"Analysing the cause and consequences of payment delays on production cycle"

And

Analysing the impact of Plant expansion on financial Performance and production cucle.

An Internship Report for

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Submitted in partial Fulfilment of Masters of Business Administration in Finance

By

TEERTHA SHANKAR KALPEKAR

Seat Number: 22P0280026

ABC ID: 221172877584

PRN: 201800584

Under the Mentorship of

PROF. PURVA HEGDE DESAI

Goa Business School/ Management Studies



Goa University/Goa Business School

Date: 06/05/2024

Examined by:

Seal of the School/Dept

DECLARATION BY STUDENT

I hereby declare that the data presented in this Internship report entitled, "Analysing the cause and consequences of payment delays on production cycle" and Exploring The Impact Of Smart Manufacturing Practices on Efficiency, Quality and Innovation is based on the results of investigations carried out by me in the Discipline of Management Studies at Goa Business School, Goa University, under the mentorship of Prof. Purva Hegde Dessai and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities/College will be not be responsible for the correctness of observations/experimental or other findings given the internship report/work.

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Teertha Shankar kalpekar

Signature and Name of Student

Seat no: : 22P0280026

Date: 06.05.24

Place: Goa University

COMPLETION CERTIFICATE

This is to certify that the internship report "Analysing the cause and consequences of payment delays on production cycle" and "Exploring The Impact Of Smart Manufacturing Practices on Efficiency, Quality and Innovation is a bonafide work carried out by Ms. Teertha Shankar Kalpekarunder my mentorship in partial fulfilment of the requirements for the award of the degree of Master of Business Administration in the Discipline of Management Studies at Goa Business School, Goa University.

Date:06.05.24

Prof. Purva Hegde Dessai

Signature and Name of Mentor

Signature of Dean of School/HoD

Date:06.05.24

Place: Goa University

School/Department Stamp





JIMCAP ELECTRONICS PVT. LTD.

Plot No. L-12 Verna Industrial Estate, Verna Goa - 403 722 INDIA. accountsgoa1@priyajimcap.com, TEL. 0832-2782189, Mob. No. 7447784241 / 9766348010 Mktg. Off.: J-367 MIDC, BHOSARI, PUNE - 411 026

TEL:(020) 66307328 /66307329 /66307330, marketing@priyajimcap.com, Mob. No. 9766348009, Website: www.jimcapelectronics.com

C.I.N.: U29199GA1999PTC002713



This is to certify that **Ms Teertha Shankar Kalpekar**, student of Goa Business school, undergoing Masters in Businness administration under finance department has successfully completed Internship between 15-01-2024 to 04.05.2024 at **Jimcap Electronics Pvt Ltd**. She has actively participated in the activities during the period of internship and learned the skills needed for various activities such as manging the books of accounts, making necessary payments to the creditors, handling the dispatch activity and making freight and journal expenses entries.

Place: Verna Goa.

Date: 04.05.2024

Mr. M.J.Joy

(Managing Director)

JIMCAP ELECTRONICS PVT LTD



JIMCAP ELECTRONICS PVT LTD www.jimcapelectronics.com

Picture of me at work



What was my role at jimcap

- Making purchase order
- Sending dispatch details
- Invoicing
- Making freight entry
- Making payments to vendors
- Making expenses entries
- Making purchase entries
- Handling the challans for inward and outward goods

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INDUSTRY ANALYSES

The Indian Electronic industry is one of the most rapidly growing industry world wide Electronic products have impacted human life in the current digital era. The advent of technology has led to seamless activities and accelerated the digital revolution to the next level. Further more demand for electronic devices is anticipated to rise rapidly and continue to be a key economic driver worldwide.

The global electronics industry was estimated at US \$2.9 MILLION IN 2020. ESDMI industry Is one of the top 25 sector in the government's make in India initiative.

Therefore it's a crucial contributor to economic growth and need for more manufacturing of this product. Indian policymakers have put a great emphasis on developing sustainable manufacturing and exports of electronic devices.

Overall the electronics manufacturing saw a great growth since 2015-16 from 37.1 billion to 67.3 billion in the year 2020 and 2021 it has been growing ever since the government of India has come up with the idea of make in India. Indian manufacturing of this products has seen an high raise and would be growing more if time to time government aids are provided to the industry to meet the growing need of the product and staying in trend with the changing environment.

According to the A call to action for broadening and Deepening Electronics Manufacturing' report by the Ministry of electronics and IT, INDIA aims to achieve electronic manufacturing worth US\$300 billion by 2026.

India has been one of the pioneers of the local goes global movement. The country is focusing on developing its share in the global value chain, establishing export hubs in different states, constructing a high-quality and seamless supply chain and increasing its overall market share in the electronics export market.

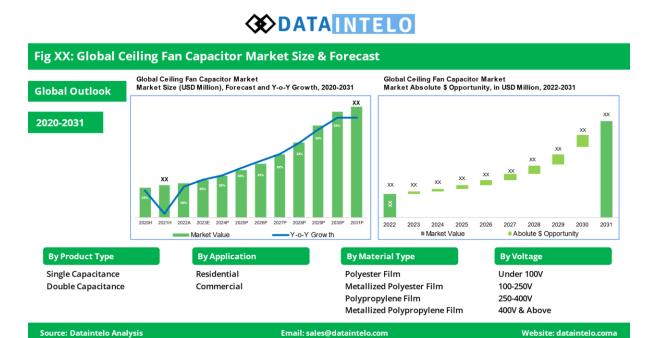
Market analyses

India electric capacitor market has seen a growth of 17.66% in value shipments in 2022 as compared to 2021 with an increase of 13.14% in 2022 over a period of 2017. The Indian electric capacitor market is expected to register a compound annual growth rate of nearly 7.1% during the forecast period 2021-2027.

This growth is attributable to the increasing demand for electricity in India, growing population and emerging smart cities projects. The rising trends of miniaturization and digitization has boosted the demand for capacitors in various industries such as automotive, consumer electronics, industrial automation system and so on

The electrical capacitor market is a vital and dynamic segment within the country's electrical and electronics industry. The Rapidly growing urban population and industrialization have also increased the demand for electronic products

According to IBEF, the appliances and consumer electronics industry in India is expected to reach US 21.18 billion by the end of 2025. The global Electrical Capacitor market has witnessed rapid growth in recent years, driven by increasing environmental concerns, government incentives, and advancements in technology The utilization of capacitors in the power sector is witnessing momentum due to increasing investment in power grid driven by growing global power demand. The power capacitors improve the quality efficiency performance of electrical system and minimize the power losses.



The Indian electrical capacitor market has been anlysed through the following segments

By type	By polarization	By voltage
Aluminium	Polarized	High voltage
Paper film	Non polarised	Low voltage
Supercapacitor		

PASTEL ANALYSES

Political

 Political Factors: Government policies and incentives can have an impact on the electrical capacitor market, incentives for energy efficient technologies of investments in the power sector can drive market growth.

Economic

 Economic growth mainly in urban areas leads to increase deamand for electronic products thereby driving the demand for capacitors.

Social

• The growing urban population increases the demand for electronic products, driving the need for capacitors in various applications.

Technological

 Technological advancements, such as nanotechnology, enable the development of high-capacitance and miniaturized capacitors, enhancing performance and reliability.

Environment

• Growing environmental consciousness prompts the adoption of energyefficient technologies, including capacitors, which help reduce energy losses and improve power factor correction.

Legal

Capacitor manufacturers need to comply with industry standards and regulations regarding product safety, quality, and environmental impact.

What are the major market drivers for the capacitor market

Increase demand for consumer electronics

one of the primary drivers fuelling the growth of the Indian electrical capacitor market is the increasing demand for electrical energy. India is experiencing rapid urbanization and industrialization resulting in a surge in electricity consumption. To meet this escalating energy demand and ensure a reliable power supply. Electrical utilities and industrial facilities often require power factor correction and voltage stabilization both of which heavily rely on electrical capacitors.

Growing renewable energy sector

The rapid growth of india's renewable energy is a significant driver for the electrical capacitor market. India has been making substantial investments in renewable energy sources including solar and wind power to reduce its carbon footprint and meet its clean energy goals.

Consumer electronics and telecommunications growth

The consumer electronics and telecommunications sector are witnessing robust growth in india, driven by factors such as increasing disposable income .digitalization and connectivity. Electrical capacitor are integral components in various consumer electronic devices including various electronic items. Capacitor serve multiple purposes in these devices such as voltage regulation, noise filtering and energy storage.

.

Why is fan capacitor so important?

- A capacitor that is used to operate a ceiling fan known as a fan capacitor.
 The capacitor used tin ceiling fan is non-polarized electrolytic AC
 capacitor. The main function of a capacitor in a fan is not only to operate
 but also it makes it rotate.
- Improved power factor
 Fan capacitor are used to improve the power factor of the fan motor. By shifting the phase relationship between current and voltage, they reduce reactive power and make the motor more efficient.
- Enhances efficiency
 Fan capacitors can improve the overall efficiency of fan motors, reducing current losses and minimizing energy waste.
- Prevention of overheating
 Proper use of fan capacitors helps maintain stable motor operation, preventing overheating and overloading, which can extent motor lifespan.
- Smooth operation
- Fan capacitors aid in the smooth operation of fan motors, reducing mechanical vibrations and noise, thus improving overall performance.

COMPANY PROFILE

Jimcap Electronics Private Limited are leading manufacturer and exporter for world-class metallized polypropylene films and quantity capacitors. Jimcap produces capacitors and products in the most modern and clean environment, having the latest imported microprocessor-based fully automatic winding machines and authorized production process.

Jimcap is classified as a private limited company and is located IN goa and Pune its authorized share capital is INR 2.00cr and the total paid-up capital is INR 1.60cr. Jimcap Electronics Private Limited operating revenues range is INR 1 cr-100 cr for the financial year ending 31st march 2022.

The company produces a wide range of capacitors for electrical appliances (fans/lighting) and motors for run and start applications. L.T power factor improvement and metallized polypropylene films in various designs to suit most stringent industrial requirements since 1985.

Experience of decades in the field of manufacturing ability to quickly and easily adapt the latest technologies to customer needs has made them gain a competitive advantage among the other player in the market. Jimcap don't only supply their products domestically but also export their product internationally.

Jimcap has the top brands such as Havells, Usha, orient, and polycab, as their loyal customer domestically and Ningbo, Sichuan and Jindal as their foreign customer makes them the top supplier in the competitor market domestically as well as internationally. Jimcap is successful in producing quality quality and reliable products keeping in mind the current and future industrial requirement.

The company produces 60,00,000 nos monthly and out of it only 70 to 75% products utilized due to various reasons such as maintenance of machinery, labour strikes, public holidays. Each and every type of capacitor has a production cycle of 5 days where the 1st stage is winding plus spraying the capacitor can 2nd stage being the can cleaning heating and busting of the cans and the thirdly a coil test is done where all the coil inserted are tested and verified whether they are in the right voltage and product rating 4th stage is assembly line where the products are assembled in line and a visual testing is done the last stage is packing the products in small carton boxes which has the company logo and all the details.

Burst-proof construction pressure relieving bellows are provided in the case to act as over-pressure disconnection. In case of very high peak voltages, this safety bellow activates and disconnects the capacitor elements from the energy sources.

To safeguard from abnormal pressures by internal or external heat and resulting gas formation the bellow expands vertically and breaks the notch allowing safe escape of gas and prevents explosion.

Features of the company

Metalizing

The roll-to-roll vacuum metalizing system is capable of producing an unlimited range of metalized films for capacitors. From standard to high-end appliances, from thick to thin films, from plain to slope designs, from thick to thin layers, and from pure layers to layer stacks, every conceivable combination can be realized in the system.

Slitting

The microsite cap is capable of providing finely cut thin films of narrow width for special application capacitors. The technological advancements help to achieve a premium quality products with minimum tolerance values as a result of the perfect interaction of the basic concept that is typical for the compact, study construction, the excellent roll configuration for the special material channels and the most modern drive and cutting technology. The sturdy construction sets the stage for the so-called wave cut for the generation of wavelike cutting contour

Winding

Winding/elements are produced in air-conditioned, dust-free, humidity controlled winding room metallized polypropylene. Film with heavy/reinforced edges is used to provide excellent bonding between the electrode and end spray heavy edge has high current carrying capacity and withstands electromechanical stresses caused by switching surges better. Coil winding machines with programmable features in comprehensive rang to meet customers specific demand.

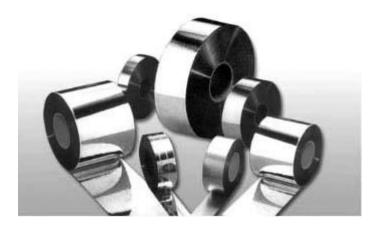
..

vacuum drying & oil impregnation

the assembles elements undergo vacuum impregnation non toxic non hazardous, non flammable non PCB impregnate is used for impregnating.

Products of the comapny

Metallised Flims



Capacitors for Fan / Motors (Regular / Burst proof designs)



Capacitors for Motors



Capacitors for Fan motor

> Capacitors for Lighting Fixtures



> Electroytic Capacitors



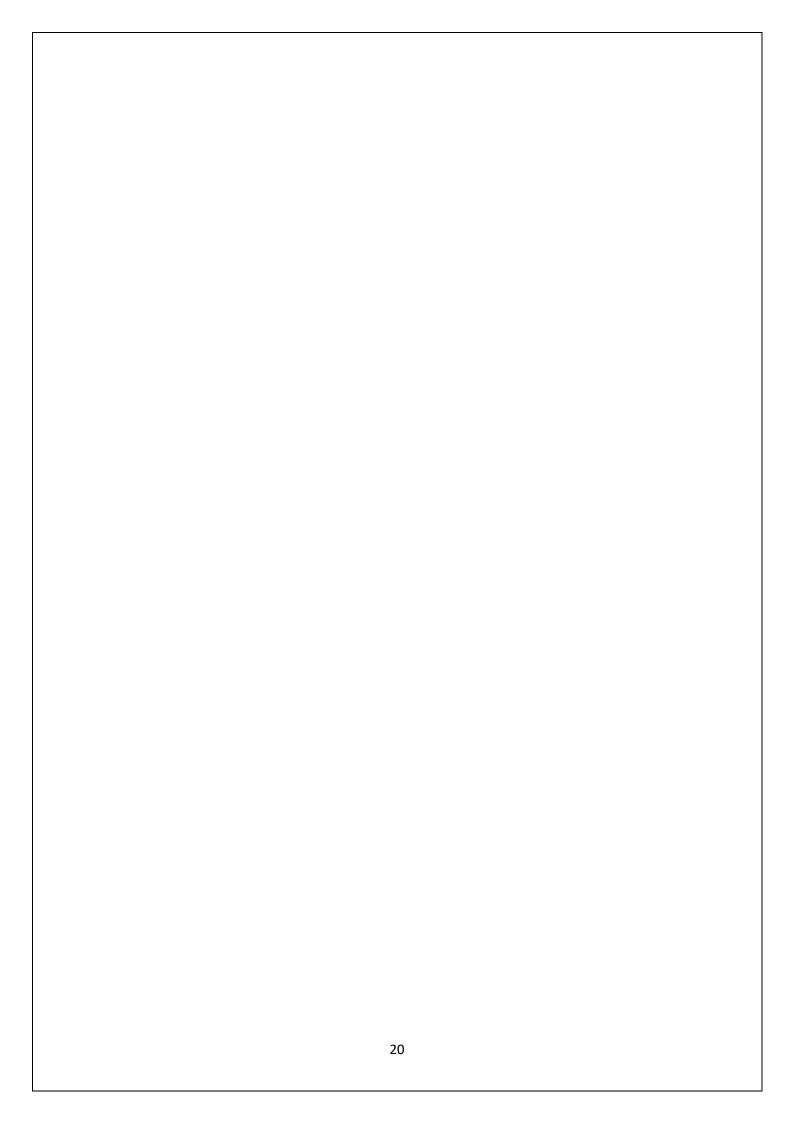
> L. T. Power Factor Improvement (Shunt) Capacitors



Customers

- Havells
- Bajaj
- Usha
- Orient
- Rr kable
- And many more





SWOT Analyses

Strength:

- the company has 50-50 machine and manpower manufacturing structure which provides a lot of employment to the women's and the needful.
- The biggest strength of the company is that the waste management structure is very well maintained all the machineries has an pollution control settings which makes the wastage generate not harmful for the company.
- The quality and price offered to the customers are very satisfactory as a result a lot of big players in the market are their loyal customers.

• Weakness:

- since it is not fully technologically advanced company a lot of factors effect their production cycle there are a lot of delays in order completion because of various reasons such as breakdown of machines power cutoff labour strike etc.
- since the company depends more on their labour force there are lot of human errors that are faced by the company which sometimes leads to big loss wastage of raw materials and delays in completion of orders.

Opportunities:

 since the company has a lot of top player in the market as their loyal customers they have a very good competitive advantage also their reasonable pricing and good quality products and their future plan of being technologically advanced can get them a lot of opportunities in the future market,

• Threats:

 since they are not technologically advanced if any player with better technology enters the market and decodes the production cycle that makes the production cycle short and can provide better quality with advanced features it can be a threat to the company.

Topic Introduction

Analyzing the cause and consequences of payment delays on production cycle

Payment delays can have significant repercussions on businesses, affecting their operation, cash flow and overall financial health. Understanding the causes and consequences of these delays can be crucial for business to effectively manage their supply chains and mitigate the potential risks.

Payment delays mean that when any company buy any raw material from a outside vendor an invoice is exchanged at the time of delivery but no payments are made at the time of delivery with a promise to make the payment according to the credit terms. Most B2B businesses offer a credit period of certain days depending on the mutual agreement it can be 15/30/45 or 60 days in rare cases credit period is extended to 90 days such payment terms are more favourable in case of regular business or for some it may be payment against the invoices that mean when a company send an PO (purchase order) to it's the vendor immediately sends and proforma invoice where unless the payments are made raw materials are not dispatches.

But what about the companies whose payments are not made against invoices or companies who don't mention their payment terms in their invoices. These companies always face a delay of payment as most of the companies take them for granted and give them a last preference when any trades are paid by the company.

These delays can be a big headache for both the company buying the stuff and the one selling it. for the company selling the stuff payments delays mean they might not have enough money to keep running their business smoothly. They might struggle to buy more materials or pay their own bills on time and for the company buying the stuff payment delays can slow down their production activities if they don't get the things they need on time, they cant make their products, which means they might be delaying on order completion and might face some losses.

So, payment delays in the production cycle aren't about waiting a little longer for money. They can disrupt the whole flow of making and selling things, causing stress and problems for everyone involved.

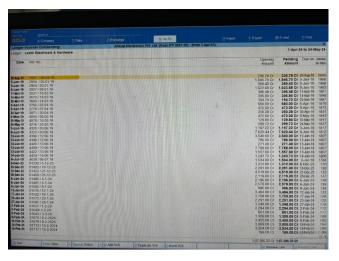
Many MSMEs experience financial distress due to non-timely payment from their customers the government has always acknowledged and encouraged the growth of MSME sector over the years, it has introduced several new initiatives and schemes to help them power through the business world. The revised MSME payment terms will help the supplier to get timely payments from the buyers.in this analysis we will delve into the various factors contributing to payment delays in the production cycle and explore their implication on both supplier and buyers.

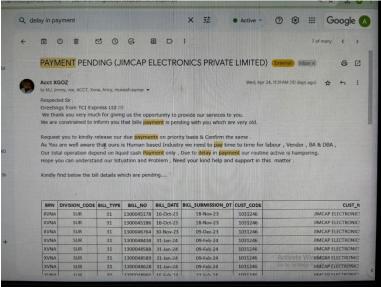
why I decided to study this topic

when I joined the firm as an intern, I observed in their books of records that the trade payables over the year has been increasing rapidly but the trade receivable was increasing at double the speed which means the company was receiving money on time from their customers but the company was making a delay in payment to the supplier/vendors from whom they get the raw material.

Even when I checked their numerical counting system named tally (which is a numerical counting system that employs vertical marks, known as tally marks to represent quantities history of all the inward and outward data) when I observed there were a lot of vendors' payments that were pending specially from the year 2023.

A lot of suppliers representatives used to visit the company requesting to clear the due payments which sometimes led to conflicts this made me a little curious to know why there were delays in payment specially after the year 2023.





literature review

(FIVp. 1)

Research on the capacitor market is underscore its growth fueled by electronic product demand premium. Many companies are adopting to innovative marketing strategies. However challenges such as supply chain disruptions persist. Despite industry acknowledgment of these trends, a unfied perspective on the markets direction remains elusive necessitating further research to provide clarify and insights.

(Sailesh Rao)

Electronics industry is a major part of modern manufacturing, and electronic **systems** play an increasingly important role in a majority of today's products. Electronic systems are usually implemented with printed circuit boards (PCBs), and, consequently, PCB assembly has become an important sector of the electronics manufacturing industry overall. However, operating effectively in this industry is becoming more difficult as the companies must compete with high quality standards, rapidly changing technologies, short production cycles, and increasing product variety and complexity. In addition, the capital equipment cost of electronics assembly industry facilities are high in comparison to the usual turnover of a company.

Stackelberg solution in a vendor-buyer supply chain model with permissible delay in payments Maw-Sheng Chern a, Qinhua Pan b,n Jinn-Tsair Teng c Ya-Lan Chan d Sheng-Chih Chen e

This article explores the dynamic of trade credit policies between vendors and buyers with supply chains its acknowledges the dual benefits of trade credit in attracting new buyers while mitigating price competition however it also highlights the additional costs and defaults risks incurred by vendors when grading credit periods. The paper aims to establish the vendor- buyer supply chain models considering the impact of permissible delays demand costs. And default risks. By analysing non-cooperative.

objective

- analyzing the cause and consequences of payment delays in the production cycle.
- Investigating the impact of payment delays on business relationships in the long run.
- Analyzing how does this delay effect the relationship with the vendors in long term.
- Explore strategies and best practices for mitigating the payment delays and improving payment management processes.

Scope of this study

The scope of this study shows a comprehensive analysis of payment delays within the production cycle. It will also delve into the root causes of payment delays examining their wide-ranging consequences on business such as operational disruptions, and strained supplier relationships.it will also explore the policy and regulator environment surrounding payment practices, assessing the technological solutions to mitigate payment delays. And identifying the best practices and actionable recommendations to mitigate such delays in future.

Methodology

Quantitative methodology

Data collection

This study will focus on gathering the quantitive data from financial reports, industry data bases and. Collecting the data on the financial performance indicators technology adoption rates, sustainability metrics and risk management practices.

Qualitive methology

Iterative process

Interviewing or asking the question to the staff and manging directors to understand the past working of the organisation and how did they cop up with the emerging trends being all manual run manufacturing unit this will be a

necessary methology as there are a lot of printed data that the company is missing.

Financial tools

Using financial tools such as financial ratio analysis to find out the financial health of the company and how it effects the cash flow.

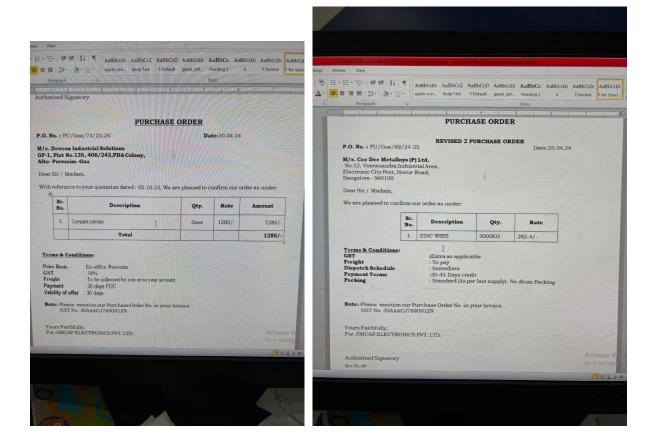
Research gap

- I had no access to their internal server which actually carry all the internal information for example their financial updates and exact amount of losses faced due to these delays.
- To find out the how vendors felt about it to question them Vendor representatives were not always available to provide information and they are not that much knowledgeable to provide authentic information correctly.
- The staff were not very open to answering questions so it was also difficult to get the quantitative data.

How are the orders placed to vendors

A purchase order I a commercial source document that is issued by a business purchasing department when placing an order with its vendor or suppliers.

The documents indicate the details on the items that are to be purchased such as the types of goods, quantity, and price. This also included the payments terms the delivery schedule the freight amount



Some sample of what a purchase order looks like

what is payment term? And What are the different types of payment term?

To study this let us understand what exactly is payment terms it is an outline of how, when and by what method the customer or clients provide payment to the business. Payment terms are typically associated with invoice payments.

Different types of payment terms

- Payment in advance
 This means that payments are made in advance to avail the products and services.
- Net 7/10/15/30/60 or 90 days:

this means the payments are expected to be made within 7,10,15 or 30,60,90 days after the invoice date.

- Stage payments: this mean a set payments are made over a period of time, this stages are pre-discussed by the buyer and sellers
- Instalments payments

Payments is spread out over a period of time in fixed instalments.

• Letter of credit (LC)

A financial documents are issued by a bank guaranteeing payment to a seller-provided that certain documents have been presented

and are typically used for international trade.

Why why analyses

Why why analyses is an analytical method that is designed to help you identify all the factors contributing to a problem one by one in an orderly manner

Why was there delay in payment?

Because the company is experiencing cash flow issues



Why is the company experiencing cash flow issues?

Because there is discrepancy between the cash inflows and outflows resulting in insufficient funds to meet payment obligations



Why is there a discrepancy between cash inflows and outflows?

Because of the unexpected expenses exceeding forecasted amounts



Why are the expenses exceeding forecasted amounts?

Due to investment in new projects without any financial help.

Analysing the financial health of the organization.

Current ratio of the company

Current ratio is calculating by dividing the current assets by current liabilities.

The current ratio is a measure of the firms short term solvency it indicates the availability of current assets in rupees for everyone rupee of current liability a ratio greater than one means that the firms has more current assets than the claims against them.

Year 2022-2023

Current ratio = current assets/current liabilities

=98,44,74,000/70,34,69,000

= 1.3

As a conventional rule a current ratio of 2 or 1 or more is consider satisfactory. The jimcap electronic pvt ltd has an ratio of 1.3 for the previous year which means therefore it may be interpreted to be sufficiently liquid. This rule is based on the logic that in a worse situation even if the value of current assets become half the firm will be able to meet its obligations

Quick ratio

Quick ratio establishes a relationship between liquid assets and current liabilities. An assets is liquid if it can be converted into cash immediately. Or reasonably without any loss.

Year 2022-23

Quick ration = Current assets-inventories / current liabilities.

= 98,44,74,000 - 66,20,66,000/

51,28,70,520

=32,22,40,80,000/51,28,70,520

=6.2

A quick ratio of 6.2 indicates that the company has 6.20 in liquid assets available to cover each 1.00 of its current liabilities. This suggests that the company has a strong ability to meet its short term obligation using

liquid assets, generally, a higher quick ratio is considered favourable as it indicates a better liquidity position and lower financial risk.	
32	

Analysing the causes of payment delays

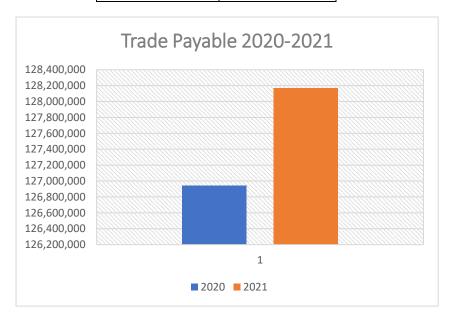
- 1. The company is not receiving the revenue amount on time?
- 2. The company doesn't have enough cash flow?
- 3. Diversification of fund
- 4. Intentionally delay of payments due to some conflicts with vendors!

Let us dive deep into this study about this topic

The company is not receiving the revenue amount on time

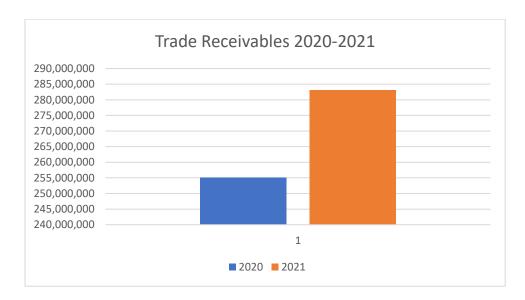
Trade payable/ receivable by the company for the year 2020-2021

2020	2021
12,69,39,785	12,81,69,475



Trade receivables

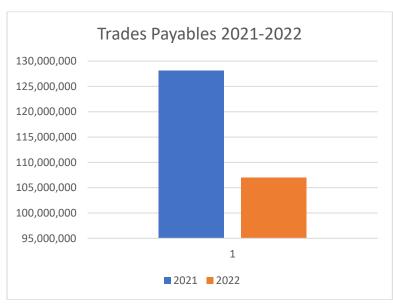
2020	2021
25,50,50,360	28,31,01,660



As this bar graph represents the trade receivables and trade payables for the year 2020-2021. As we can see in the year 2020 trade payables were more than trade receivables this can be due to the covid-19 pandemic were everything was shut down and the companies had to pay out there vendors to maintain the goodwill with the vendors but at the same time due to the shutdown they were not able to make much sales for this year but it eventually got better in the year 2021 were things started to get better but still the sales were not that much and the companies still had a a lot of creditors to pay off.

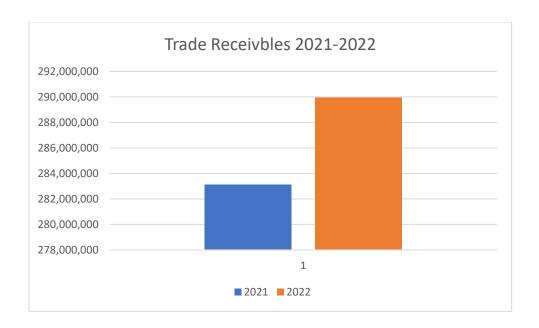
Trade payable/ receivable by the company for the year 2021-2022

2021	2022
12,81,69,745	10,70,01,000



Trade receivables

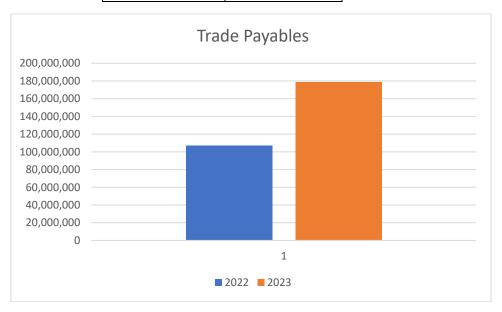
2021	2022
28,31,02,000	28,99,37,000



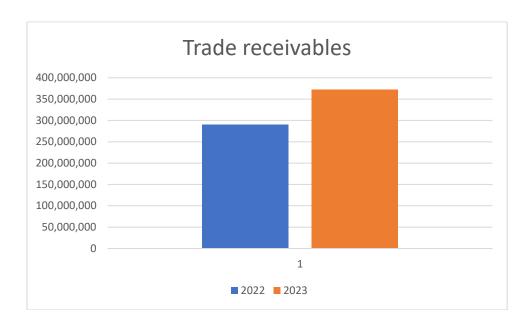
As seen in the bar graphs above we can see the trade payables has decreased for the year 2022 but the sales were increased for this period company only cleared the payments that were a top priority. At this point, the company was recovering from the loss of sales from the year 2020-21. Which is why there was a delay of payment to creditors for the year because the company was busy focusing on the manufacturing of the capacitor. And even till mid 2022 the administrator office was closed that can be and additional reason to the delay in payments.

Trade payable/ receivable by the company for the year 2022-2023

2022	2023
10,70,01,000	17,86,63,000



2022	2023
28,99,37,000	37,21,29,000



As the graphs represent we can see that most of the creditors were paid during the year 2023 along with a good sales. but still the company has more trades to pay from the year 2023 to 2024. Let us know why

2. The company doesn't have enough cash flow?

As we can see from the why why analyses we can see the root cause of the delay in vendor payment is because of the company is experiencing cash flow issue. That is because There are a lot of discrepancies between the cash inflows and outflows resulting in insufficient funds to meet the payment obligations the main reason of this discrepancy is the companies investment in their new plant without any financial help from the outer sources. And also despite of an cash flow issue the director remuneration the salaries of the staff and workers are fixed there is no changes made in those finances hence there is a lot of cash flow issues

The next and the most import reason why there is discrepancies in the cash inflows and outflows is because the company exports a lot of their raw material which means when any such international trades are made the supplier provide an LC (letter of credit) to the company which allows the bank to make an automatic payment when the raw material are out for delivery.

Since it import there raw material there are a lot of charges and fees they need to pay which makes the amount a a lot more expensive than what they anticipate. And since the payment term for their company is 90 days from their customers this effects the cash flow in terms of that amount outward is more than the amount inward and since the payment term is 90 days there is a lot of gap between the payment cycle hence the vendor payment can be delayed because all the raw materials that are imported are very important for the production cycle hence those payments cannot be delayed and hence the other payments are kept on hold.



This pie chart represents the import of raw material from different part of the world

3. Diversification of fund

The company is planning for an expansions therefor a lot of their funds are diverted to building their new plant.

The company has not raised any funds from the external sources for this project. However the company has taken a term loan but its only used for buying a plant and machinery. This the main reason why the company is unable to pay a lot of vendors.

Expense of building this new plant

Value of the plot – 20,00,00,000

Construction value- 4,00,00,000.

Investment in plant and machinery- 4,81,00,000.

This is a rough amounts of what the new plant is getting made in.

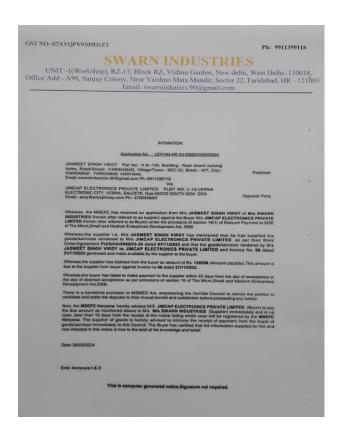
4.Intentionally delay of payments due to some conflicts with vendors!

Sometimes the company delays the payment of vendors due to some conflicts with the vendors.

These conflicts can be due to not delivery the quality that was promised any internal issues with the vendor.

I experienced a case where the payment was delayed because the vendor sent them raw materials which were not according to proper measurements but the vendor gave them a test certificate saying its according to their needs. They used the product for a big consignment which was sent to their top customers. But than the product failed when the customer tried using it. Which in return spoiled the reputation of the company and they got a B grade for their products which is not an nice sign for the company.

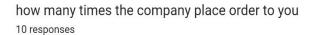
That's why the company intentionally stop the payment of this party which in turn lead to an case from the vendor to the company. Because of which the company got into an legal fight which also made them hire an advocate which made a payment of 1,27,000/- get double with all the legal charges advocate charges etc.

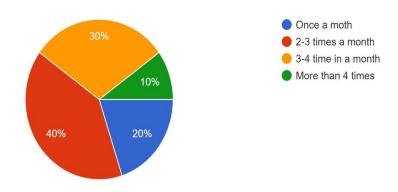


How does the vendor feel about there payment delay.

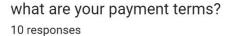
I prepared a questionnaire about of the vendor felt about the payment delay made by the company. This questionnaire was circulated through google forms via WhatsApp or emails and some filled the questionnaire when they use to come to the company asking for payments.

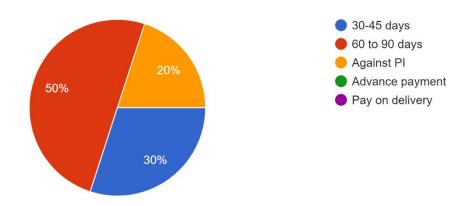
I kept the questionnaire very small since most of the company representative who use to come visit the company were not much educated and since I had a time constrain it was difficult for me to ask more questions





As seen from the pie chart most of the supplier use to get a order 2 3 times a month and some use to get the order 3-4 times a day. The supplier who use to get a order 2-3 tims a month are the supplier who use to provide like miscellaneous items such as stationary, any small hardware things, pantry items etc. the supplier who got a order for once a month are the supplier who import the items and the order quantity is also more that's why a order placed once a month is ulilised for the whole month.





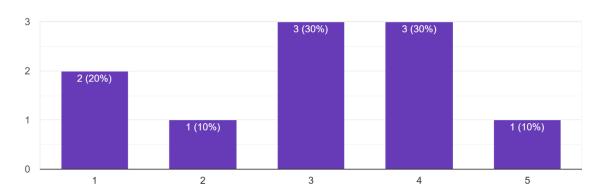
Most of the vendors has payment terms of 60 to 90 days which are mostly the small vendors who get more orders in a month and are eligible for the payments term of 90-60 days.

The payment against proforma invoice is for the party who gets purchase order against which they sent an proforma invoice which makes the company eligible to pay the vendor an full payment against the invoice unless which the vendor wont ship the consignment

30 days are for the transport party who gives a monthly bill to the company.

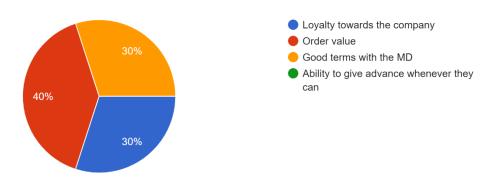
Infro

how u feel about the payment delays 10 responses



From this bar graphs we can see how the vendor feels about the delay of payment 1 shows that the vendors are okay with the payment delays. While the 5 depicts how disappointed the vendors are. While most of the vendors are okay with payment delay. Most of them are not disappointed because the vendors are still trying to build a positive relationship with the company.

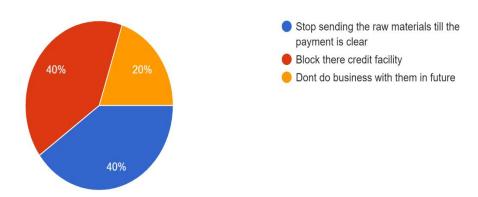
What are factors that influence you to still continue to give the materials 10 responses



Order value plays an important role to keep the vendor happy despite of payment delays . most of the vendors still continue to supply the raw material despite of the payment delays. This also compliance that most of the vendors have a loyalty towards to the company because most of them said that because of this company they got a lot of more companies to order from them. Even loyalty towards the md who has very nice relationship with almost all the

vendors that's why a lot of them are willing agreeing to the companies demand.

what measure you take if the comapny fails to pay the amount on time 10 responses



While a lot of vendors are loyal towards and continue to make a business on the other side some vendors just withdraw themselves from the business. Some of them even stop giving the materials before the outstanding payment is done. And a little business just block there credit limit after which if the company still wants any credit facility the company has to write an official letter after which the vendor remove the restrictions and order is placed.

Consequences on the production cycle

Disrupted supply chain.

Delayed payments strain the relationships with vendors leading to disruption in the supply chain vendors may prioritize other customers or even suspend deliveries resulting in shortages of raw materials or component essential for production.

Production delays

Without access to necessary inputs, production schedules may be disrupted, leading to delays in manufacturing process. because even a smallest of raw material missing the company cannot send in their consignment to there customer which can cause a delay in delivery and the goodwill be at a stake.

Increased costs

Production delays can lead to increased costs, including extra shipping cost for urgently needed materials overtime wages for workers trying to catch up on lost production time, and potential penalties for failing to meet contractual obligations with customers.

Cash flow constraints

Production delays can effect the cash flow for the company. With finished goods still in process and finished goods sitting in inventory instead of being sold, cash remains tied up in unsold inventory. Impacting liquidity and financial stability this also than increase the payment terms of 90 days for the company which than also makes there payment delays to the vendors

How I helped the company get most of the payments on track

- I use to make an excel sheet with all the parties whose payments are remaining.
- Than I use to take a print of the excel sheet show it to the finance department which they use to cross check.
- Than I use to take the second approval of the managing directors they use to mark on the sheet whose payments need to be removed whose doesn't need to be removed etc.
- The vendor who use to get the miscellaneous item I convinced the finance department to make their payment from 60 days to 30 days.
- Because a lot of this vendors were not supplying on time because of the non-payment as there and the pending amount were pending from november which now has come down to February.
- As the company uses the old traditional payment methods such as RTGS, cheque payment etc. no bank transfer were made to speed up the payment process. On the occasions of bank holidays and all the payments use to get delayed there were no option for the company to wait till the bank opens to make the payment.
- Bank payments are still not opted by the organization but I used to request the party sending them the photo of cheque is withdrawn and will be deposited when the bank reopens.
- Which was very well accepted by the party and they use to send the products and and follow up on calls till the payments were received by them.

What plans that the company has to solve this problem?

As we saw that due to the insufficient cash flow the payment to vendors are not the companies 1st priority. All the funds are getting diverted into the new project. The new project almost coming to get finalised which means after that the production cycle will be doubled which will generate more revenue after which the delayed payments will be paid off and all the payments will come on track.

The company uses traditional payment method which will makes the payment delayed due to various factors the company will start to opt for the online payments, online transaction etc.

Suggestion

- Following the payment terms to save up the interest charged on delayed payments.
- Using online payment apps.
- Having a track of how much raw materials are left so that they can order the items well in time and make payment well in advance to avoid delay in production cycle.
- Allocating work to people according to their specialization and having dedicated department to each of the work.

Conclusion

To conclude the report payment delays to vendors can have far reaching consequences on the production cycle and overall operations of the company. From disrupted supply chains to increased costs and customer dissatisfaction the impact of delayed payments are multifaceted and can significantly impair business performance.

Vendor satisfaction is also need to maintain as if the vendors are not happy they might withdraw themselves from the business, delay the supply of raw materials etc. Adopting to new technology and allocating the funds in the right direction will bring a good result to the company in near future a goodwill will be maintained and tangible and intangible profits will be earned.

Questionnaire

The questions asked to know about the vendor satisfaction about the delay in payment and action they take to improve this

- 1. Name of the organisation
- 2. How many times the company place and order to you?
- Once a month
- 2-3 time a month
- 3-4 times a month
- More than 4 times a month

3.wat are your payment terms?

- 30-45 days
- 60 -90 days
- Against PI
- Advance payment
- Pay on delivery

4.how do you feel about the payment delays?

- 1 being the vendor is okay with payment delay
- 5 being the vendors is extremely disappointed with the payment delays
- 5. What are factors that let u still continue to give the payments?
 - Loyalty towards the customer
 - Order value
 - Good terms with the MD
 - Ability to give advance whenever possible

6.what measures you take if the company fails to pay the amount on time?

- Stop sending the raw material unless the payment is made
- Block the credit facility
- Don't do business with the company any further.

Questions asked to the staff member for content analyses

- 1. What are the typical reasons for payment delays?
- 2.Are there any limitations or short coming with the current systems that impact payment processing?
- 3.how payment delays affect relationship with vendors?
- 4.what strategies do you employ to maintain positive relationship with vendors despite payment delays?

Analyzing the impact of plant expansion on financial performance and production cycle. And innovation in the products according to the customers need

Introduction to the topic

The decision to expand a manufacturing plant is a crucial moment for any organization. Because we cannot think of what we can expect from the expansion and whether the investment will give good returns.

Representing a strategic investment aimed at enhancing both financial performance and production capacity. Plant expansion projects are typically undertaken with the exception of yielding substantial returns in terms of increased revenue in terms of increased revenue improved efficiency and expanded market presence.

The purpose of this study is to analyse the multifaceted implications of plant expansion on both financial performance and production capacity.

Also the innovation according to the customers need plays a vital role in the production cycle and the maintain of goodwill of the company.

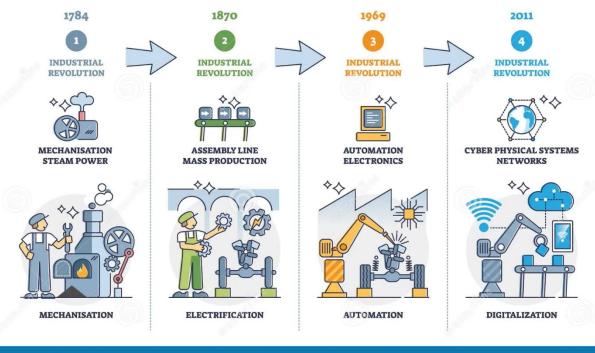
Modifying the product according to the customer preferences plays and crucial role in the company's working and cash inflows.

Unless the company is not able to meet the needs of their customer's the company wont make any progress as a disappointed client will find some one better in the market and eventually loose the customers.

This is how adapting to changing pays and crucial role in the electronic market. Lets us study how the new plant will be profitable to customers along with the meeting the needs of the customers

Industrial revolution

INDUSTRIAL REVOLUTION



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steam engines

steam engines use pressurized steam to perform mechanical work. In the mid 1700s they provided a constant source of power so that factories runes and mill could work around the clock producing more goods in less time.

Assembly lines

Assembly line consist of manufacturing process in which workers assemble a product step by step as it progresses along with a conveyor belt. These lines consist of multiple workstations, each staffed by workers who are responsible for specific tasks in the assembly process. As the product moves further down the assembly line it gradually takes on its final form with each step contributing to transformation from raw material.

<u>•</u>

Automation electronics

This consist of how the company's mitigated the human into their manufacturing process and made it semi automatic where the machines will do the maximum job. This will be time effective and will help a lot of companys to make their production cycle very fast.

Industry 4.0

This will revolutionize the manufacturing process in the future where the companies wont need any human intervention. All the production will be made by AI robotics will take over and make the production cycle smaller for example if and production cycle of any company is 9 days than it will be shortened to 3 days this will be time effective and the company will be able to produce more with less time this will be expensive but it will be worth the investment.

Literature review

(Esmaeilian)

The evolution of <u>manufacturing systems</u>, influenced by changes along four axes - products, technology, business strategies and production paradigms - is presented. Adoption of human-centric decision making in meshed collaboration with intelligent systems is examined.

(Ostasz)

The current situation in the energy market contributes not only to the sales growth of photovoltaic panels (PV) but also to the intense search for possibilities for its improvement. The purpose of this research was to develop a model to determine, where possible, the most beneficial modifications to improve products.

Objective

- To find out how company is adapting with the changing environmental needs.
- Determining how the company is coping up with the changing customers need and modifying their products
- What is their plans for adapting to smart manufacturing process.

Scope

The scope of this study is to focuses the impact of changing environmental changes on manufacturing practices the productivity, efficiency and innovation within the company's setting. This study will delves more into how the company will adopt to the smart manufacturing in the future and how the company modify there products according to the needs and profitable for the company.

Methology

Content analysis

Analysing textual data from the customer feedback reports, regulatory documents and media sources to identify emerging trends best practices and regulatory developments and how important it is for the customer to adapt to changes.

Comperative analyses

Comparing how the companies expansion will yield a more better productivity than the older one with adapting to the innovation

And how adopting to new ,manufacturing technologies will give them a better return.

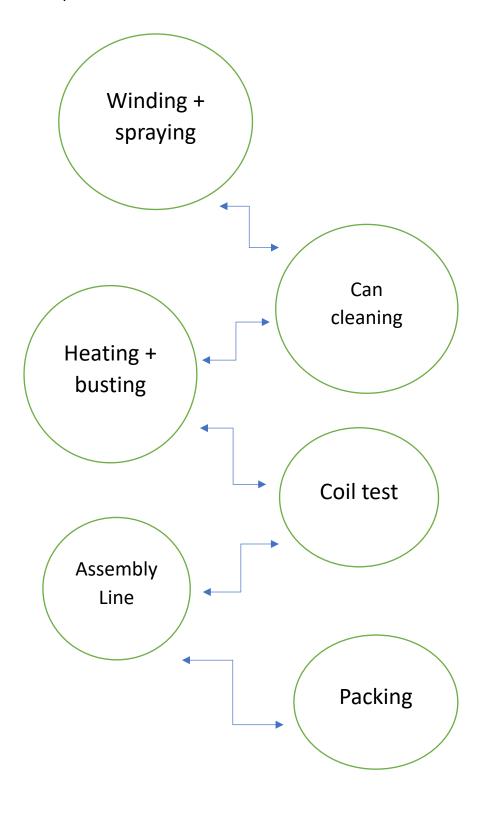
Limitations

Since the current expansion plan and the productivity generated cannot be measured a lot of things to study gets restricted.

This study is only based on assumptions of how the staff has knowledge about the processing of the machineries to generate the mentioned figures.

Companies current manufacturing process

To make an product the company has an 5 days cycle. After 5 days the product is ready another 2 days are spent testing each and every product than only all the products are packed



This is how a product is made in the company

Step 1: winding and spray

In this step a sheet is cut into a smaller sheet and spray to make the sheet harder and moulded in the shape of the capacitor.

Step 2: can cleaning

In this step the moulded can is cleaned and all the particles attached are removed and the gum stuck to the capacitor while moulding is also cleaned.

Step 3 heating and busting

In this step the shaped capacitor is heated and busted. The busted pressure are provided to act as a over pressure disconnections. In case of very high peak voltages in this the capacitor which are not strong enough are busted and discarded.

Step 4 coil testing

The coils that are inserted into the capacitor are check with an machine whether all the coils that are getting inserted are active.

Step 5 assembly line

In this step all the ready capacitors are assembled in a line an visual checking is done and any defect that the observer founds it is discarded.

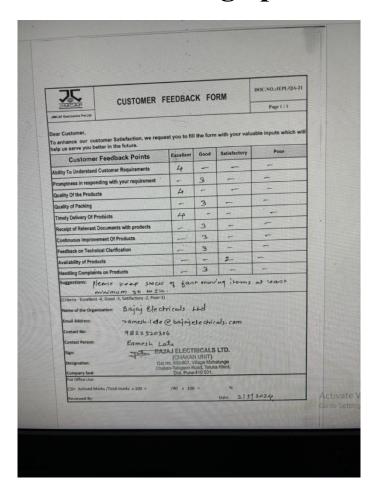
Step 6: packing

In this stage the products are labelled and packed into smaller boxes and than into an bigger cartridge.

Than the products are shipped along with an invoice and test certificate to show that all the goods that are packed are tested and good to go.

To find how the company approach to innovation is I asked the staff members to understand

Q. how does the company collect and anlze data from manufacturing operations?



Such sheet are send to the customer quarterly where various question are asked about how the buyer feels about the quality of the product, how their requirements are treated how the products are delivered the what they feel about the after sale services provided to them.

This sheet helps the company to modify there products according to the needs of the customer. this sheets help them to plan the production cycle. And remain competitive and profitable in the long run

Q.How does the company prioritize research and development effort to stay at the forefront of technology innovation?

The company is very particular about the research and development because they want to at the forefront the budget for the research and development in every general body annual meeting and the funds are allocated evry year to buy new machineries developing new products and making improvement in the production cycle.

Q. can you provide example of how customer feedback has influenced product design features or services?

Customer feedbacks are taken into account and the products are modified accordingly. To maintain a good will with the sellers here is an example of how they helped a company get over the losses faced by just modifying their products according to technicality.

There was a case where a product was buyer when used our capacitor to there products their product started busting they got a lot of complaints about the deterioration of the product when used.

This was purely because the product we were sending them and the product they were using for an appliance was facing a voltage problem because of which it used to get Detroit.

That's why the company suggest them to go for a two layer metalised film capacitor which will help the capacitor to spread the voltage equally into there products. Which helped the buyer to solve the problem and maintain the quality of there products.

The price also increased from 14.65 before and after the variations 15.80

Tangible benefits- the product pricing increased hence the profitability also increased.

Intangible benefits- the clients were happy than the problem they were facing is finally solved hence the goodwill of the company increased.

Q. Are there any specific technologies or areas of focus that your company is currently investing in or exploring for future development?

The company is expanding its current production capacity buy building a new plant where the company is making an attempt to adopt the smart manufacturing process where the machinery will be fully automatic and would not need much human involvement and the productivity will be increased,

Where the company used to produce 2,50,000 per day but with the new plant being fully automatic the human errors will be skipped so the company will be able to produce 3,20,000 per day.

This will help the company to introduce a new product line which will be a game changer for the company as the production increases, new products are made the profitability will be increased and hence the financial health of the company will be increased.

	Old plant	New plant
Production capacity	2,50,000 per day	3,20,000 per day
Profitability	75%	85%
Production timing	9 days cycle	5 days cycle
Advantages	More humans are	Since it will be more depended
	involved so any errors	on machineries the adaption
	can be rectified and can	to changes wont be as quick as
	adapt to changes	possible
disadvantages	Breakdown of machines	This plant will be backed up by
	was a measure cause	power generators the
	Human errors will be	breakdown of machineries is a
	less.	less concerning problems
		Human errors will be solved.

Conclusion:

This study shows how the expansion will generate more productivity and give monetary benefits to the company. The expansion will be beneficial to the company as well as to their buy as it will mitigate the production cycle time and will help the company give them the product on time this will generate more cash flow that can solve a lot of problems.]

Adopting to the customers need is highly suggested because this will help the company to maintain their good will with the buyers and gain monetary benefits.

Overall adopting to changes and modifying the production cycle will help the company be at the forefront of their competition.

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text book

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