilities result in decrease (-) in "working capital"

Changes in Net working capital = Change in Current Assets – Change in Current Liabilities

### 3.5 LIMITATIONS OF THE STUDY

* The project period of three months is insufficient as the company's operations are numerous and complex and hence various areas could not be fully covered.
* The data will be tabulated using the last five years financial statements of the company and such

*data are only secondary in nature.*

- *Analysis of ratios can also be done with the help of alternative formulae*

- *The scope of study analysis is only for five year*

## CHAPTER 4

## DATA ANALYSIS AND INTERPRETATIONS

### 4.1 AGEING BUCKET STATEMENT FOR QUARTERLY COLLECTIONS DURING THE YEAR 2023

*Formula*

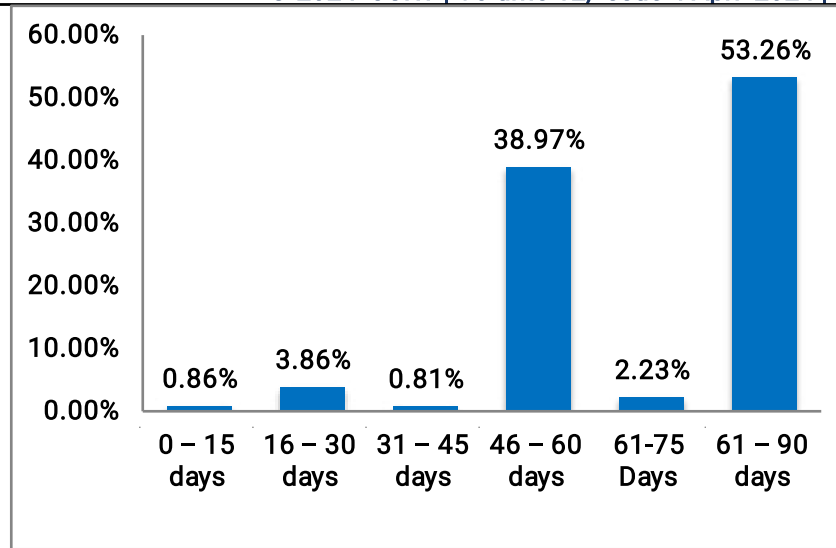| Percentage of Debts Collected = Debt Collected in outstanding period * 100/ Total Debt |
|---|

### TABLE 1

### AGEING BUCKET FOR THE YEAR 2023 – QUARTER 1 (JAN-MARCH 2023)

| Quarter | Outstanding Period | Debt Collected | Percentage of Debtor collected |
|---|---|---|---|
| I | 0 – 15 days | 73535723 | 3.23% |
| | 16 – 30 days | 547503196 | 24.08% |
| | 31 – 45 days | 19640836 | 0.86% |
| | 46 – 60 days | 396249742 | 17.43% |
| | 61-75 Days | 158921163 | 6.99% |
| | 61 – 90 days | 1077362376 | 47.39% |
| | TOTAL | 2273213036 | 100% |

INTERPRETATION:

The above analysis on ageing statement is performed for the year of 2023 to assess the collection made during 1$^{st}$ quarter of January 2023 to March 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the first quarter, the debt was collected during the last 15 days

### CHART 1

### AGEING BUCKET FOR THE YEAR 2023 – QUARTER 1 (JAN-MARCH 2023)
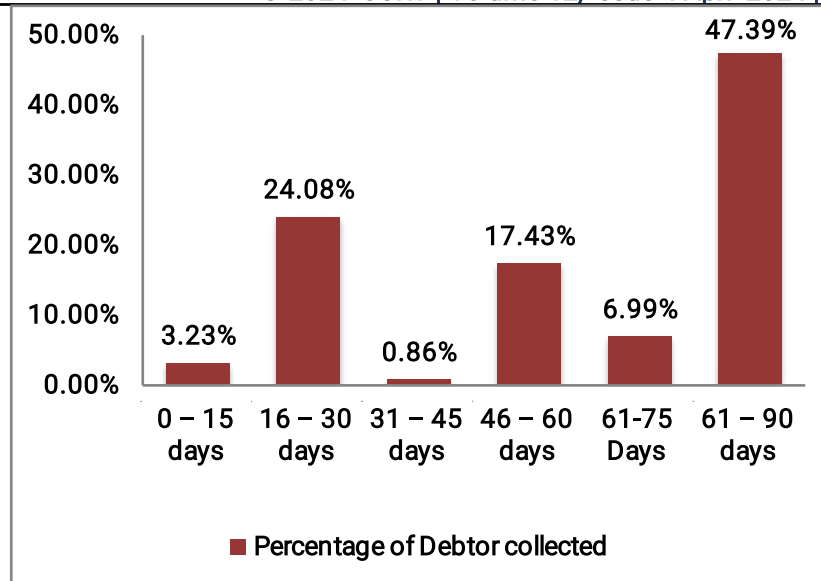
*TABLE 2*

*AGEING BUCKET FOR THE YEAR 2023 – QUARTER II (APRIL-JUNE 2023)*

| Quarter | Outstanding Period | Debt Collected | Percentage of Debtor collected |
|---|---|---|---|
| II | 0 – 15 days | 3677706 | 0.86% |
| | 16 – 30 days | 16524650 | 3.86% |
| | 31 – 45 days | 3477883 | 0.81% |
| | 46 – 60 days | 166798855 | 38.97% |
| | 61-75 Days | 9561647 | 2.23% |
| | 61 – 90 days | 227926553 | 53.26% |
| | TOTAL | 427967294 | 100% |

**INTERPRETATION:** *The above analysis on ageing statement is performed for the year of 2023 to assess the collection made during 2nd quarter of April 2023 to June 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the second quarter, the debt was collected during the last 15 days*

*CHART 2*

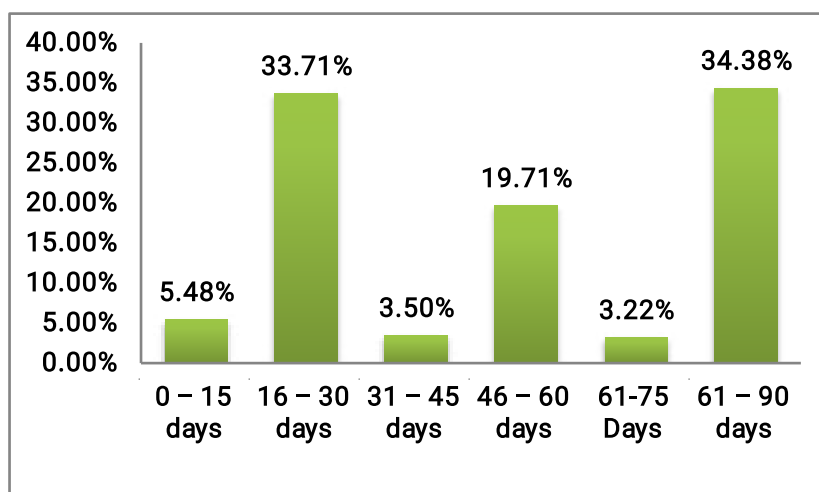*AGEING BUCKET FOR THE YEAR 2023 – QUARTER 1 (APRIL-JUNE 2023)*

*TABLE 3*

*AGEING BUCKET FOR THE YEAR 2023 – QUARTER III (JULY-SEPTEMBER 2023)*

| Quarter | Outstanding Period | Debt Collected | Percentage of Debtor collected |
|---|---|---|---|
| III | 0 – 15 days | 69543644 | 5.48% |
| | 16 – 30 days | 427644593 | 33.71% |
| | 31 – 45 days | 44445052 | 3.50% |
| | 46 – 60 days | 250032888 | 19.71% |
| | 61-75 Days | 40742478 | 3.22% |
| | 61 – 90 days | 436118873 | 34.38% |
| | TOTAL | 1268527528 | 100% |

INTERPRETATION:

The above analysis on ageing statement is performed for the year of 2023 to assess the collection made during 3rd quarter of July 2023 to September 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the third quarter, the debt was collected during the last 15 days

*CHART 3*

*AGEING BUCKET FOR THE YEAR 2023 – QUARTER 3 (JULY – SEP 2023)*

*TABLE 4*

*AGEING BUCKET FOR THE YEAR 2023 – QUARTER IV (OCT-DEC 2023)*

| Quarter | Outstanding Period | Debt Collected | Percentage of Debtor collected |
|---|---|---|---|
| IV | 0 – 15 days | 96410892 | 5.37% |
| | 16 – 30 days | 300252136 | 16.73% |
| | 31 – 45 days | 49882292 | 2.78% |
| | 46 – 60 days | 469380034 | 26.15% |
| | 61-75 Days | 188728896 | 10.52% |
| | 61 – 90 days | 690022541 | 38.45% |
| | TOTAL | 1794676791 | 100% |

INTERPRETATION:

*The above analysis on ageing statement is performed for the year of 2023 to assess the collection made during 4th quarter of October 2023 to December 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the fourth quarter, the debt was collected during the last 15 days*

*CHART 4*

*AGEING BUCKET FOR THE YEAR 2023 – QUARTER 4 (OCT – DEC 2023)*
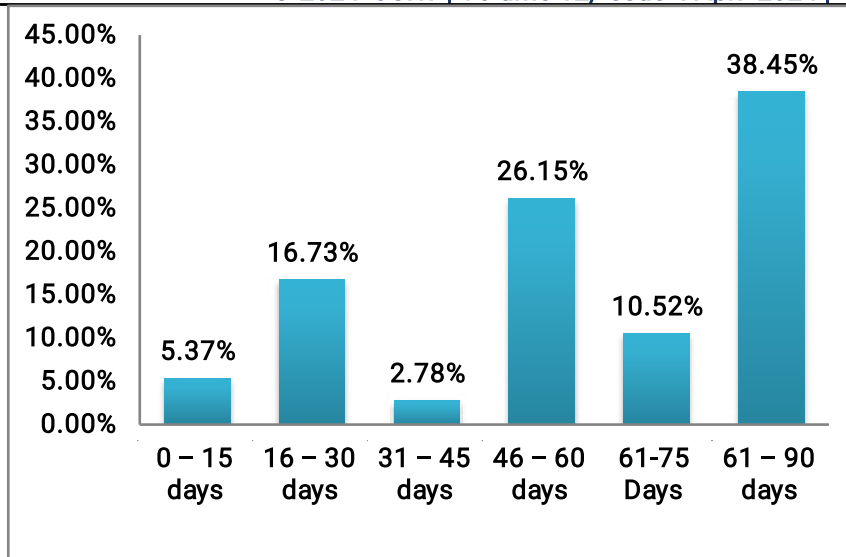
## 4.2 COMPARATIVE STATEMENTS OF QUARTERLY DEBTORS AND SALES

*Formula*

Increase / Decrease = Difference between quarterly Sale/Debtor of previous quarter

*TABLE 5*

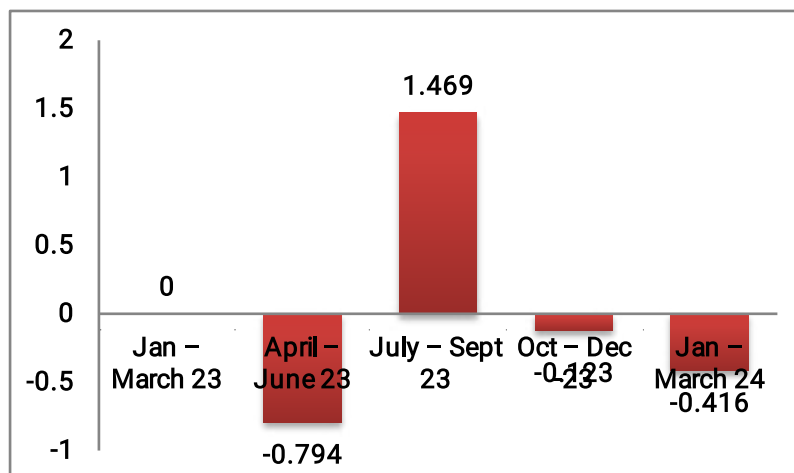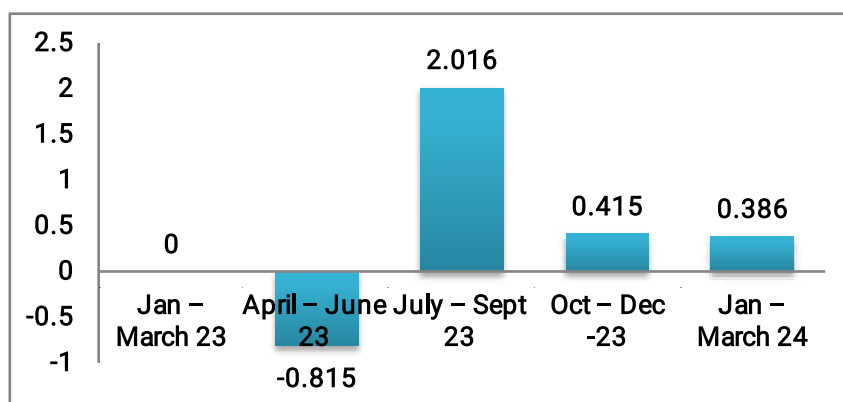*TABLE SHOWING COMPARATIVE QUARTERLY DEBTORS AND SALES FY 2023*

| Quarters | Sales | % of change | Increase/ Decrease | Debtors | % of change | Increase/ Decrease |
|---|---|---|---|---|---|---|
| Jan – March 23 | 7917042838 | - | - | 2273213036 | - | - |
| April – June 23 | 1630048495 | -0.794 | Decrease | 420611882 | -0.815 | Decrease |
| July – Sept 23 | 4024920292 | 1.469 | Increase | 1268527528 | 2.016 | Increase |
| Oct – Dec-23 | 3531635091 | -0.123 | Decrease | 1794676790 | 0.415 | Increase |
| Jan – March 24 | 2062028074 | -0.416 | Decrease | 2488021062 | 0.386 | Increase |

NOTE: 15 days to 20 days may be considered as a normal period for quarterly debtor's management. The debtors were found to be increasing during the last 3 quarters of 2023

INTERPRETATION: During the second, fourth and fifth quarters, the percentage of change in sales showed a decreasing trend but the change percentage of sales was positive during last three quarters.

*CHART 5*

CHART SHOWING PERCENTAGE OF CHANGE IN SALES



*CHART 6*

CHART SHOWING PERCENTAGE OF CHANGE IN DEBTORS



*CHART 7*

CHART SHOWING COMPARATIVE QUARTERLY DEBTORS AND SALES
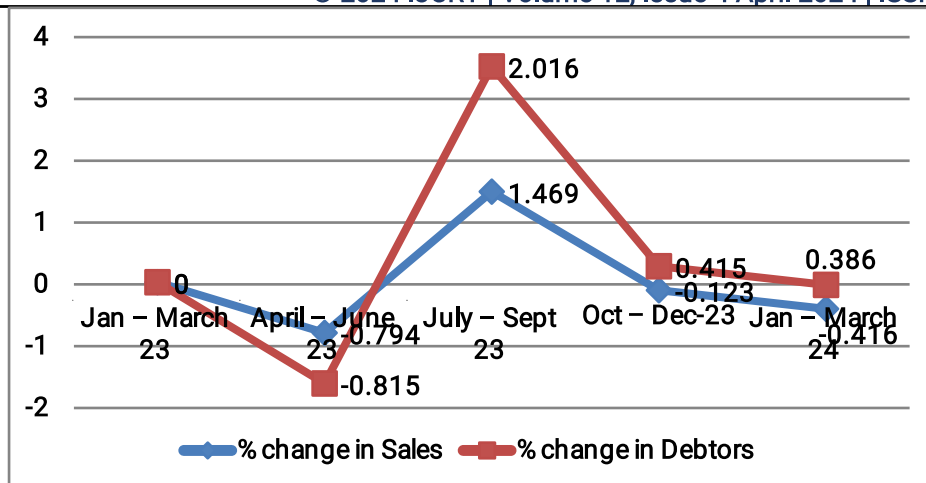
**INTERPRETATION:**

The above chart showed a comparative trend of change percentage between sales and debtors during the quarters of 2023 and first quarter of 2023.

## 4.3 QUARTERLY PER DAY SALES AND DEBT COLLECTION PERIOD

*Formula*

| Per Day Sales = Sales / 90 and Debtors Collection Period = Debtors / per day sales |
|---|

*TABLE 6*

*SHOWING COMPARATIVE QUARTERLY DEBT COLLECTION PERIOD 2023*

| Quarters | Jan-March 2023 | Apr-June 2023 | July-Sep-2023 | Oct-Dec 2023 | Jan-March 2024 |
|---|---|---|---|---|---|
| A. Sales | 7917042838.40 | 1630048495.32 | 4024920291.61 | 3531635090.83 | 2062028074.33 |
| B. Debtors | 2273213036 | 420611882.1 | 1268527528 | 1794676790 | 2488021062 |
| C. Per Day sales | 87967142.65 | 18111649.95 | 44721336.57 | 39240389.9 | 22911423.05 |
| D. Debt collection | 26 Days | 23 Days | 28 Days | 46 Days | 109 Days |

**Note:** *15 days to 20 days may be considered as a normal period for quarterly debtor's management. JN Machineries is allowing 30 Days of credit and actual collection period is 30 days average. It is clear that the company is very good at collections*

**INTERPRETATION:** *During the year 2023, the per day sales was high during the first quarter of January 2023. Debt collection period was less during April to June 2023 as 23 days and higher during January to March 2019 as 109 days. The company can concentrate more on reducing the quarterly debt collection*

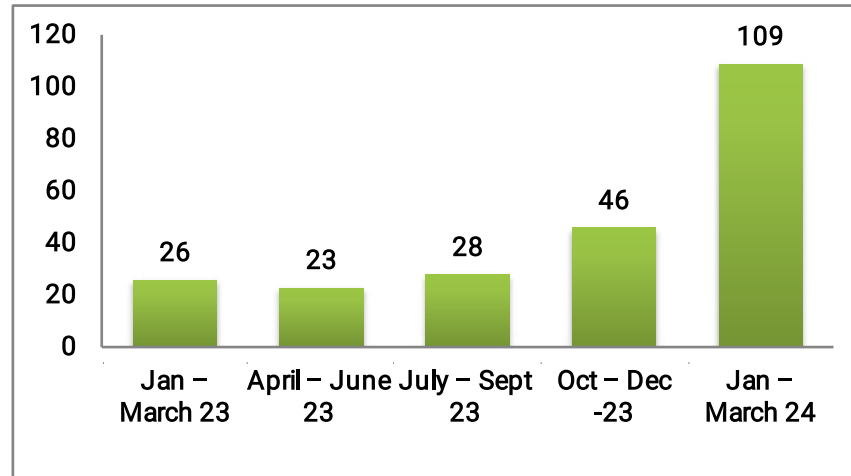*period as it was high during the last two quarters of the study period*

CHART 8

*CHART SHOWING PER DAY SALES (Rs)*
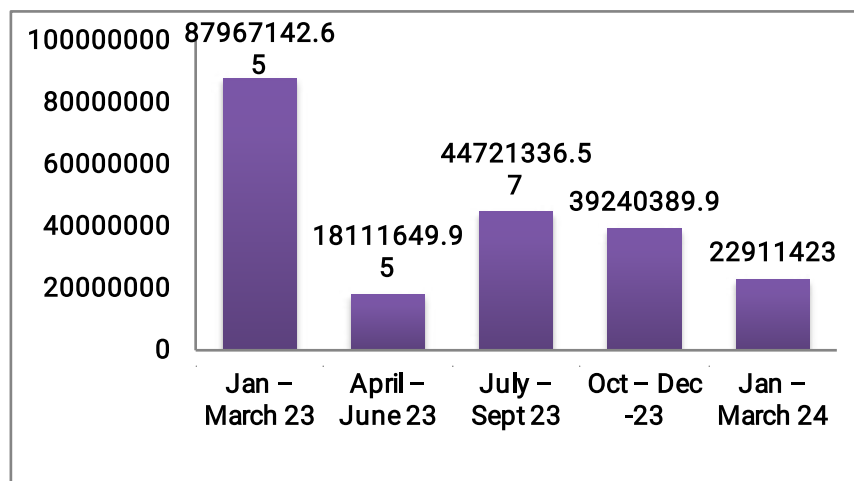


CHART 9

*CHART SHOWING DEBT COLLECTION PERIOD (Days)*



**4.4 YEARLY PER DAY SALES AND DEBT COLLECTION PERIOD**

*Formula*

*Per Day Sales = Sales / 365 and Debt Collection Period = Debtors / per day sales*

*TABLE 7*

*TABLE SHOWING COMPARATIVE DEBT COLLECTION PERIOD FY 2019-2023*

| Particular | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| A. Sales | 42246.59 | 47978.89 | 48424.65 | 39108.83 | 30182.98 |
| B. Debtors | 102.14 | 123.43 | 1415.20 | 2654.77 | 61.00 |
| C. Day sales (A/365) | 115.74 | 131.45 | 132.67 | 107.15 | 82.69 |
| D. Debtors collection period (B/C) | 1 | 1 | 11 | 25 | 1 |
| E. Rank | II | III | IV | V | I |

*Note:* 60 Days are considered as normal debt collection period for yearly Credit management and JN Machineries is found to be very good at yearly debtor's management

*INTERPRETATION:* During the year 2021, the per day sales was higher as 132.67. Debt collection period was less during the years 2019, 2020 and 2023 as 1 day and higher during the year 2022 as 25 days.

*CHART 10*

*TABLE SHOWING COMPARATIVE SALES AND DEBTORS FY 2019-2023*
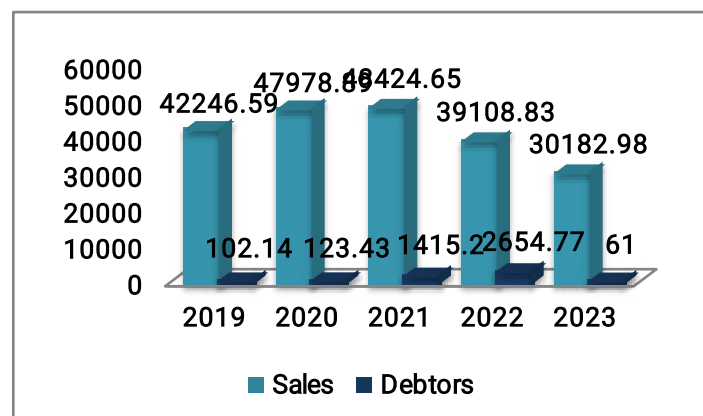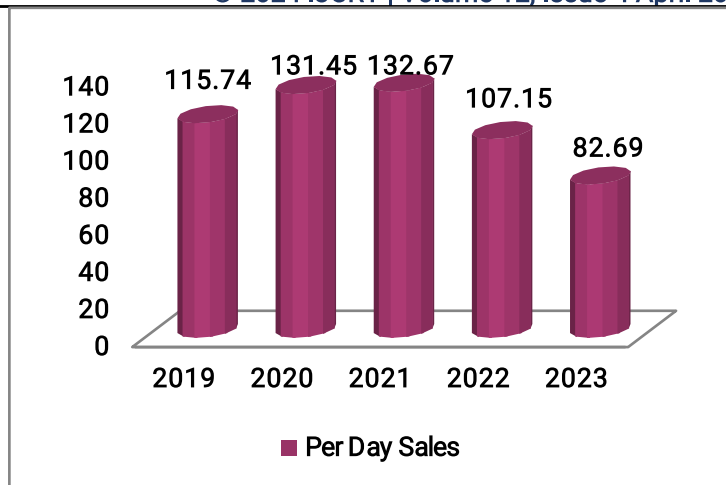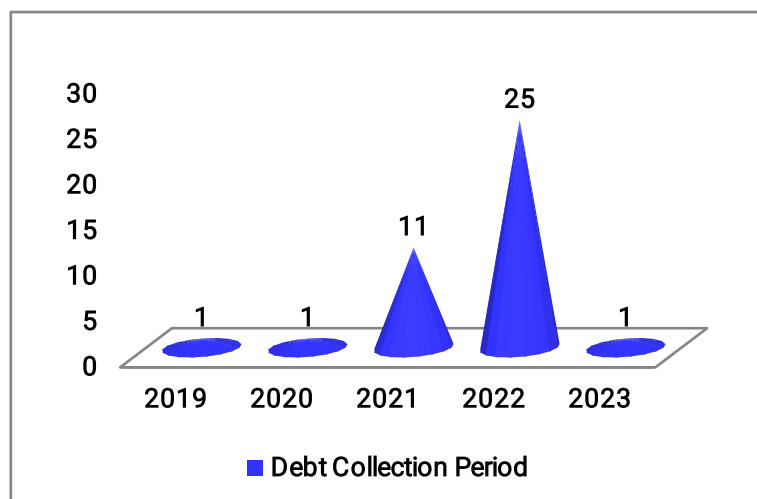


*CHART 11*

*CHART SHOWING PER DAY SALES FY 2019-2023*

*CHART 12*

*CHART SHOWING DEBT COLLECTION PERIOD FY 2019-2023*



*TABLE 8*

*TABLE SHOWING GAINED COLLECTION PERIOD*

| | |
|---|---|
| *Allowed Collection period* | *60 days* |
| *Less: Actual Collection period (max)* | *25 days* |
| ***Gained period*** | ***35 days*** |

**INTERPRETATION:** *The Company allowed the collection period of 60 days on an average for yearly collections. During the year 2022, the actual collection period was 25 days. The company gained 35 days as gained period during the study period from 2019 to 2023*

## 4.4 RATIO ANALYSIS

- *Debt to Equity Ratio*
- *Debt to Assets Ratio*
- *Quarterly debtor turnover Ratio*
- *Yearly Debtor Turnover Ratio*

*Ratios are designed to help you measure the degree of financial risk that your business faces by considering debt to equity, debt to assets, and debtor turnover ratio*

- ***Debt to Equity Ratio***

*Formula*

| |
|---|
| *Debts to Equity Ratio = Total debts / Shareholders Equity* |

*TABLE 9*

*TABLE SHOWING DEBT TO EQUITY RATIO*

| *Year* | *Total Debt* | *Shareholders' Equity* | *Debt to Equity Ratio* |
|---|---|---|---|
| *2019* | *102.14* | *489.52* | *0.209* |
| *2020* | *123.43* | *489.52* | *0.252* |
| *2021* | *1415.20* | *489.52* | *2.891* |
| *2022* | *2654.77* | *489.52* | *5.423* |
| *2023* | *61.00* | *489.52* | *0.125* |

**INTERPRETATION:** *The ratio of debt-to-owner's equity or net worth indicates the degree of financial leverage you're using to enhance your return. A rising debt-to-equity ratio may signal that further increases in debt caused by purchases of inventory or fixed assets should be restrained. The above chart shows, Debtor's Turnover Ratio keeps on decreasing from 2019 and increased in 2021 and met a sudden fall in*

*2023. This shows a decrease in sales volume as well as debtors' volume. From the above graph it is clear that in the 2019, debtors' turnover ratio is 0.0051 & it has been decreased 0.0018 in 2023*

CHART 12

CHART SHOWING DEBT TO EQUITY RATIO
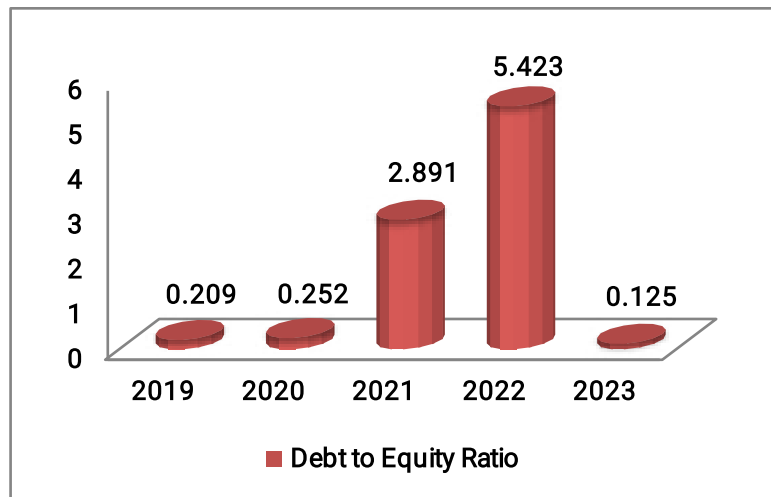


- *Debt to Assets Ratio*

*Formula*

| Debts to Assets Ratio = Total debts / Total Assets |
| --- |

TABLE 10

TABLE SHOWING DEBT TO ASSETS RATIO

| Year | Total Debt | Total Assets | Debt to Assets Ratio |
| --- | --- | --- | --- |
| 2019 | 102.14 | 20,255.98 | 0.0050 |
| 2020 | 123.43 | 25,496.64 | 0.0048 |
| 2021 | 1415.20 | 31,859.30 | 0.0444 |
| 2022 | 2654.77 | 35,701.82 | 0.0744 |
| 2023 | 61.00 | 34,145.60 | 0.0018 |

INTERPRETATION

*This ratio measures whether the total assets are enough for total debt. Historically, a debt-to-asset ratio of*

*no more than 50 percent has been considered prudent. A higher ratio indicates a possible overuse of leverage, and it may indicate potential problems meeting the debt payments. The Debt asset ratio was 0.0050 in 2019, it increased in 2021 to 0.0444 and has a sudden fall in 2023 to 0.0018*

CHART 13

CHART SHOWING DEBT TO ASSETS RATIO
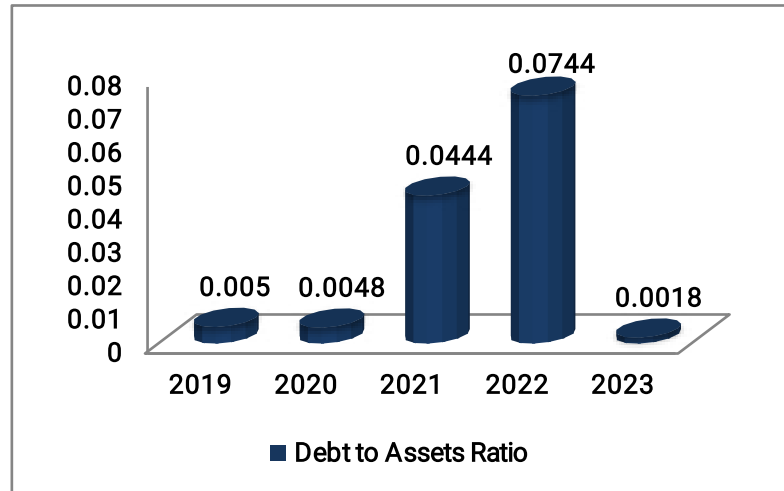


- *Quarterly debtor turnover Ratio*

Formula

| Quarterly Debtor Turnover Ratio = Quarterly Sales / Respective Quarterly Debtor |
| --- |

TABLE 11

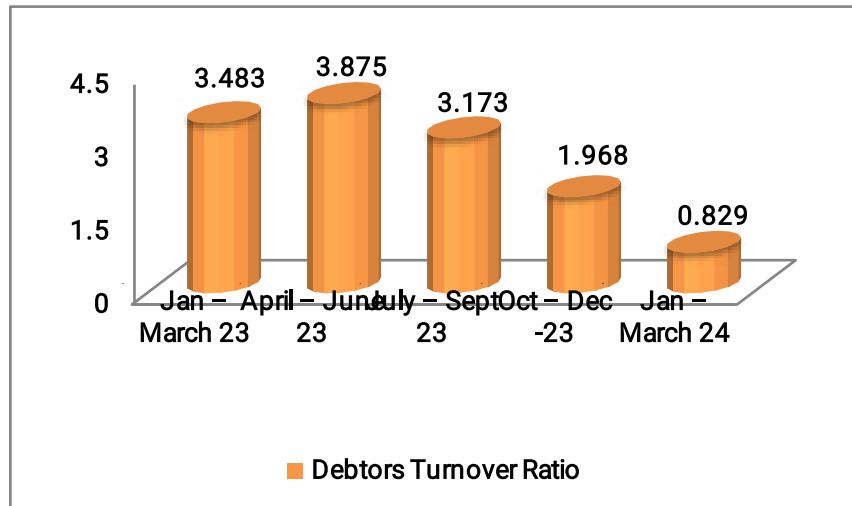TABLE SHOWING QUARTERLY DEBTORS TURNOVER RATIO DURING THE YEAR 2023

| Quarters | Sales | Debtors | Debtors Turnover Ratio |
| --- | --- | --- | --- |
| Jan – March 2023 | 7917042838 | 2273213036 | 3.483 |
| April – June 2023 | 1630048495 | 420611882 | 3.875 |
| July – Sept 2023 | 4024920292 | 1268527528 | 3.173 |
| Oct – Dec-2023 | 3531635091 | 1794676790 | 1.968 |
| Jan - March 2024 | 2062028074 | 2488021062 | 0.829 |

INTERPRETATION

*The above chart shows, Debtor's Turnover Ratio keeps on decreasing from 1st Quarter and meets a sudden fall. This shows and decrease in sales volume as well as debtors' volume. From the above graph it is clear that in the quarter January 2023-March 2023, in January-March 2023, debtors' turnover ratio is 3.48 & it has been decreased 0.83 in January-March 2023 from 1.97 in October-December 2023*

## CHART 14

### CHART SHOWING QUARTERLY DEBTORS TURNOVER RATIO DURING THE YEAR 2023



- *Yearly Debtor Turnover Ratio*

*Formula*

| Debtor Turnover Ratio = Total Sales /Debtors |
| --- |

### TABLE 16

### TABLE SHOWING DEBTORS TURNOVER RATIO

| Years | Debtors | Sales | Debtors Turnover Ratio |
| --- | --- | --- | --- |
| 2019 | 20,103.50 | 42246.59 | 2.10 |
| 2020 | 26,336.13 | 47978.89 | 1.82 |
| 2021 | 29,234.49 | 48424.7 | 1.66 |
| 2022 | 28,071.92 | 39108.83 | 1.39 |
| 2023 | 26,223.50 | 30182.98 | 1.15 |

*INTERPRETATION:*

*During the study period from 2019 to 2023, the debtor turnover ratio was found to be higher in 2019 with 2.10 and decreased marginally over the period of time and stands at 1.15 during 2023*

### CHART 20

### CHART SHOWING DEBTORS TURNOVER RATIO
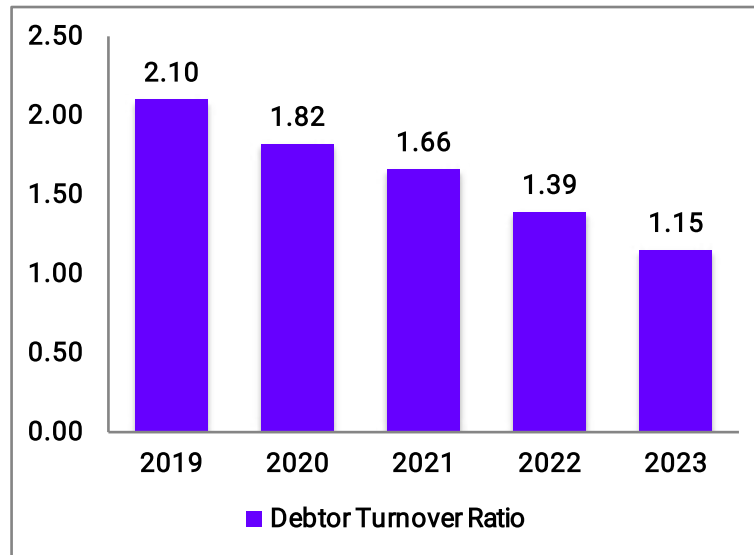


*4.6 TREND ANALYSIS*

- *Total Debt*

### TABLE 12

### TABLE SHOWING TREND ANALYSIS OF TOTAL DEBT

| YEAR | X | Y | $X^2$ | XY | TREND VALUE | Deviation |
|------|----|--------|------|----------|----------|-----------|
| 2019 | -2 | 102.14 | 4 | -204.28 | 381.496 | -279.36 |
| 2020 | -1 | 123.43 | 1 | -123.43 | 626.402 | -502.97 |
| 2021 | 0 | 1415.2 | 0 | 0 | 871.308 | 543.892 |
| 2022 | 1 | 2654.77 | 1 | 2654.77 | 1116.21 | 1538.56 |
| 2023 | 2 | 61 | 4 | 122 | 1361.12 | -1300.1 |
| TOTAL | | 4356.54 | 10 | 2449.06 | | |

*Formula*

| *Trend Line (Yc) = A + BX* |
|---|

*Where A = ∑Y/N*

$B = \sum XY / \sum X^2$

| *Deviation = Y – Trand Vale of the corresponding period* |
|---|

*A = 4356.54 / 5*

*= 871.308*

*B = 2449.06 / 10*

*= 244.906*

> *Yc = 4356.54 + [244.906 (-2)]*
>
> *= 381.496*


*Yc = 4356.54 + [244.906 (-1)]*

> *= 626.402*


*Yc = 4356.54 + [244.906 (0)]*

> *= 871.308*


*Yc = 4356.54 + [244.906 (1)]*

> *= 1116.21*


*Yc = 4356.54 + [244.906 (2)]*
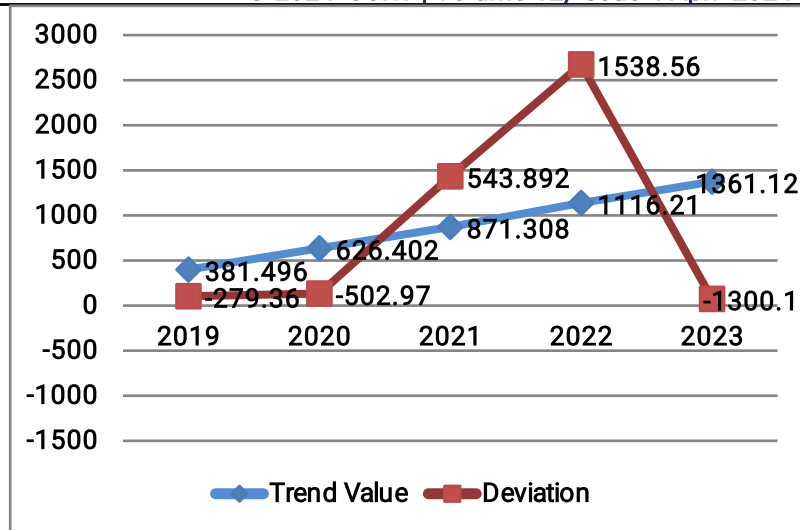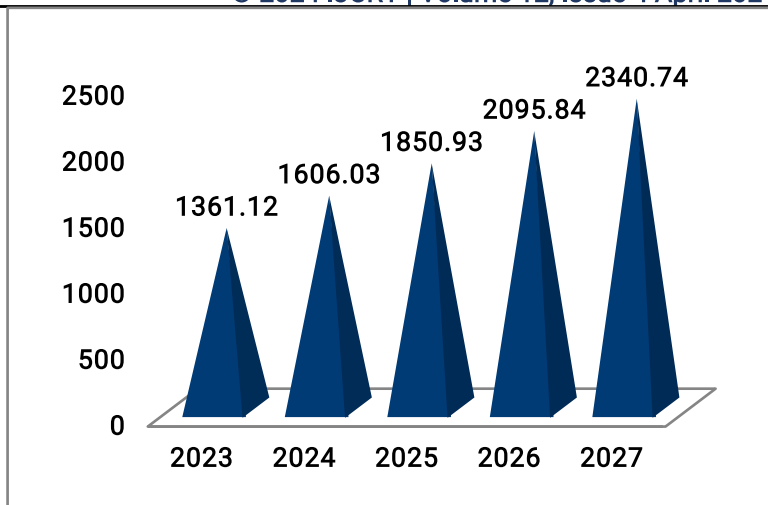
> *= 1361.12*


*CHART 15*

*CHART SHOWING TREND & DEVIATION*

TABLE 13

PROJECTED TREND VALUE – EXPECTED TOTAL DEBT

FOR THE FORTHCOMING YEARS (2023 TO 2021)

| YEAR | FUTURE TREND (Trend value + B) |
|------|-------------------------------|
| 2023 | 1361.12 |
| 2024 | 1606.03 |
| 2025 | 1850.93 |
| 2026 | 2095.84 |
| 2027 | 2340.74 |

TABLE 16

CHART SHOWING TREND ANALYSIS

## INTERPRETATION:

*The trend analysis for the above years shows decent increase. This is mainly due to the reason that these data's have been arrived in comparison with the last 5 years sales. There was no phenomenal increase in growth in term of total debt during 2023 and this is the one of the major reasons that the projections are also showing an increasing trend. In reality if we assume that the same increasing in trend continues compared to 2023, the ratio for the above five years will be still higher.*

- *Sales Turnover*

*TABLE 14*

*TABLE SHOWING TREND ANALYSIS OF SALES*

| YEAR | X | Y (Rs.lakhs) | $X^2$ | XY (Rs.lakhs) | TREND VALUE | DEVIATION |
|------|-----|--------------|-----|---------------|-------------|-----------|
| 2019 | -2 | 42246.6 | 4 | -84493.2 | 48187.84 | -5941.3 |
| 2020 | -1 | 47978.9 | 1 | -47978.9 | 44888.12 | 3090.77 |
| 2021 | 0 | 48424.7 | 0 | 0 | 41588.39 | 6836.26 |
| 2022 | 1 | 39108.8 | 1 | 39108.83 | 38288.66 | 820.17 |
| 2023 | 2 | 30183 | 4 | 60365.96 | 34988.93 | -4806 |
| TOTAL | | 207942 | 10 | -32997.3 | | |

*Where Deviation = Y – Trend Value*

*Yc = A + BX*

*Where A = ∑Y/N*

$B = ∑XY / ∑X^2$

*A = 207942/ 5*

 *= 41588.39*

*B = -32997.3 / 10*

 *= -32997.3*

$$Yc = 41588.39 + [-32997.3 (-2)]$$

$$= 48187.84$$

*Yc = 41588.39 + [-32997.3 (-1)]*

$$= 44888.12$$

*Yc = 41588.39+ [-32997.3 (0)]*

$$= 41588.39$$

*Yc = 41588.39+ [-32997.3 (1)]*

$$= 38288.66$$

*Yc = 41588.39+ [-32997.3 (2)]*

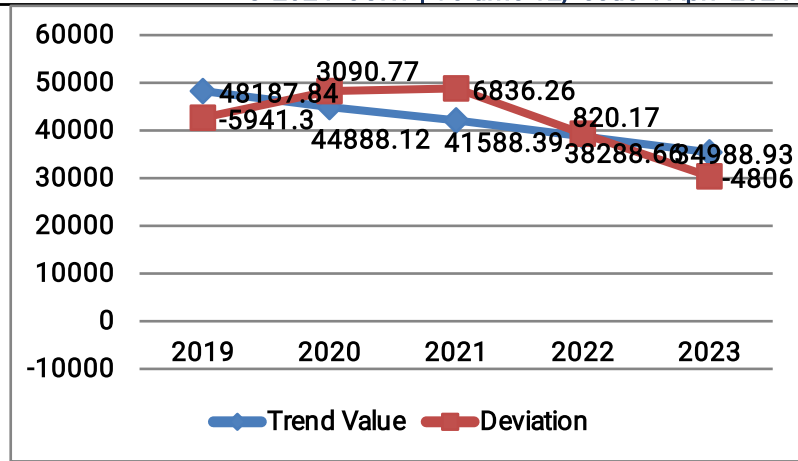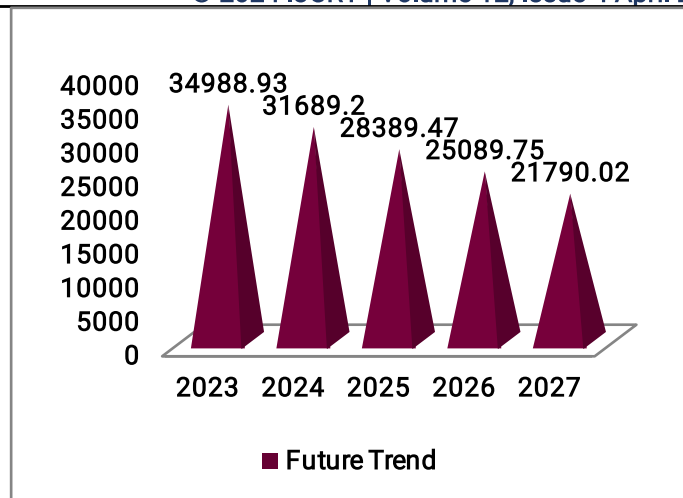$$= 34988.93$$

*CHART 17*

*CHART SHOWING TREND & DEVIATION*

*TABLE 15*

*PROJECTED TREND VALUE – EXPECTED SALES*

*FOR THE FORTHCOMING YEARS (2023 TO 2021)*

| YEAR | FUTURE TREND (Trend value + B) |
|------|-------------------------------|
| 2023 | 34988.93 |
| 2024 | 31689.2 |
| 2025 | 28389.47 |
| 2026 | 25089.75 |
| 2027 | 21790.02 |

*CHART 18*

*CHART SHOWING TREND ANALYSIS OF SALES*

*INTERPRETATION:*

*The trend analysis for the above year's shows decreasing trend. This is mainly due to the reason that these data's have been arrived in comparison with the last 5 years sales. There was no phenomenal increase in growth in term of sales during 2023 and this is the one of the major reasons that the projections are also showing a decreasing trend. In reality if we assume that the trend continues compared to 2023, the ratio for the above five years will be still lower.*

*4.8 SCHEDULE OF CHANGES IN WORKING CAPITAL*

*TABLE 17*

*TABLE SHOWING THE CHANGES IN WORKING CAPITAL FY 2023-2022*

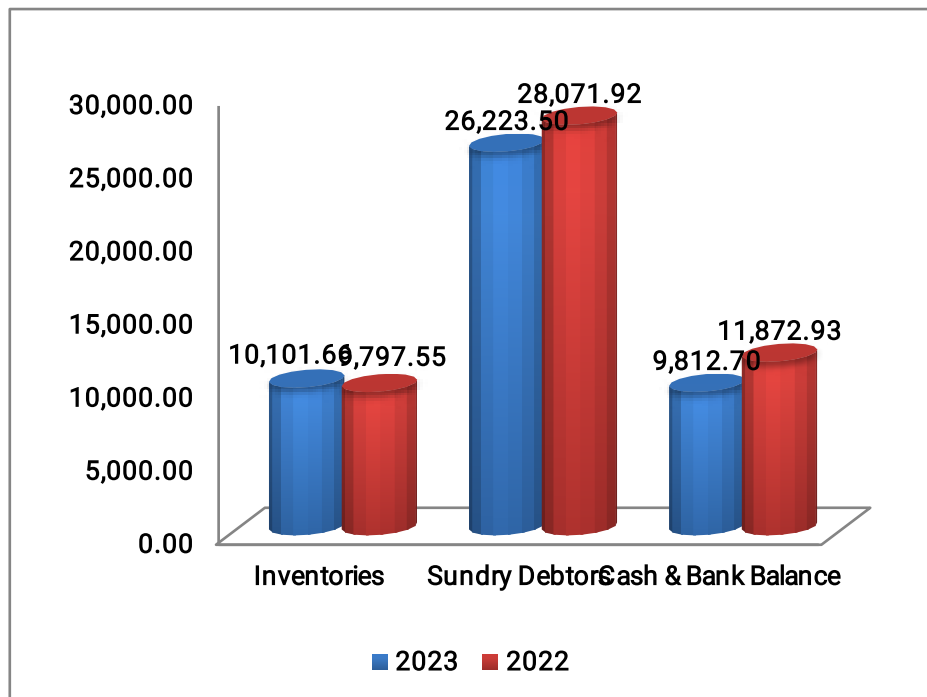| Particular | 2023 | 2022 | Increase | Decrease |
|---|---|---|---|---|
| *Current Asset* | | | | |
| *Inventories* | *10,101.66* | *9,797.55* | *304.11* | |
| *Sundry Debtors* | *26,223.50* | *28,071.92* | | *1,848.42* |
| *Cash & Bank Balance* | *9,812.70* | *11,872.93* | | *2,060.23* |
| | | | | |
| | *46,137.86* | *49,742.40* | | |
| *Current Liabilities* | | | | |
| *Current Liabilities* | *23,281.09* | *26,763.33* | *3,482.24* | |
| *Provisions* | *11,040.44* | *10,326.02* | | *714.42* |
| | *34,321.53* | *37,089.35* | | |
| *Net Working Capital* | *11,816.33* | *12,653.05* | | |
| *Increase in WC* | *836.72* | | *836.72* | |
| *Total* | *12,653.05* | *12,653.05* | *4623.07* | *4,623.07* |

*Interpretation:*

*The above table shows the working capital statement of JN Machineries for the year 2022 and 2023.*

*Current assets of the company showed a slow raise from the previous year. Current liabilities increased.*

*Though this is not favorable to the company net assets compensated such a decline.*

### CHART 21

### CHART SHOWING THE VARIATION IN CURRENT ASSETS FY 2023-2022



### CHART 22

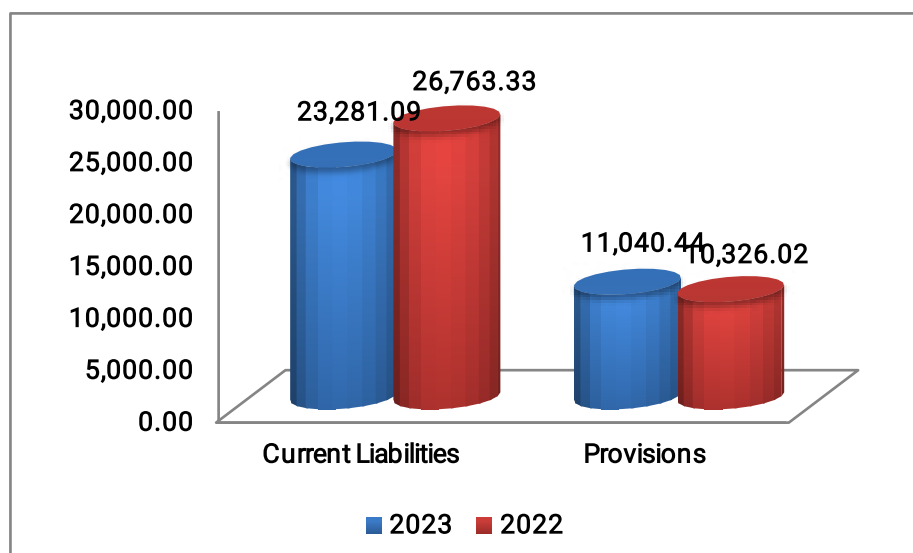### CHART SHOWING THE VARIATION IN CURRENT LIABILITIES FY 2023-2022

*TABLE 18*

*TABLE SHOWING THE CHANGES IN WORKING CAPITAL FY 2022-2021*

| Particular | 2022 | 2021 | Increase | Decrease |
|---|---|---|---|---|
| Current Asset | | | | |
| Inventories | 9,797.55 | 11,763.82 | | 1,966.27 |
| Sundry Debtors | 28,071.92 | 29,234.49 | | 1,162.57 |
| Cash & Bank Balance | 11,872.93 | 7,732.05 | 4,140.88 | |
| | | | | |
| | 49,742.40 | 48,730.36 | | |
| Current Liabilities | | | | |
| Current Liabilities | 26,763.33 | 29,327.02 | 2,563.69 | |
| Provisions | 10,326.02 | 8,942.13 | | 1,383.89 |
| | 37,089.35 | 38,269.15 | | |
| Net Working Capital | 12,653.05 | 10,461.21 | | |
| Decrease in WC | | 2,191.84 | | 2191.84 |
| | 12,653.05 | 12,653.05 | 6704.57 | 6704.57 |

*Interpretation:*

*The above table shows the working capital statement of JN Machineries for the year 2022 and 2021. Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

*CHART 23*

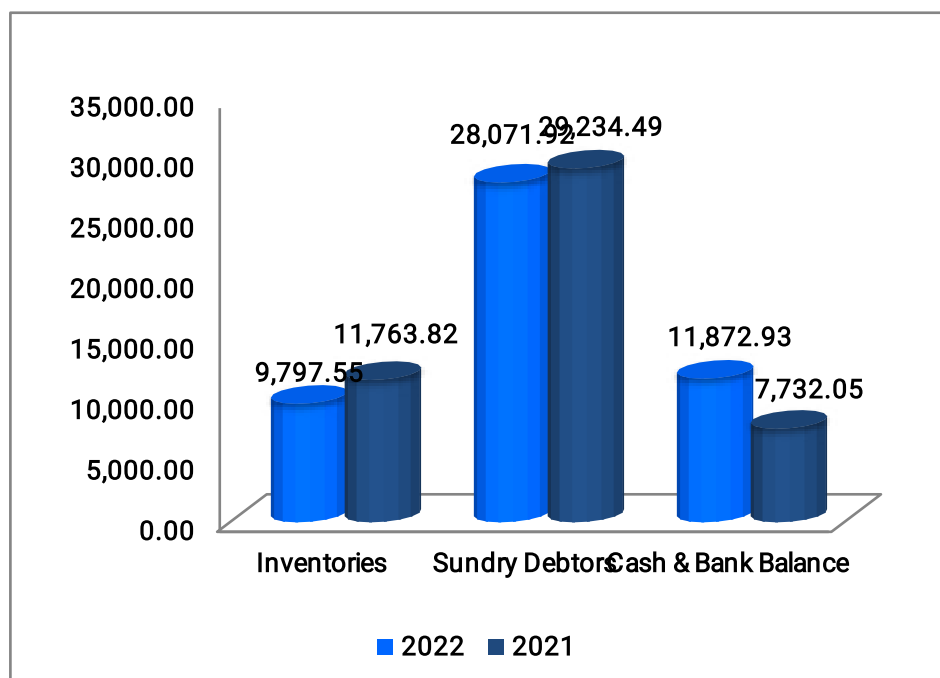*CHART SHOWING THE VARIATION IN CURRENT ASSETS FY 2022-2021*

CHART 24

CHART SHOWING THE VARIATION IN CURRENT LIABILITIES FY 2022-2021
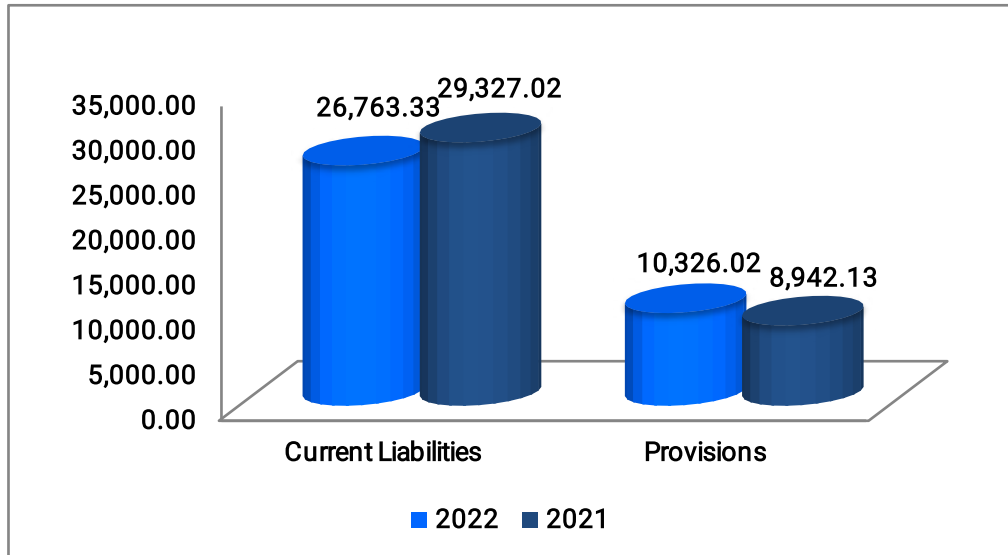


TABLE 19

TABLE SHOWING THE CHANGES IN WORKING CAPITAL FY 2021-2020

| Particular | 2021 | 2020 | Increase | Decrease |
|---|---|---|---|---|
| Current Asset | | | | |
| Inventories | 11,763.82 | 13,444.50 | | 1,680.68 |
| Sundry Debtors | 29,234.49 | 26,336.13 | 2,898.36 | |
| Cash & Bank Balance | 7,732.05 | 6,671.98 | 1,060.07 | |
| | | | | |
| | 48,730.36 | 46,452.61 | | |
| Current Liabilities | | | | |
| Current Liabilities | 29,327.02 | 33,638.01 | 4,310.99 | |
| Provisions | 8,942.13 | 7,641.37 | | 1,300.76 |
| | 38,269.15 | 41,279.38 | | |
| Net Working Capital | 10,461.21 | 5,173.23 | | |
| Decrease in WC | | 5,287.98 | | 5287.98 |
| | 10,461.21 | 10,461.21 | 8269.42 | 6704.57 |

Interpretation:

The above table shows the working capital statement of JN Machineries for the year 2021 and 2020. Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.

CHART 25

*CHART SHOWING THE VARIATION IN CURRENT ASSETS FY 2021-2020*



CHART 26

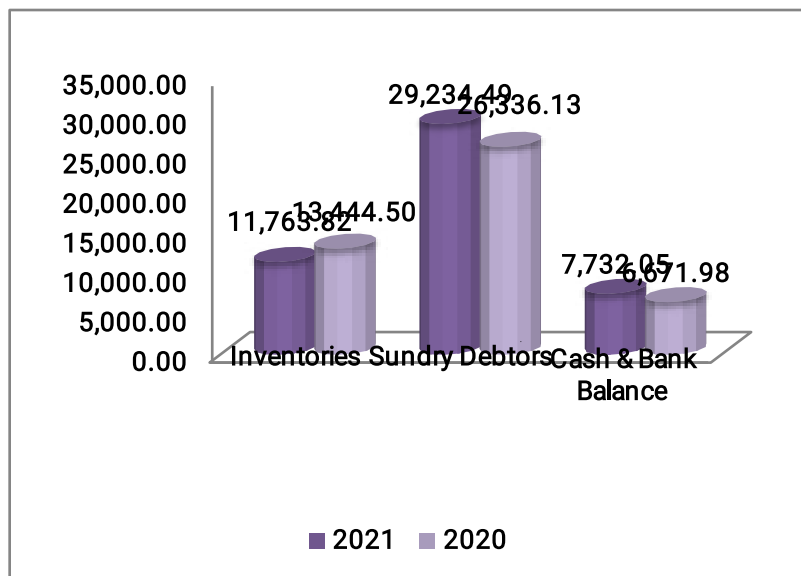*CHART SHOWING THE VARIATION IN CURRENT LIABILITIES FY 2021-2020*
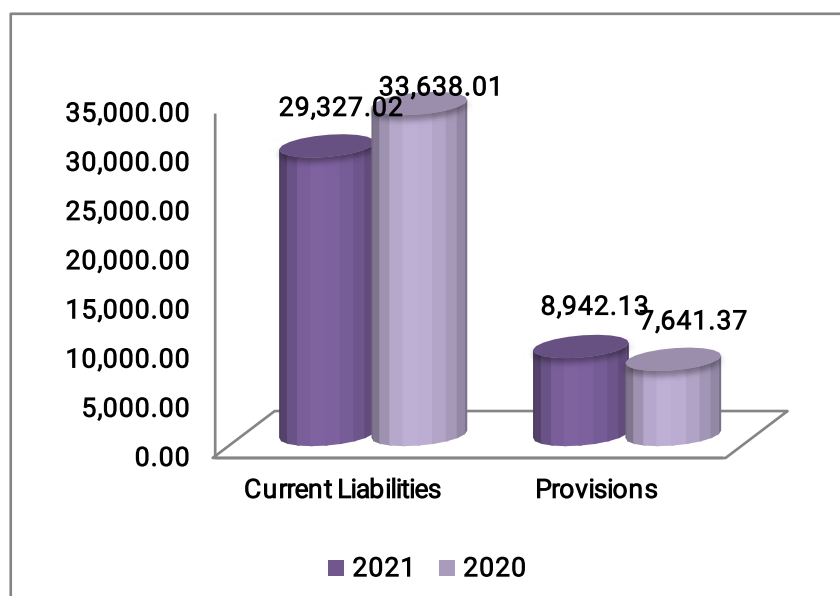
*TABLE 20*

*TABLE SHOWING THE CHANGES IN WORKING CAPITAL FY 2020-2021*

| Particular | 2020 | 2019 | Increase | Decrease |
|---|---|---|---|---|
| *Current Asset* | | | | |
| Inventories | 13,444.50 | 10,852.05 | 2,592.45 | |
| Sundry Debtors | 26,336.13 | 20,103.50 | 6,232.63 | |
| Cash & Bank Balance | 6,671.98 | 9,630.15 | | 2,958.17 |
| | | | | |
| | 46,452.61 | 40,585.70 | | |
| *Current Liabilities* | | | | |
| Current Liabilities | 33,638.01 | 31,407.77 | | 2,230.24 |
| Provisions | 7,641.37 | 7,596.54 | | 44.83 |
| | 41,279.38 | 39,004.31 | | |
| *Net Working Capital* | 5,173.23 | 1,581.39 | | |
| Decrease in WC | | 3,591.84 | | 3591.84 |
| | 5,173.23 | 5,173.23 | 8825.08 | 6704.57 |

**Interpretation:**

*The above table shows the working capital statement of JN Machineries for the year 2020 and 2019. Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

*CHART 27*

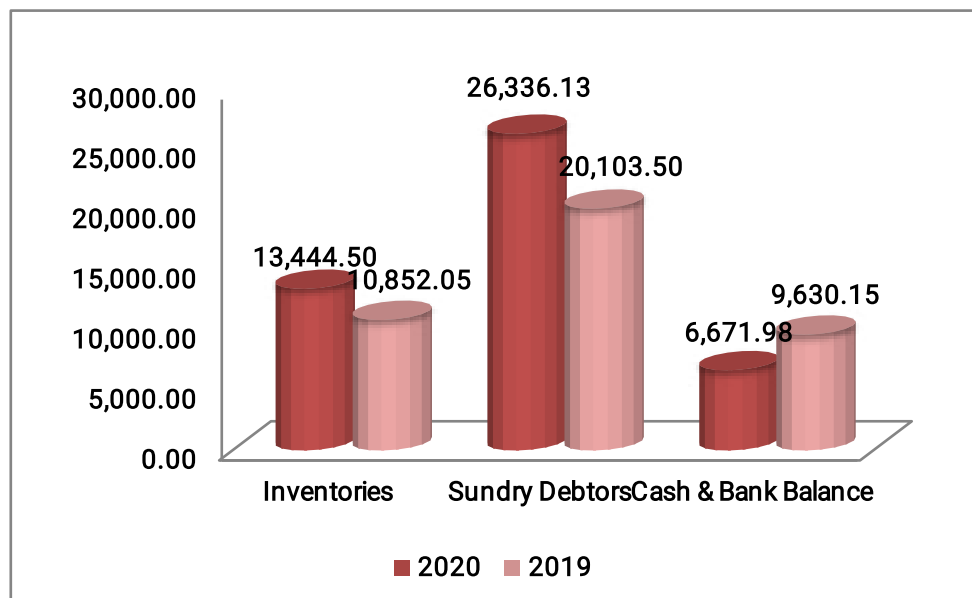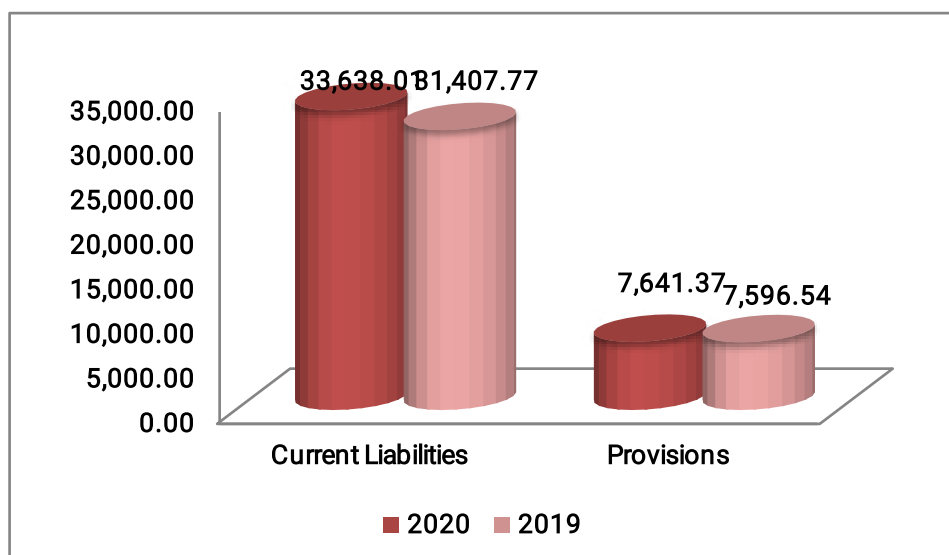*CHART SHOWING THE VARIATION IN CURRENT ASSETS FY 2020-2019*

## CHART 28

### CHART SHOWING THE VARIATION IN CURRENT LIABILITIES FY 2020-2019



CHAPTER 5

## FINDINGS & SUGGESTIONS

### 5.2 FINDINGS OF THE STUDY

✓ *The results of ageing statement performed for the year of 2023 to assess the collection made during 1ˢᵗ quarter of January 2023 to March 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the first quarter, the debt was collected during the last 15 days*

✓ *The results of ageing statement performed for the year of 2023 to assess the collection made during 2ⁿᵈ quarter of April 2023 to June 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the second quarter, the debt was collected during the last 15 days*

✓ *The results of ageing statement performed for the year of 2023 to assess the collection made during 3ʳᵈ quarter of July 2023 to September 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the third quarter, the debt was collected during the last 15 days*

✓ *The results of ageing statement performed for the year of 2023 to assess the collection made during 4ᵗʰ quarter of October 2023 to December 2023. A year was divided into 4 quarters and each quarter was sub divided into 6 periods with 15 days interval. The above chart shows that during the fourth*

*quarter, the debt was collected during the last 15 days*

✔ *During the second, fourth and fifth quarters, the percentage of change in sales showed a decreasing trend but the change percentage of sales was positive during last three quarters.*

✔ *During the year 2023, the per day sales was high during the first quarter of January 2023. Debt collection period was less during April to June 2023 as 23 days and higher during January to March 2019 as 109 days. The company can concentrate more on reducing the quarterly debt collection period as it was high during the last two quarters of the study period*

✔ *During the year 2021, the per day sales was higher as 132.67. Debt collection period was less during the years 2019, 2020 and 2023 as 1 day and higher during the year 2022 as 25 days.*

✔ *The Company allowed the collection period of 60 days on an average for yearly collections. During the year 2022, the actual collection period was 25 days. The company gained 35 days as gained period during the study period from 2019 to 2023*

✔ *During the study period from 2019 to 2023, the debtor turnover ratio was found to be higher in 2019 with 2.10 and decreased marginally over the period of time and stands at 1.15 during 2023*

✔ *The ratio of debt-to-owner's equity or net worth indicates the degree of financial leverage you're using to enhance your return. A rising debt-to-equity ratio may signal that further increases in debt caused by purchases of inventory or fixed assets should be restrained. The above chart shows, Debtor's Turnover Ratio keeps on decreasing from 2019 and increased in 2021 and met a sudden fall in 2023. This shows a decrease in sales volume as well as debtors' volume. From the above graph it is clear that in the 2019, debtors' turnover ratio is 0.0051& it has been decreased 0.0018 in 2023*

✔ *This ratio measures whether the total assets are enough for total debt. Historically, a debt-to-asset ratio of no more than 50 percent has been considered prudent. A higher ratio indicates a possible overuse of leverage, and it may indicate potential problems meeting the debt payments. The Debt asset ratio was 0.0050 in 2019, it increased in 2021 to 0.0444 and has a sudden fall in 2023 to 0.0018*

✔ *Debtor's Turnover Ratio keeps on decreasing from $1^{st}$ Quarter and meets a sudden fall. This shows and decrease in sales volume as well as debtors' volume. From the above graph it is clear that in the quarter January 2023-March 2023, in January-March 2023, debtors' turnover ratio is 3.48 & it has been decreased 0.83 in January-March 2023 from 1.97 in October-December 2023*

✔ *The trend analysis shows decent increase. This is mainly due to the reason that these data's have been arrived in comparison with the last 5 years sales. There was no phenomenal increase in growth in term of sales during 2023 and this is the one of the major reasons that the projections are also showing an increasing trend. In reality if we assume that the same increasing in trend continues compared to 2023, the ratio for the above five years will be still higher.*

✔ *The trend analysis for sales shows a decreasing trend. This is mainly due to the reason that these data's have been arrived in comparison with the last 5 years sales. There was no phenomenal increase in growth in term of sales during 2023 and this is the one of the major reasons that the projections are also showing an decreasing trend. In reality if we assume that the trend continues compared to 2023, the ratio for the above five years will be still lower.*

✔ *Debtor turnover ratio was found to be higher in March 2022 and lower in March 2023*

✔ *The working capital statement of JN Machineries for the year 2022 and 2023, Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

✔ *The working capital statement of JN Machineries for the year 2021 and 2022, Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

✔ *The working capital statement of JN Machineries for the year 2020 and 2021, Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

✔ *The working capital statement of JN Machineries for the year 2019 and 2020, Current assets of the company showed a slow raise from the previous year. Current liabilities increased. Though this is not favorable to the company net assets compensated such a decline.*

## *5.2 SUGGESTIONS OF THE STUDY*

*It was found out that the relationship between Credit management and profitability was very strong. Thus the profitability of a firm will vary depending on the Credit management policy adopted by the particular firm. From the finding it can be concluded that JN Machineries uses a stringent Credit management policy. The way receivables are managed profoundly affects profitability. The researcher emphasizes that receivables constitute a significant portion of the firm's current assets and thus should be managed properly.*

*After analyzing the findings and found out the relationship between Credit management and profitability, the researcher made the following findings. In the management of receivables, credit worthiness of customers should be assessed. The costs and risks of maintaining any credit customer should be matched with the returns from such a customer. Credit rating should be emphasized and adopted, such that if the probability of a particular customer to default is high, the customer can be denied credit. Rational decisions should be whether to or not to trade with a customer to who credit risk has been attached. There should be adequate work force in the credit control department so as to make fast the process of credit collections. The enterprise should adopt a credit policy that is compatible with other policy decisions e.g dividend policy, investment decisions and at the same time maximizes the expected profits.*

## *5.3 CONCLUSION*

Over the years, JN Machineries grew in size from its plant established at Chennai, Tamil Nadu. An experienced and committed workforce is the hallmark of the company taking it successfully through the vagaries of business cycles.

Today it is truly a market driven company, making important structural changes and continuous process improvements to meet its customers and obligations. Through its continuous efforts to utilize its modernized facilities to their full capacity and achieve cost-effectiveness, JN Machineries is endeavoring to provide its customers with the benefit of competitively priced products of world-class quality. To achieve cost leadership, the company is currently implementing a business restructuring plan which envisages the separation of all non-core activities into secondary businesses, in addition to regular cost-cutting measures, including manpower cost, following restructuring,

The Company is found to be collecting large value of debts in short term duration that enables the company to have a good working capital to meet its current liabilities, reserves and surplus, and can also plan its future investments. The company is found to be constantly reviewing its credit policy every year and has acquired all their credits within the stipulated period

## 5.4 DIRECTIONS FOR FUTURE RESEARCH

Credit is all about company's future business so the company should concentrate on debtor's management. The company is having better Credit management. The implementation of proper Credit management will improve the Working Capital management and overall efficiency of the operation of the company. This report paves way for many future researches in the field of Credit management.

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### BALANCE SHEET OF JN MACHINERIES INDUSTRIES AS ON 2019-2023

| Sources Of Funds | Mar '23 | Mar '22 | Mar '21 | Mar '20 | Mar '19 |
|---|---|---|---|---|---|
| Total Capital | 489.52 | 489.52 | 489.52 | 489.52 | 489.52 |
| Reserves | 33,595.08 | 32,557.53 | 29,954.58 | 24,883.69 | 19,664.32 |
| Networth | 34,084.60 | 33,047.05 | 30,444.10 | 25,373.21 | 20,153.84 |
| Secured Loans | 0 | 2,550.00 | 1,286.00 | 0 | 0 |
| Unsecured Loans | 61 | 104.77 | 129.2 | 123.43 | 102.14 |
| Total Debt | 61 | 2,654.77 | 1,415.20 | 123.43 | 102.14 |
| Total Liabilities | 34,145.60 | 35,701.82 | 31,859.30 | 25,496.64 | 20,255.98 |
|  |  |  |  |  |  |
| Application Of Funds | Mar '23 | Mar '22 | Mar '21 | Mar '20 | Mar '19 |
| Gross Block | 12,304.80 | 11,812.47 | 10,585.56 | 9,542.79 | 7,917.62 |
| Less: Accum. Depreciation | 8,164.28 | 7,119.53 | 6,127.07 | 5,245.98 | 4,516.70 |
| Net Block | 4,140.52 | 4,692.94 | 4,458.49 | 4,296.81 | 3,400.92 |
| Capital Work in Progress | 517.8 | 642.12 | 1,171.59 | 1,347.61 | 1,733.76 |
| Investments | 417.67 | 420.17 | 429.17 | 461.67 | 439.17 |
| Inventories | 10,101.66 | 9,797.55 | 11,763.82 | 13,444.50 | 10,852.05 |
| Sundry Debtors | 26,223.50 | 28,071.92 | 29,234.49 | 26,336.13 | 20,103.50 |
| Cash and Bank Balance | 9,812.70 | 11,872.93 | 7,732.05 | 6,671.98 | 9,630.15 |
| Total Current Assets | 46,137.86 | 49,742.40 | 48,730.36 | 46,452.61 | 40,585.70 |
| Loans and Advances | 17,253.28 | 17,293.54 | 15,338.84 | 14,217.32 | 13,100.74 |
| Total CA, Loans & Advances | 63,391.14 | 67,035.94 | 64,069.20 | 60,669.93 | 53,686.44 |
| Current Liabilities | 23,281.09 | 26,763.33 | 29,327.02 | 33,638.01 | 31,407.77 |
| Provisions | 11,040.44 | 10,326.02 | 8,942.13 | 7,641.37 | 7,596.54 |
| Total CL & Provisions | 34,321.53 | 37,089.35 | 38,269.15 | 41,279.38 | 39,004.31 |
| Net Current Assets | 29,069.61 | 29,946.59 | 25,800.05 | 19,390.55 | 14,682.13 |
| Total Assets | 34,145.60 | 35,701.82 | 31,859.30 | 25,496.64 | 20,255.98 |

*PROFIT & LOSS ACCOUNT OF JN MACHINERIES INDUSTRIES FOR THE YEARS 2019-2023*

| INCOME | Mar '23 | Mar '22 | Mar '21 | Mar '20 | Mar '19 |
|---|---|---|---|---|---|
| Sales Turnover | 31,103.40 | 39,108.83 | 48,424.65 | 47,978.89 | 42,246.59 |
| Excise Duty | 920.42 | 0 | 0 | 0 | 0 |
| Net Sales | 30,182.98 | 39,108.83 | 48,424.65 | 47,978.89 | 42,246.59 |
| Other Income | 1,220.45 | 1,616.03 | 1,121.71 | 1,265.55 | 1,020.64 |
| Stock Adjustments | 338.04 | -1,057.40 | -116.21 | 823.2 | 127.35 |
| **Total Income** | **31,741.47** | **39,667.46** | **49,430.15** | **50,067.64** | **43,394.58** |
| | | | | | |
| EXPENDITURE | Mar '23 | Mar '22 | Mar '21 | Mar '20 | Mar '19 |
| Raw Materials | 14,176.53 | 17,706.70 | 23,627.73 | 25,113.12 | 19,887.45 |
| Power & Fuel Cost | 554.57 | 603.52 | 555.78 | 510.25 | 402.86 |
| Employee Cost | 5,450.00 | 5,933.78 | 5,752.78 | 5,465.83 | 5,396.71 |
| Other Manufacturing Expenses | 3,581.79 | 4,392.38 | 4,271.64 | 3,901.24 | 3,487.98 |
| Miscellaneous Expenses | 4,659.49 | 4,895.22 | 4,710.68 | 3,904.41 | 4,613.50 |
| Total Expenses | 28,422.38 | 33,531.60 | 38,918.61 | 38,894.85 | 33,788.50 |
| **Operating Profit** | **2,098.64** | **4,519.83** | **9,389.83** | **9,907.24** | **8,585.44** |
| PBDIT | 3,319.09 | 6,135.86 | 10,511.54 | 11,172.79 | 9,606.08 |
| Interest | 91.65 | 132.63 | 125.27 | 51.28 | 54.73 |
| PBDT | 3,227.44 | 6,003.23 | 10,386.27 | 11,121.51 | 9,551.35 |
| Depreciation | 1,077.32 | 982.92 | 953.39 | 800 | 544.12 |
| Profit Before Tax | 2,150.12 | 5,020.31 | 9,432.88 | 10,321.51 | 9,007.23 |
| Extra-ordinary items | -10.11 | -6.01 | -0.44 | -19.25 | -1.79 |
| PBT (Post Extra-ord Items) | 2,140.01 | 5,014.30 | 9,432.44 | 10,302.26 | 9,005.44 |
| Tax | 720.72 | 1,553.52 | 2,817.71 | 3,262.30 | 2,994.24 |
| **Reported Net Profit** | **1,419.29** | **3,460.78** | **6,614.73** | **7,039.96** | **6,011.20** |