# "The influnce of inventory management practices on production efficiency and sales performance in the electronic industry"

# And

# "Waste management and its impact on industry"

AnInternshipReportfor

MGA-652 Industry Internship

Credits: 16 Credit

Submitted in partial fulfilment of Masters Degree

MBA FINANCE

By


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## DECLARATIONBYSTUDENT

I hereby declare that the data presented in this Internship report entitled,"**The influence of Inventory management practices on production efficiency and sales performance in the electronic industry" and " Waste management and its impact on productivity"**is based on the results of investigations carried out by me in the Discipline of Management Studies at the 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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Date: 06/05/24

Place:GoaUniversity

# COMPLETIONCERTIFICATE

This is to certify that the internship report "**The influence of Inventory management practices on production efficiency and sales performance in the electronic industry" and "Waste management and its impact on productivity"**is a bonafide work carried out by **Ms. Nidhi Prakash Shirodker** under my mentorship in partial fulfilment of the requirements for the award of the degree of **Masters of Business Administration**in the Discipline of Management Studies at the Goa Business School, Goa University.

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This is to certify that **Ms Nidhi Prakash Shirodkar**, student of Goa Business school, undergoing Masters in Business 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 freight bills.

Place: Verna Goa.

Date: 04.05.2024

**Mr. M.J.Joy**

(Managing Director)

JIMCAP ELECTRONICS PVT LTD

JIMCAP ELECTRONICS PVT. LTD. JIMCAP VERNA, GOA

JIMCAP ELECTRONICS PVT LTD
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# INTRODUCTION TO THE COMPANY:

# JIM CAP ELECTRONICS PVT LTS, VERNA - GOA

Jimcap Electronics Pvt Ltd is a leading manufacturer and exporter of Metalized Polypropylene films and high quality capacitors for the past three decade. It is classified as a private limited company and is located in Goa. It's authorized share capital is INR 2.00 cr and the total paid-up capital is INR 1.60 cr. Jimcap electronics private ltd has an extensive product range comprises of Fan capacitors, Motor Run & Motor Start Capacitors, L.T Power Factor Improvement capacitors, capacitors for lighting applications and Metalized Polypropylene films designed to meet the levels of service demanded by our customers and set by latest Standards.

Jimcap Electronics Private Limited's operating revenues range is INR 1 cr - 100 cr for the financial year ending on 31 March, 2022. It's EBITDA has decreased by -18.11 % over the previous year. At the same time, it's book net worth has increased by 17.37 %. (http://www.jimcapelectronics.com/, n.d.)

At JIMCAP, capacitors are produced in the most modern and clean environment with state-of-the-art facility including microprocessor based fully automatic Metallizer, Slitting and automated production processes.

Experience of decades in the field of manufacturing and investing in the research and development of cutting edge technologies, JIMCAP is successful in producing quality and reliable products, keeping in mind the current and future industry requirements. Today, JIMCAP, with its world-class solutions plays a key role in manufacturing Capacitors for Fan, Capacitors for Motor, L T Power Factor Improvement Shunt Capacitors, Roll Die Metallized Films, Capacitors For Fan, Capacitors For Lighting Fixtures. The last reported Annual General Meeting (AGM) held on 30 September, 2023, indicating the company's commitment to transparency and corporate governance. This AGM serves as a testament to Jimcap's ongoing engagement with its shareholders and stakeholders, ensuring accountability and fostering trust in its operations

## PRODUCT PORTFOLIO:

Jimcap's diverse product range caters to various industries, including fan capacitors, motor run and motor start capacitors, L.T. power factor improvement capacitors, capacitors for lighting applications, and Metalized Polypropylene films. These products are meticulously designed to meet the highest standards of quality and performance, aligning with the evolving needs of customers and industry benchmarks. Noteworthy features include RoHS-approved MPP films, available in aluminum and bi-layer configurations, and capacitors constructed with burst-proof designs for enhanced safety.

## PRODUCTS MANUFACTURED:

1. Metallized Films

Types available:

a) Aluminum
b) Bi layer (Zn and Aluminum)

2. Capacitors

a) Capacitors for Fan / Motors (Regular / Burst proof designs)
b) Capacitors for Lighting Fixtures
c) Electrolytic Capacitors
d) L. T. Power Factor Improvement (Shunt) Capacitors.

**Innovative Capacitor Solutions:**

Jimcap's commitment to innovation is evident in its state-of-the-art manufacturing facility, equipped with advanced technologies such as microprocessor-based fully automatic Metalizer and Slitting machines. This modern infrastructure, coupled with decades of experience and investment in research and development, enables Jimcap to produce cutting-edge products that meet current and future industry requirements. The company's capacitors are renowned for their reliability, performance, and adherence to international standards.

**Technical Specifications and Advantages:**

The article provides detailed insights into Jimcap's technical specifications, including metallization types, roll dimensions, and standard resistance values. Noteworthy advantages such as the linear slope/taper/ramp metallization technique highlight Jimcap's commitment to

electrical strength and reliability. Moreover, the article underscores the superior performance of Jimcap's capacitors, attributed to features like uniform current and heat distribution, eliminating sparks and enhancing safety.

**Associated Company: Priya Capacitors Pvt. Ltd.**

Established since 1985, Priya Capacitors Pvt. Ltd. is an associated company of Jimcap Electronics Pvt Ltd, operating from J-367, MIDC Bhosari, Pune 411026, India. With a longstanding presence in the industry, Priya Capacitors Pvt. Ltd. complements Jimcap's expertise by offering a range of capacitor solutions to meet various industrial needs.

## SERVICES PROVIDED BY COMPANY:

Jimcap provides some of the services to their customer so as to customize the products based on their specific needs.

- Design and Engineering: Providing design and engineering services to help customers develop customized capacitor solutions tailored to their specific requirements.
- Customization: Offering customization services such as altering capacitance values, voltage ratings, sizes, and configurations to meet unique customer needs.
- Quality Assurance: Implementing rigorous quality control measures throughout the manufacturing process to ensure that capacitors meet industry standards and customer expectations.
- Testing and Inspection: Conducting comprehensive testing and inspection procedures to verify the performance, reliability, and durability of capacitors before they are shipped to customers.
- Technical Support: Providing technical support and assistance to help customers with product selection, application engineering, troubleshooting, and other related issues.
- Value-added Services: Offering value-added services such as packaging, labeling, kitting, and inventory management to streamline the procurement process for customers.

## SECTIONS WITHIN THE ORGANISATION:

1. **PRODUCTIONS HOUSE:**

   Jimcap Electronics Pvt Ltd operates advanced manufacturing facilities equipped with cutting-edge technology, including microprocessor-based fully automatic Metalizer

and Slitting machines. These facilities enable the production of Metalized Polypropylene films and capacitors, meeting industry standards and customer demands with superior quality and reliability. There are 400+ workers who manage the day-to-day production of the products at the company.

2. **SALES:**

Sales department manages all the details products that has been sold to the customers or the orders pending. Managing the bills, invoices, Test Certificate, LR of the products dispatched to the customers.

Customer Relationship Management: The sales department serves as a direct point of contact between Jimcap and its customers. Sales representatives build and maintain relationships with clients, understand their needs, and provide personalized solutions. This ensures customer satisfaction and fosters long-term partnerships.

Order Management and Fulfillment: Sales professionals are responsible for processing orders, managing inventory, and coordinating product delivery or shipment. They ensure timely fulfillment of customer orders, maintain accurate records, and address any issues or concerns that may arise during the sales process.

Revenue Generation: Ultimately, the primary objective of the sales department is to generate revenue for Jimcap Electronics Pvt Ltd. By effectively selling its products, the sales team contributes to the company's financial growth and profitability.

3. **WAREHOUSE:**

The workers at the warehouse have to look after the purchase details and filing the PO in order to keep the records.

Receiving and Storing: Warehouse employees are responsible for receiving incoming shipments of products, materials, and supplies. They verify the accuracy of deliveries, inspect items for damage, and properly store them in designated locations within the warehouse.

Inventory Management: Warehouse staff maintain accurate records of inventory levels, including quantities on hand, incoming shipments, and outgoing orders. They use

inventory management software and systems to track inventory movements, conduct regular cycle counts, and reconcile discrepancies.

Order Picking and Packing: When customer orders are received, warehouse employees retrieve the required items from inventory shelves or storage bins. They carefully pick the items according to order specifications, pack them securely for shipping, and prepare them for outbound delivery.

Shipping and Receiving: Warehouse workers handle the shipping process, including preparing shipping labels, selecting appropriate packaging materials, and arranging for transportation carriers to pick up outgoing orders. They also receive returned merchandise, process returns, and restock inventory as needed.

Maintaining Cleanliness and Safety: Warehouse employees ensure that the warehouse facility remains clean, organized, and free from safety hazards. They follow proper procedures for handling materials, operate equipment safely, and adhere to safety regulations to prevent accidents and injuries.

Equipment Operation: Depending on the warehouse's operations, employees are required to operate various types of equipment such as forklifts, pallet jacks, and conveyor systems. They receive training and certification to operate equipment safely and efficiently.

Communication and Collaboration: Warehouse staff work closely with other departments, such as sales, procurement, and customer service, to coordinate activities related to inventory management, order fulfillment, and shipping. Effective communication and collaboration help ensure smooth warehouse operations and customer satisfaction

4. **FINANCE DEPARTMENT:**

Financial Reporting: Finance department employees are responsible for preparing and analyzing financial reports, including income statements, balance sheets, and cash flow statements. These reports provide insights into the company's financial performance and help stakeholders make informed decisions.

Budgeting and Forecasting: They participate in the budgeting process by developing annual budgets and financial forecasts. This involves collaborating with other departments to estimate future expenses, revenues, and capital requirements, ensuring effective allocation of financial resources.

Accounts Payable and Receivable: Finance personnel manage accounts payable by processing vendor invoices, ensuring timely payment, and maintaining accurate records of outstanding liabilities. They also oversee accounts receivable, invoicing customers, tracking payments, and following up on overdue accounts to ensure prompt collection.

Financial Analysis: They conduct financial analysis to assess the company's financial health, identify trends, and evaluate performance metrics. This analysis helps management identify areas for improvement, make strategic decisions, and optimize financial outcomes.

Compliance and Regulation: Finance department employees ensure compliance with financial regulations, accounting standards, and tax laws. They stay updated on regulatory changes, prepare tax filings, and liaise with external auditors to facilitate audits and ensure adherence to regulatory requirements.

Cash Management: They manage the company's cash flow by monitoring cash balances, forecasting cash needs, and optimizing cash utilization. This involves overseeing banking relationships, investing excess cash, and managing short-term financing arrangements to meet liquidity requirements.

Financial Planning and Strategy: Finance personnel contribute to the development of financial strategies and long-term financial planning initiatives. They provide financial insights to support strategic decision-making, assess investment opportunities, and evaluate potential risks.

Risk Management: They identify and assess financial risks faced by the company, such as credit risk, market risk, and liquidity risk. They develop risk mitigation strategies,

implement internal controls, and monitor risk exposure to safeguard the company's financial assets and reputation.

## SWOT ANALYSIS:

- **Strengths:**

  **Extensive experience**: Jimcap Electronics Pvt Ltd has over three decades of experience in manufacturing and exporting metalized polypropylene films and high-quality capacitors.

  **Diverse product range**: The company offers a diverse product portfolio including fan capacitors, motor run and motor start capacitors, L.T. power factor improvement capacitors, capacitors for lighting applications, and metalized polypropylene films.

  **Modern manufacturing facility**: Jimcap operates a state-of-the-art manufacturing facility equipped with advanced technologies such as microprocessor-based fully automatic metallizer and slitting machines.

  **Commitment to innovation**: The company invests in research and development to produce cutting-edge products that meet current and future industry requirements.

- **Weaknesses:**

  **Decrease in EBITDA**: Despite its strengths, Jimcap has experienced a decrease in EBITDA (-18.11%) over the previous year, indicating potential challenges in profitability and operational efficiency that need to be addressed.

  **Limited Financial Resources:** While the company has an authorized share capital of INR 2.00 crore, its total paid-up capital is INR 1.60 crore, suggesting limited financial resources that may constrain investment in expansion or technology upgrades.

  **Reliance on traditional products:** While Jimcap offers a diverse product range, it may be overly reliant on traditional capacitor products, potentially missing out on emerging market opportunities in new technologies or applications.

  **Limited geographical presence**: Operating from a single location in Goa may limit the company's market reach and expansion opportunities compared to competitors with a broader geographical presence.

- **Opportunities:**

  **Market expansion:** There are opportunities to expand into new markets or geographical regions to increase market share and revenue potential.

  **Product innovation:** Investing in research and development can lead to the development of innovative capacitor solutions that address evolving customer needs and industry trends.

  **Strategic partnerships:** Collaborating with other companies or entering into strategic partnerships can facilitate access to new technologies, markets, or distribution channels.

  **Sustainability initiatives:** With increasing focus on sustainability, there are opportunities to develop eco-friendly capacitor solutions and align with environmentally conscious customers and regulations.

- **Threats:**

  **Intense competition:** The capacitor manufacturing industry is highly competitive, with numerous players competing on price, quality, and technology.

  **Economic downturns:** Economic downturns or fluctuations in demand for electronic components could adversely affect the company's sales and profitability.

  **Technological obsolescence:** Rapid technological advancements in the electronics industry may lead to the obsolescence of existing products or require significant investments in upgrading manufacturing capabilities.

  **Regulatory changes:** Changes in regulations related to environmental standards, safety requirements, or trade policies could impact the company's operations and compliance costs.

## BRAIN ANALYSIS:

- **BENEFITS**:

  **Experience:** Jimcap Electronics Pvt Ltd has over three decades of experience in manufacturing and exporting metalized polypropylene films and high-quality capacitors, giving it a strong foundation and understanding of the industry.

  **Product Range:** The company offers a diverse product portfolio, including fan capacitors, motor run and motor start capacitors, L.T. power factor improvement

capacitors, capacitors for lighting applications, and metalized polypropylene films, catering to various industry needs.

**Modern Manufacturing Facility**: Operating a state-of-the-art manufacturing facility equipped with advanced technologies enables Jimcap to produce cutting-edge products efficiently and maintain high-quality standards.

**Innovation:** The company's commitment to innovation, evidenced by investment in research and development, allows it to stay competitive and meet evolving industry requirements effectively.

- **RISKS**:

**Decrease in EBITDA**: The company has experienced a significant decrease in EBITDA (-18.11%) over the previous year, indicating potential challenges in profitability and operational efficiency that need to be addressed.

**Limited Financial Resources:** Despite having an authorized share capital of INR 2.00 crore, Jimcap's total paid-up capital is INR 1.60 crore, suggesting limited financial resources that may constrain investment in expansion or technology upgrades.

**Reliance on Traditional Products:** While the company offers a diverse product range, it may be overly reliant on traditional capacitor products, potentially missing out on emerging market opportunities in new technologies or applications.

**Limited Geographical Presence**: Operating from a single location in Goa may limit the company's market reach and expansion opportunities compared to competitors with a broader geographical presence.

- **ACTIONS**:

**Investment in Efficiency:** Address the decrease in EBITDA by implementing measures to improve operational efficiency, reduce costs, and enhance profitability.

**Financial Planning:** Develop strategies to optimize financial resources and explore avenues for raising additional capital to support expansion and technology upgrades.

**Diversification:** Explore opportunities to diversify the product portfolio and expand into new markets or product categories to mitigate risks associated with reliance on traditional products and limited geographical presence.

**Market Expansion:** Invest in market research and strategic partnerships to expand the company's geographical presence and capitalize on emerging market opportunities.

- **INTERACTIONS**:

  **Financial Planning and Efficiency:** Collaboration between the finance department and production house can help optimize financial resources and improve operational efficiency to address the decrease in EBITDA.

  **Research and Development Collaboration:** Close collaboration between the production house and design and engineering services can facilitate the development of innovative capacitor solutions that meet evolving customer needs and industry trends.

  **Sales and Market Expansion:** Alignment between the sales department and strategic partnerships can drive market expansion initiatives and explore new opportunities for revenue growth.

  **Regulatory Compliance and Innovation:** Collaboration between the finance department and research and development can ensure compliance with regulatory standards while driving innovation in eco-friendly capacitor solutions.

- **NEEDS**:

  **Efficiency Improvement:** There is a need to focus on improving operational efficiency to address the decrease in EBITDA and enhance overall profitability.

  **Financial Resources:** Exploring avenues for raising additional capital and optimizing financial resources is crucial to support expansion and innovation initiatives.

  **Market Diversification:** Diversifying the product portfolio and expanding into new markets or product categories can mitigate risks associated with reliance on traditional products and limited geographical presence.

  **Innovation:** Continued investment in research and development is essential to drive innovation and maintain competitiveness in the rapidly evolving electronics industry.

The above BRAIN analysis identifies key benefits, risks, actions, interactions, and needs based on the provided data, helping to guide strategic decision-making and prioritize areas for improvement and growth within Jimcap Electronics Pvt Ltd.

# INTRODUCTION ON TOPIC

## THE INFLUNCE OF INVENTORY MANAGEMENT PRACTICES ON PRODUCTION EFFICIENCY AND SALES PERFORMANCE IN THE ELECTRONIC INDUSTRY

Inventory Management plays an important role in improving the efficiency and competitiveness of manufacturing firms. This seemingly simple task to determine how much of an item to order or produce, and how much inventory of an item to hold, is at the foundation of all operational decisions. Inventory is one of the elements in the business cycle that absorbs cash. The question of what is the optimal amount of inventory a firm should hold to streamline its operational activities, and what type of practices to adopt for managing/selling inventories are the key areas of concern in inventory management literature. These questions become more interesting for manufacturing firms as inventory represents a large portion of current assets thus improper use of it puts a huge cost burden on firms Excessive inventory on one hand can place a heavy burden on the cash resources of a business, on the other, insufficient inventory can result in loss of sales and delays for customers. The first view argues that in a manufacturing environment, plants carry/hold inventories for smooth production flow, for meeting uncertain customer demands, for higher supplier lead time. The other view argues that inventory in access amount can create other issues such as damages, cash block, locked resources, etc. In other words, holding too much or too little inventory is risky for firms and impacts financial performance/outcome. However, a review of the literature on supply chain performance identifies three inadequacies. First, there is no consensus among the various studies on the relationship between inventory performance and financial performance. While one array of the literature suggests that there is a positive relation between the two, another

suggests that there is no significant relation between the inventory performance and financial performance. Second, most of the existing studies considered total inventory value as a proxy of the inventory performance and neglected its discrete components (RMI, WIPI, and FGI). Third, the results of these studies lack generalizability in a sense that most of them are conducted in US context. Despite the extensive research carried out in the area of supply chain management (SCM) across the world, SCM practices have not yet been very well-adopted in developing countries like India (Jain et al., 2011). Existing literature also lacks studies on Indian manufacturing firms. This study therefore examines the relationship between the performance of the discrete components of inventory and the financial performance of Indian manufacturing firms.

The Influence of Inventory Management Practices on Electronics Industry. This topic would examine how electronic companies manage their inventory levels, including techniques such as Just-in-Time (JIT) inventory, vendor-managed inventory (VMI), and ABC analysis, and how these practices impact production efficiency and sales performance. (fil2) (Ndubuisi, n.d.) (Chandra, n.d.) (Eze, n.d.) (Mazanai, n.d.) (ATnafu, n.d.) (ngeno, n.d.) (KENYA, n.d.) (Muchaendepi, n.d.)

- **Just-in-Time (JIT) Inventory Management:**

JIT is a strategy where inventory is kept at minimal levels and replenished only when needed to meet customer demand.

Electronic companies implement JIT to reduce inventory holding costs, minimize waste, and improve production efficiency by synchronizing manufacturing processes with customer orders.

JIT requires close coordination between suppliers and manufacturers to ensure timely delivery of components and materials.

- **ABC Analysis:**

ABC analysis categorizes inventory items into three categories based on their importance and value: A (high-value items), B (moderate-value items), and C (low-value items).

Electronic companies use ABC analysis to prioritize inventory management efforts and allocate resources efficiently.

A-items receive more attention in terms of inventory control and monitoring, while C-items may be managed with less stringent controls.

- **Impact on Production Efficiency:**

Efficient inventory management practices such as JIT help electronic companies streamline production processes by reducing lead times, eliminating excess inventory, and minimizing disruptions due to stockouts.

By maintaining optimal inventory levels and improving material flow, these practices contribute to smoother production operations and higher throughput.

- **Impact on Sales Performance:**

Effective inventory management directly affects sales performance by ensuring product availability, reducing order fulfillment times, and enhancing customer satisfaction.

By minimizing stockouts and backorders, companies can fulfill customer orders promptly, leading to higher sales volumes and improved customer loyalty.

ABC analysis assists in prioritizing inventory investments, ensuring that high-demand products are readily available to meet customer needs, thus positively impacting sales revenue.

- **Challenges and Future Directions:**

Address potential challenges associated with the adoption of IT-based inventory management systems, such as implementation costs, data security concerns, and organizational change management.

Propose future research directions to explore emerging technologies (e.g., RFID, IoT) and their potential applications in further optimizing inventory management practices in the electronics industry.

Overall, this literature review would delve into how these inventory management practices are implemented in the electronics industry, their effects on production efficiency and sales performance, and any associated challenges or best practices identified in existing research.

## PORTAL ANALYSIS:

- **Purpose:**

The purpose of this literature review is to explore the influence of inventory management practices on JIMCAP ELECTRONICS PVT LTD. It aims to investigate how the company manage their inventory levels through techniques such as Just-in-Time (JIT) inventory and ABC analysis, and whether these practices impact production efficiency and sales performance.

- **Organization:**

The review is structured into several sections: an introduction highlighting the importance of inventory management in manufacturing firms, a discussion on the inadequacies in existing literature regarding inventory performance and financial performance relationships, and a gap analysis pointing out the lack of studies on Indian manufacturing firms. The main focus is then directed towards inventory management practices in the electronics industry, covering JIT inventory management, ABC analysis, and their impact on production efficiency and sales performance. The review concludes by addressing potential challenges and proposing future research directions.

- **Research:**

The review synthesizes existing literature on inventory management practices, particularly focusing on their implementation and impact within the electronics industry. It draws upon studies investigating JIT inventory management, ABC analysis, and their effects on production efficiency and sales performance. Additionally, it acknowledges gaps in the literature, such as the limited research on Indian manufacturing firms and the lack of consensus regarding the relationship between inventory performance and financial performance.

- **Technology:**

The review discusses the role of technology in inventory management, particularly the adoption of IT-based systems. It highlights potential challenges associated with implementing such systems, including costs, data security concerns, and organizational change management. Furthermore, it suggests future research directions to explore emerging technologies such as RFID and IoT and their applications in optimizing inventory management practices in the electronics industry.

- **Audience:**

The target audience for this review includes researchers, practitioners, and policymakers interested in inventory management practices within the electronics industry. It provides valuable insights into how electronic companies manage their inventory levels and the impact of these practices on production efficiency and sales performance. Additionally, it offers suggestions for addressing challenges and future research directions in this field.

- **Language:**

The review employs clear and concise language to communicate complex concepts related to inventory management practices. It effectively explains the significance of inventory management in manufacturing firms and discusses various techniques used in the electronics industry, such as JIT inventory management and ABC analysis. Additionally, it articulates potential challenges and future research directions in a comprehensible manner.

## PESTEL ANALYSIS:

- **Political Factors:**
    - Government rules about inventory management could affect electronic companies.
    - The stability of governments in areas where manufacturing happens can impact the flow of supplies.
    - Import and export taxes and trade agreements influence where companies get their materials and how much they pay for them.

- **Economic Factors:**
    - How well the economy is doing affects how much people buy electronic stuff, which affects how much inventory companies need.
    - Changes in currency value affect how much it costs to bring in materials or send out finished products.

- When prices go up, it costs more to store inventory and can change how much companies charge for their products.

➢ **Social Factors:**

- People's tastes and what they want to buy can change how much inventory companies need to keep.
- Different kinds of workers are needed to manage inventory, and who's available can change based on where a company is located.
- More companies are thinking about the environment, so they might change how they manage inventory to be more eco-friendly.

➢ **Technological Factors:**

- New tools and technology, like tracking systems with chips or sensors, can help companies manage inventory better.
- Having good computer systems helps companies keep track of inventory in real-time.
- Machines and computers can help predict how much inventory is needed, so companies don't have too much or too little.

➢ **Environmental Factors:**

- Laws about the environment can change how products are made and where materials come from.
- Companies are trying to be more eco-friendly, so they might change how they handle inventory to create less waste.
- Natural disasters or big changes in the climate can make it hard for companies to get the inventory they need.

➢ **Legal Factors:**

- Companies have to follow the rules about how workers are treated, which can affect how inventory is managed.
- Protecting ideas and inventions is important, especially when dealing with suppliers or partners.
- Companies have to be careful about keeping information about inventory safe and following privacy rules.

- **Ethical Factors:**
    - Making sure materials are sourced responsibly is important for companies.
    - Treating workers fairly is part of being a good company, and it can affect how inventory is handled.
    - Being open and honest about inventory practices helps companies build trust with customers and others.

## Lean Inventory:

For Jim Cap to increase operational effectiveness, cut expenses, and keep a competitive advantage in the capacitor manufacturing sector, lean inventory methods must be implemented. In order to meet consumer demand while eliminating extra inventory, lean inventory management focuses on decreasing waste, optimizing inventory levels, and streamlining procedures. For Jim Cap, lean inventory methods can have a big financial impact because accuracy, productivity, and creativity are essential. Jim Cap can limit the danger of outmoded or expired inventory, save carrying expenses, and free up important warehouse space by getting rid of excess inventory.
Furthermore, just-in-time (JIT) inventory management is emphasized by lean inventory concepts. This guarantees that supplies and parts are bought and delivered exactly when needed, cutting lead times and enhancing responsiveness to customer demand. This strategy reduces the cost of keeping goods on hand while simultaneously improving responsiveness to changes in the market and client needs. Jim Cap may increase operational effectiveness, streamline its inventory management procedures, and keep up a competitive edge in the capacitor manufacturing sector by implementing lean inventory methods.

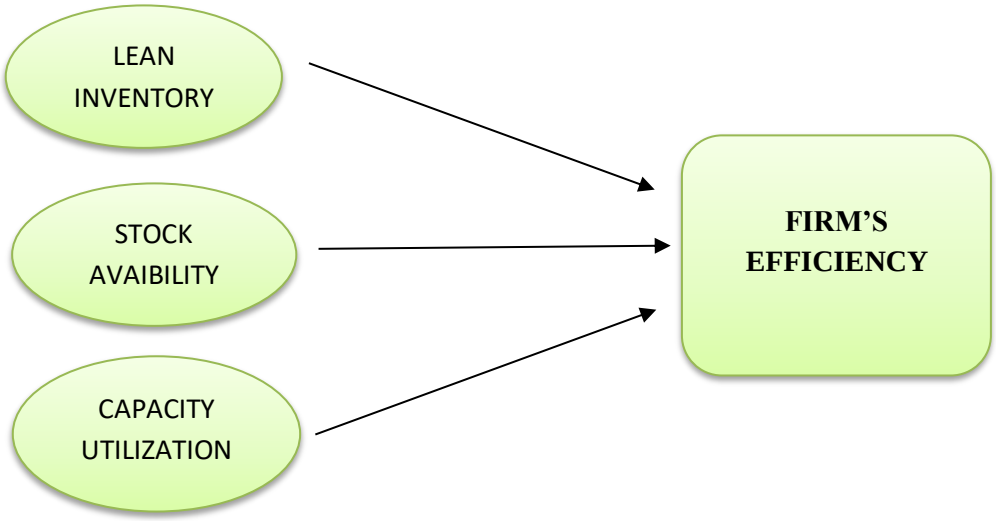
## Stock Availability:

One of the most important tasks of an efficient inventory management system is to ensure that the right product is available at the right time, in the right place and in the right quantity. Lean inventory management focuses on improving organizational responsiveness and speed by managing capacity constraints (bottlenecks) and reducing work-inprocess (inventory). The capacity and ability to meet customer needs in the shortest time possible should be a top goal of every world-class organization. The customer will be dissatisfied when the response time does not meet the expectation that he has. It must therefore be ensured that the responsiveness is within the expectations of customers and that this response is continuously improved. In the course of the supply chain, stock management is essential for the efficient management of organizations, whether public or private. The lack of materials, high turnover, or even low are

important for the functioning of the organization, it may result in significant damage to the organizations.

**Capacity Utilization:**

Efficient capacity utilization enables Jim Cap to minimize idle time and resource wastage while maximizing output. By closely monitoring and managing capacity utilization, Jim Cap can balance production levels with demand fluctuations, avoiding underutilization or overutilization of resources. This strategic approach ensures that the company can fulfil customer orders promptly while minimizing production costs and maintaining profitability. Additionally, Jim Cap can quickly adapt to changes in market demand or business situations by scaling up or down production as needed thanks to efficient capacity utilization. Jim Cap can maintain long-term growth in the capacitor manufacturing industry, optimize resource allocation, and become more competitive by maximizing capacity utilization.




## LITERATURE REVIEW:

This study investigated the effect of various inventory management factors on firm's efficiency. These factors included Capacity Utilization, Inventory Accuracy, Lean Inventory, and Stock Availability. The connection between inventory leanness and various dimensions of financial return has been explored in many previous research studies. However, there is still a void in the literature regarding the mechanism that is responsible for the consequences of inventory leanness on the firm's financial outcome. Thus, the purpose of this work is to study how inventory leanness influences financial outcome, with the focus on the mediation effect of production efficiency. The result on overall data indicates that the association between

inventory leanness (IL) and financial outcome(FO) is partially mediated through enhancement in production efficiency. Further, empirical analysis on each industryspecific subsample reveals that the mediation effect of production efficiency varies across industries. Thus, this article contributes to the theory of inventory control in operations management literature by empirically verifying the mediation effect of production efficiency.

The management of materials in organizations cannot be achieved without reference to inventory, also referred to as stock. Inventory and its management remain a central theme in discourse on managing materials. in general terms defines inventory as the stock of goods physically stored to meet expected demand. However, from a material management views inventory as resources that though having economic value for use remain idle. It is sensible to set aside some physical stock that can take care of anticipated demands rather than cause delays in operations for lack of relevant materials, necessitating inventory in most organizations.

## RESEARCH GAP:

In the last several years, inventory management has become a fundamental component of every organization. Moreover, increasing attention is devoted to effective inventory management and its impact on company's performance by a number of researchers. Inventory planning, management and control attempts to level the benefits against the drawbacks of holding stock. However, almost all the mentioned studies fail to recognize the fact that management of inventory also have an impact on operating cash flows of an organization. This study has exclusively focused on the impact of efficient inventory management on the performance of a JIMCAP ELECTRONIC PVT LTD. The study presents an argument that efficient and effective inventory management will result in profitability and significant operating cash flow. This is due to the fact that inventory management is regarded as all the practices and procedures that go into keeping the required level of inventory at the right time, place and quantity and includes coordinating, controlling, purchasing, assembling, and utilization of inventory for productivity

## RESEARCH OBJECTIVES:

1) To Assess Inventory Management Practices: Evaluate the current inventory management practices employed by Jimcap Electronics Pvt Ltd, including techniques such as Just-in-Time (JIT) inventory and ABC analysis.

2) To Examine Production Efficiency: Investigate the impact of inventory management practices on production efficiency within Jimcap Electronics Pvt Ltd, focusing on factors such as lead times, material flow, and throughput.
3) To Analyse Sales Performance: Analyse the relationship between inventory management practices and sales performance of Jimcap Electronics Pvt Ltd, exploring metrics such as order fulfilment times, customer satisfaction, and sales revenue.
4) To Evaluate Financial Outcomes: Assess the financial implications of inventory management practices on Jimcap Electronics Pvt Ltd, including profitability, operating cash flows, and return on investment.
5) To Identify Challenges and Best Practices: Identify challenges faced by Jimcap Electronics Pvt Ltd in implementing inventory management practices and explore best practices adopted by the company or similar firms in the electronics industry.
6) To Provide Strategic Recommendations: Based on the findings, formulate strategic recommendations to optimize inventory management processes, address challenges, and improve overall operational and financial performance of Jimcap Electronics Pvt Ltd.
7) To Contribute to Existing Literature: Contribute to the body of knowledge on inventory management practices in the electronics industry, particularly within the context of Indian manufacturing firms, by providing empirical insights and analysis.

## RESEARCH METHODOLODY:

**Data Collection:**

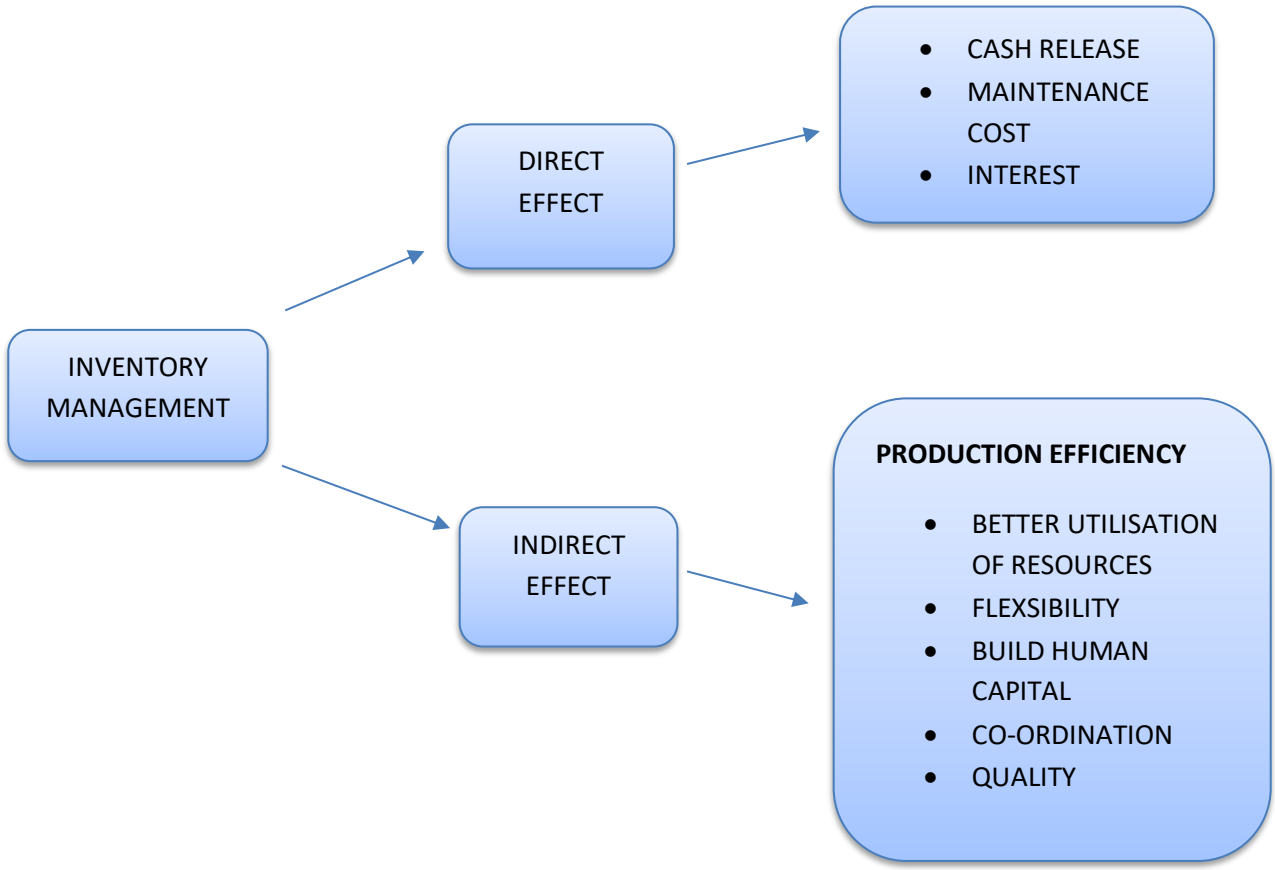
Secondary Data: Secondary data collected from various sources such as company reports, financial statements, industry publications, academic journals, and relevant government reports. This secondary data provides background information on inventory management practices in the electronics industry, existing literature on the topic, and insights from previous studies conducted in similar contexts.

## QUESTIONAIRE:

1) How does Jimcap determine the optimal inventory levels for its various products?

2) Can you provide insights into the implementation of Just-in-Time (JIT) inventory management at Jimcap?
3) How does Jimcap conduct ABC analysis to prioritize inventory management efforts?
4) How does Jimcap ensure production efficiency while maintaining optimal inventory levels?
5) Can you provide insights into how inventory management practices impact Jimcap's sales performance?
6) How does Jimcap ensure product availability and timely order fulfillment to enhance customer satisfaction?
7) What are the key financial outcomes associated with Jimcap's inventory management practices?

## DATA ANALYSIS:




Jim Cap relies heavily on inventory management, which has a direct impact on many facets of the business's operational and financial performance. Company can gain immediate advantages including cash release, fewer maintenance costs, and lower interest charges through efficient inventory management. The company can improve liquidity and financial

flexibility by releasing capital that would otherwise be invested in excess stock through the optimization of inventory levels and turnover. Jim Cap can also minimize maintenance expenses related to handling and storage by reducing excess inventory. Additionally, the business can save interest costs by lowering the requirement for borrowing to fund inventories, improving overall profitability.
Effective inventory management ensures that resources are used as efficiently as possible and that production processes function properly, which indirectly improves production efficiency. This results in increased resource efficiency, increased adaptability to shifting market conditions, and the development of human capital through streamlined procedures and staff development. Effective inventory management also improves departmental coordination, which fosters better cooperation and communication. In the end, these unintended consequences strengthen Jim Cap's standing as a pioneer in sustainability and innovation by enhancing product quality, customer happiness, and competitiveness in the capacitor manufacturing sector.

## **Questions answered:**

1)How does Jim cap determine the optimal inventory levels for its various products?

- With order requirements the company keep check on the inventory levels.

2)Can you provide insights into the implementation of Just-in-Time (JIT) inventory management at Jim cap?

- Jim cap uses JIT in inventory management according to the orders the raw materials are been stocked to the inventory. a minimum of all raw materials is kept incase of a urgent requirement.

3)How does Jim cap conduct ABC analysis to prioritize inventory management efforts?

- According to the ABC analysis the most important materials required in manufacturing of capacitor are been categorized as A grade materials. E.g. Bopp film, Aluminium Can, Capacitor, Motor.
- B grade materials are categorized as medium value item. that is Ink cartridge, Masking Tape, Cutter blade, Foam plastic granules etc.
- C grade materials are low value items that contributes less significantly to the company’s revenue compared to A and B items. Eg. Gloves knitted, Fevikwik, Novafit, Polygel, bubble wrap etc.

4)How does Jim cap ensure production efficiency while maintaining optimal inventory levels?

- Demand forecasting - by knowing our high demand product. by analyzing sales data, market trends and customer interests the company knows the future demands. this

enables to adjust production schedules and inventory levels accordingly, avoiding stockouts or excess inventory.

- Just in time manufacturing also helps to minimize inventory holdings costs and improve production efficiency, by synchronizing production with customer demands the company reduces the need for large inventory buffers and excessive lead times. Jim cap also evaluates efficient production processes that optimizes its production to enhance efficiency and minimize waste. Through initiatives such as process automation, equipment upgrades, and employee training programs, the company streamlines operations, reduces cycle times, and increases throughput without compromising quality. By maximizing the use of available resources and eliminating bottlenecks, Jim Cap achieves higher levels of production efficiency while maintaining optimal inventory levels.

5)Can you provide insights into how inventory management practices impact Jim cap's sales performance?

- By implementing inventory management practices such as demand forecasting and safety stock policies, Jim cap can minimize the occurrence of stockouts. Stockouts occur when products are out of stock, leading to missed sales opportunities and potential loss of customers. By ensuring sufficient stock levels, Jim cap can prevent stockouts and maximize sales revenue. Efficient Order Fulfillment: Inventory management practices such as efficient order processing and fulfillment contribute to timely delivery of products to customers. By streamlining order management processes and optimizing inventory replenishment cycles, Jim cap can fulfill customer orders quickly and accurately, enhancing customer satisfaction and loyalty. Satisfied customers are more likely to make repeat purchases and recommend Jim cap to others, thereby driving sales growth.

6)How does Jim cap ensure product availability and timely order fulfillment to enhance customer satisfaction?

- By safety stock and timely delivery of orders to the customers.

7)What are the key financial outcomes associated with Jim cap's inventory management practices?

- There is no manufacturing delays or delays in order delivery as inventory is properly managed.

## RESEARCH FINDINGS:

Jim cap Electronics Pvt Ltd makes sure that stock levels are in line with customer demand by closely monitoring order requirements and prioritizing appropriate inventory levels. Its inventory procedures are further improved by implementing Just-in-Time (JIT) inventory management and ABC analysis, which enable better resource allocation and prioritizing of inventory management activities. By implementing these tactics, Jim cap is able to maximize throughput, minimize waste, and achieve appropriate production efficiency. The organization guarantees efficient manufacturing procedures and prompt order fulfilment by closely monitoring inventory levels, which ultimately promotes smooth operations and client happiness.

efficient inventory management is essential to both manufacturing and sales efforts. By streamlining processes, cutting expenses, and maximizing resource use, it creates a strong basis for the business's performance in both the manufacturing and commercial sectors.

## CONCLUSION:

Inventory control management have a strong impact on the firm’s performance and profitability as they allow quantitative and qualitative measure of the movement of inventory, which allows strategic decisions to be made that increase efficiency in the process of the supply chain and lower costs. The main indicator of inventory control comes out to be inventory accuracy which allows having an effective control of the outputs of the different goods. The accuracy indicator is intended to be controlling how reliable is the inventory and the indicator of duration of the inventory allows to know how long a certain commodity remains in the organization. Based on the results of this study, inventory control indicators allow the firm to organize, manage and utilize the best inventory control model in order to improve the flow of inventory. With the results of the investigation, it can be concluded that the most used inventory control indicators, is the Lean Inventory system, which handles the most important variables: the cost quantity and rotation. Furthermore, Inventory control indicators can also allow the firm to measure and qualify how the inventory process works, and shows the strengths and weaknesses of the inventory control system currently used in an organization.

# PROJECT 2

## "WASTE MANAGEMENT AND ITS IMPACT ON INDUSTRY"

## INTRODUCTION:

In the intricate world of capacitor manufacturing, Jim Cap Electronics Pvt Ltd stands as a beacon of innovation and sustainability. Embracing a proactive approach to waste management, Jim Cap has forged strategic partnerships with vendors to sell the waste generated during its manufacturing processes on a daily basis. While this initiative has effectively addressed immediate waste disposal needs and minimized environmental impact, a critical challenge persists. At times, Jim Cap finds itself grappling with an unexpected surge in waste production, surpassing manageable thresholds. Despite meticulous management and transportation arrangements, the company lacks efficient strategies to pinpoint the root causes behind these fluctuations. This crucial gap in understanding not only jeopardizes waste management goals but also poses financial and operational risks. To navigate this challenge and uphold its commitment to sustainable practices, Jim Cap Electronics Pvt Ltd seeks an innovative solution that can precisely identify the reasons behind increased waste production and provide actionable insights to optimize its manufacturing processes.

In today's competitive business landscape, Manufacturing sectors are constantly seeking for strategies to increase their bottom line and guarantee long-term financial growth in today's cutthroat business environment. An aspect of this endeavour that is frequently disregarded is the efficient handling of waste produced throughout the production process. Despite the fact that waste management is often overlooked in favour of more important operational tasks, it has a substantial and complex influence on financial success. Manufacturing businesses can improve their profitability and sustainability by employing techniques that reduce, reuse, and recycle waste. These tactics can open up numerous chances for improvement. The strong

arguments for waste management's critical role in fostering the industrial sector's financial growth will be covered in this introduction. We will explore the ways in which efficient waste management is essential to manufacturing financial success, as it reduces costs and improves productivity, while also adhering to regulations and enhancing brand image.

Waste control is crucial in the capacitor manufacturing industry, where accuracy, productivity, and creativity are critical factors. The manufacture of capacitors entails complex procedures that frequently call for delicate materials and complex equipment. In this situation, any waste management inefficiencies or oversights result in financial losses in addition to environmental problems. The present introduction aims to clarify the significance of waste management in a capacitor manufacturing company and demonstrate how careful implementation of this process can lead to significant enhancements in financial performance.

Capacitor manufacturing is a sector characterized by rigorous quality standards and tight profit margins. To guarantee the dependability and functionality of the finished product, great attention to detail is required at every stage of the production cycle. But in the rush for accuracy, waste is frequently overlooked or undervalued, whether it takes the shape of packaging, byproducts, or leftover raw materials. However, this waste is more than just thrown away stuff; it also symbolizes lost chances for resource efficiency, cost reduction, and regulatory compliance.

In this , we will discuss how a strategic waste management approach can have a positive impact on the financial stability of a capacitor manufacturing company. Effective waste management is not just a legal need but also a driver of long-term growth and profitability in this niche market, with benefits ranging from lowering energy and material waste to improving operational effectiveness and brand reputation.
(Sasikumar, n.d.) (NAIK, n.d.) (Corona, n.d.) (Borthakur, n.d.) (Sutopo, n.d.) (Dalam, n.d.) (WASTE, n.d.)

## PESTLE ANALYSIS:

- **Political:**
  Jim cap Electronics Pvt Ltd.'s business activities may be greatly impacted by laws and policies pertaining to environmental protection and waste management from the government.
  Adherence to standards for the disposal of trash, emissions, and management of hazardous chemicals is vital in order to avert penalties and legal complications.

- **Economic:**
  The pricing of raw materials, labour expenses, and the demand for capacitors in the market are examples of economic issues that affect Jim cap Electronics Pvt Ltd.'s bottom line.
  Profitability can be increased by lowering production costs through the use of effective waste management techniques.

- **Social:**
  Jim cap Electronics Pvt Ltd.'s brand reputation and consumer perception is impacted by growing environmental sustainability awareness among stakeholders and consumers.
  Adopting eco-friendly waste management techniques can improve the company's reputation and draw in eco-aware clients.

- **Technological:**
  Technological developments in waste management, including waste-to-energy systems or recycling procedures, may help Jim cap Electronics Pvt Ltd with chances to increase the effectiveness of its waste management operations. Investing in technology for manufacturing process monitoring and optimization can reduce waste output and boost operational effectiveness.

- **Legal:**
  Jim cap Electronics Pvt Ltd must abide by environmental rules and regulations pertaining to emissions, waste disposal, and worker safety in order to stay out of legal hot water and keep its operating license. To reduce legal hazards, waste management techniques must be updated with new rules and adjusted properly.

- **Environmental:**
  Jim cap Electronics Pvt Ltd is a capacitor producer, hence its operations have an influence on the environment in terms of energy use, pollutants, and trash production. By putting into practice sustainable waste management techniques, a business can reduce its environmental impact and support broader environmental preservation initiatives.

## PORTAL ANALYSIS:

- **Purpose:**
  The purpose of conducting a PORTAL analysis for Jim Cap Electronics Pvt Ltd is to comprehensively assess the external factors that could impact the company's waste management practices and overall business operations.

- **Organisation:**
  Jim Cap Electronics Pvt Ltd.'s waste management methods and business outcomes are impacted by a number of political, economic, social, technological, legal, and environmental aspects, all of which are systematically examined in the PORTAL research.

- **Research:**
  Knowing about the waste management techniques used by Jim cap Electronics Pvt Ltd. Whether they recycle or transfer the waste to the waste vendor.

- **Technology:**
  For Jim Cap Electronics Pvt Ltd, waste management is greatly influenced by

technology. The business may increase waste reduction, resource efficiency, and operational performance by utilizing technology innovations including data analytics, process automation, and recycling technologies. Jim Cap Electronics may cut costs and improve waste management procedures by adopting creative solutions.

- **Audience:**
  The audience for the PORTAL analysis includes within Jim Cap Electronics Pvt Ltd, such as executives, managers, and employees responsible for waste management and strategic decision-making. Additionally, external audience such as vendors involved in taking away the waste on regular basis.

- **Language:**
  The language should convey the importance of waste management in driving financial growth and sustainability for Jim Cap Electronics Pvt Ltd.

## Lean Manufacturing Method:

To efficiently manage waste in its operations, the organization must implement lean manufacturing concepts. The goal of lean manufacturing is to find and eliminate waste in any form, including excess inventory, motion, faults, waiting times, overproduction, and unused talent. Jim Cap may reduce waste generation and related expenses by implementing lean principles to enhance resource use, streamline processes, and boost overall efficiency.
lean manufacturing places a strong emphasis on waste reduction and ongoing improvement. A corporation can find inefficient areas in its production processes and put waste-reduction measures in place by methodically examining them. For instance, the business can reduce waste generation and decrease downtime by increasing productivity and minimizing equipment setups and changeover times.
Value-added activities are promoted by lean concepts, which concentrate on work that directly affects customer satisfaction. Jim Cap can streamline operations and cut down on waste by giving value-added jobs priority over non-value-added ones. For instance, the business can minimize errors and defects, resulting in higher-quality products and less waste, by standardizing labour processes and removing unnecessary stages.
lean manufacturing emphasizes the importance of just-in-time production, minimizing excess inventory and reducing storage space requirements. By adopting a pull-based production system, Jim Cap can produce goods in response to customer demand, reducing the risk of overproduction and excess inventory buildup, which can lead to waste. By focusing on continuous improvement, value-added activities, employee involvement, and just-in-time production, the company can streamline its processes, optimize resource utilization, and reduce waste generation, thereby enhancing efficiency, reducing costs, and maintaining its commitment to sustainability and environmental responsibility.

# LITERATURE REVIEW:

Waste management in the capacitor manufacturing industry is a critical aspect of ensuring environmental sustainability and operational efficiency. The complex nature of capacitor production processes often results in the generation of various types of waste, including raw

material scrap, byproducts, and packaging materials. Capacitor manufacturers face unique challenges in managing this waste effectively, including the presence of hazardous materials and stringent quality standards. Compliance with environmental legislation governing trash disposal and recycling is critical for avoiding legal consequences and upholding business standards.

Current waste management techniques in the capacitor manufacturing business are diverse, with companies using a variety of methods and technologies for waste disposal, recycling, and resource recovery. While some manufacturers prioritize recycling and reuse programs to reduce waste output, others may resort to traditional disposal methods due to financial or technical restrictions. However, there is an increasing acknowledgment of the importance of sustainable waste management procedures in reducing the environmental impact of capacitor manufacturing activities.

Jim Cap Electronics Pvt Ltd, a prominent player in the capacitor manufacturing industry, has implemented an innovative approach to waste management to ensure environmental responsibility and operational efficiency. With a commitment to sustainability, Jim Cap has established a system where the waste generated from its day-to-day operations, primarily from the slitting of raw materials using three specialized machines, is meticulously managed. These machines, integral to the manufacturing process, inevitably produce approximately 2-3% waste daily. However, rather than disposing of this waste indiscriminately, Jim Cap has forged partnerships with scrap vendors, effectively transforming what would otherwise be discarded material into a valuable resource. By selling their waste to these vendors, Jim Cap not only minimizes its environmental footprint but also contributes to the circular economy by facilitating the reuse and recycling of materials. This proactive approach underscores Jim Cap's commitment to sustainable business practices and sets a commendable example for the capacitor manufacturing industry as a whole.

## RESEARCH GAP:

The literature analysis gives a complete overview of waste management strategies in the capacitor manufacturing business, with an emphasis on Jim Cap Electronics Pvt Ltd.'s novel approach. However, a significant study vacuum has emerged about the efficacy and optimization of Jim Cap's waste management technique. A research gap would be filled by undertaking a thorough study of the causes that contribute to increasing waste production unpredictability, such as process inefficiencies, equipment malfunctions, and material quality concerns. Furthermore, evaluating the possible benefits of employing advanced monitoring and optimization technologies could provide significant insights into improving waste management effectiveness and fulfilling Jim Cap Electronics Pvt Ltd.'s long-term business goals.

## RESEARCH OBJECTIVES:

- To evaluate the existing waste management strategies at JimCap Electronics Pvt Ltd.
- To identify the key challenges and inefficiencies in waste management
- To evaluate the effectiveness of lean manufacturing techniques in improving waste management:

- To examine the financial and operational implications of enhanced waste management.
- To provide suggestions for optimizing waste management methods.

## RESEARCH METHODOLOGY:

The research methodology for JimCap Electronics Pvt Ltd commences with an in-depth analysis of their current waste management practices, emphasizing the identification of prevalent waste streams and their underlying causes. This involves conducting a meticulous examination to ascertain the origins and reasons for waste generation within the manufacturing process. Understanding the root cause of waste is paramount, whether it arises from machine errors, raw material defects, inefficient production setups, or inadequately trained personnel.

## DATA ANALYSIS:

Comparison of Waste Production from Three Slitting Machines.

| | Machine A | Machine B | Machine C |
|---|---|---|---|
| Wastage produced | 16 Kg | 20 Kg | 25 Kg |
| Contributing Factors | Normal Production | High Material Consumption | Inefficient setup |

The chart provides an overview of waste production from three machines used in the slitting process . Machine A generates 16 kg of waste, Machine B produces 20kg, and Machine C yields 25 kg. Each machine's waste production is influenced by specific contributing factors. Machine 1's waste production is attributed to normal production operations. Machine 2's higher waste output is primarily due to increased material consumption during operation. Conversely, Machine 3's elevated waste production stems from an inefficient setup, indicating that the waiting time of the machine may contribute significantly to waste generation. Understanding these contributing factors is essential for devising targeted strategies to optimize waste management and enhance overall efficiency in the manufacturing process.

### Grading Wastes produced:

- Grade A: indicates minimal or negligible waste (less than 1% of total production).
- Grade B: Low waste (1% to 3% of total production).
- Grade C: Moderate waste (3%–5% of total production).
- Grade D: High wastage (5% to 8% of total production).
- Grade E: indicates severe waste (greater than 8% of total production).

- **Grade A**: (Minimal/Negligible Wastage): This grade is indicative of an exceptionally high degree of waste management efficiency, with manufacturing waste often amounting to less than 1% of total production. Establishments that receive a Grade A

show that they have excellent process control, which results in maximum resource efficiency and little environmental effect.

- **Grade B** (Low Waste): This grade denotes an excellent degree of waste management, with waste generation falling within the range of 1% to 3% of total production. Facilities in this category continue to run reasonably efficient production processes, however there is always potential for development.

- **Grade C**: Moderate Wastage: Grade C facilities generate between 3% and 5% of the total production, which is considered a moderate degree of waste. Waste is evident, yet it is still controllable within reasonable bounds.

- **Grade D**, or "High Wastage," denotes a substantial amount of waste, between 5% and 8% of the entire production. Facilities in this category deal with issues related to wasteful use of resources, which can result in significant losses and worsen the effects on the environment.

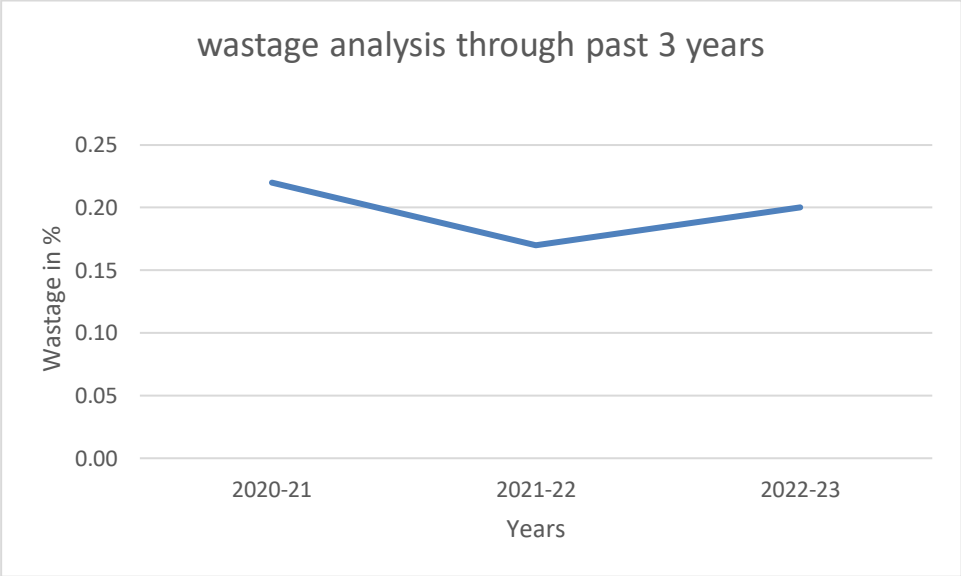
- The highest rating, rating E (Severe Wastage), indicates a dire situation in which waste exceeds 8% of total production and points to significant inefficiencies in the manufacturing process. Grade E facilities suffer severe losses in terms of resources and potential revenue, which puts sustainability and profitability at serious danger. To prevent more harm and return operational efficiency, prompt action and thorough process reform are essential.

Some of the Main wastages Produced in manufacturing process

- Aluminium Cutting: Waste generated from the cutting of aluminium materials, which may include scraps and trimmings.
- Aluminium Cutting with Inner Can: Similar to aluminium cutting, but specifically involving materials with inner cans, potentially adding complexity to the waste management process.
- Aluminium Foil Cutting: Waste produced during the cutting of aluminium foil, which may consist of scraps and discarded sections.
- Capacitor Aluminium Scrap: Waste generated from the manufacturing of capacitors, specifically aluminium scrap materials.
- Failed Capacitors: Capacitors that do not meet quality standards or fail during the manufacturing process, resulting in waste.
- Failed Elements: Components or elements that fail to meet quality or functional requirements, contributing to waste production.
- Motor: Waste generated from the manufacturing process involving motors, including scraps and defective units.
- Paper Core: Waste materials generated from paper cores used in various manufacturing processes.
- Plastic Moulding Grinding: Waste produced from the grinding or processing of plastic moulding materials, often consisting of scraps and excess material.
- PVC Stripping: Waste generated from the stripping or removal of PVC materials, which may include scraps and discarded sections.
- Solder Wire: Waste materials generated from soldering processes, including unused or excess solder wire.

- Slitted MPP Film: Waste produced during the slitting or cutting of metalized polypropylene film, which may include trimmings and scraps.

**Analysis of waste produced in past 3 years .**




The data provided shows the total wastage in percentage for the years 2020-21, 2021-22, and 2022-23, which are 0.22 % , 0.17 %, and 0.20 %respectively. To assess the impact of this wastage on the financial stability of the company, it's important to compare it against the maximum tolerable limit set by the company. In this case, the company has set a maximum tolerable limit of 18% waste. If the total wastage exceeds 18%, it indicates that the company is facing challenges in managing its waste effectively, which could potentially impact its financial performance. Therefore, ongoing monitoring and optimization of waste management practices are crucial to ensure that wastage remains within acceptable limits and does not adversely affect the company's finances. Hence having proper waste management practices help the company into its proper manufacturing functions.

## RESEARCH FINDINGS:

Based on the provided information, it's evident that Jim Cap Electronics Pvt Ltd has established specific waste management thresholds and practices to ensure operational efficiency and minimize financial losses. The company has set a tolerance limit of 6% for daily waste generation, beyond which additional losses are incurred. This indicates a proactive approach to waste management, with a clear understanding of acceptable levels and associated risks.

Furthermore, Jim Cap Electronics Pvt Ltd takes steps to reduce the amount of waste produced during business operations. Every day, the organization focuses on error prevention and continual improvement by cleaning and taking remedial action. Regular feedback empowers staff members to spot and resolve possible waste sources, fostering an environment that values

operational excellence and waste minimization. Further, the organization makes certain that various waste kinds are properly separated and disposed of, which is essential for effective waste management. Jim Cap Electronics Pvt Ltd reduces the possibility of contamination and guarantees that recyclable materials are processed correctly by gathering and disposing of waste separately. By taking a proactive approach, garbage may be avoided building up in warehouses or storage facilities and the environmental impact can be minimized while streamlining the waste disposal processes.

Overall, Jim Cap Electronics Pvt Ltd.'s comprehensive waste management strategy, combined with daily cleaning and corrective actions, segregation of waste, and adherence to tolerance limits, underscores its commitment to sustainability and operational efficiency. These practices not only mitigate financial risks associated with waste generation but also contribute to long-term business resilience and competitiveness.

## CONCLUSION:

In conclusion, waste management plays a crucial role in Jim Cap Electronics Pvt Ltd's operations to mitigate financial losses stemming from excessive waste during the manufacturing process. Implementing proper lean manufacturing methods is key for the company to effectively reduce wastage. This involves optimizing production processes to produce the necessary quantities at the required time, ensuring proficient operation of machinery, and precise calculation to minimize waste generation. By embracing lean manufacturing principles, Jim Cap can enhance operational efficiency, reduce waste, and ultimately bolster its financial performance while upholding its commitment to sustainability and responsible business practices.

## MANAGERIAL IMPLICATIONS:

- Strategic Planning: to develop a comprehensive waste management strategy aligned with the company's overall objectives. This includes setting clear goals for waste reduction, defining key performance indicators (KPIs) to measure progress, and allocating resources effectively to support waste reduction initiatives.
- Process Optimization: carry out in-depth analyses of current industrial processes to pinpoint inefficiencies and waste production. By standardizing processes, maximizing the use of equipment, and speeding workflows
- Continuous Improvement: Maintaining waste reduction efforts over time requires the adoption of a continuous improvement culture. To continuously improve waste management procedures, managers should welcome employee feedback, evaluate performance indicators on a regular basis, and make incremental adjustments.

## TASK HANDLED:

- Bank reconciliation
- Freight Bills
- Invoice bills
- Filling bills

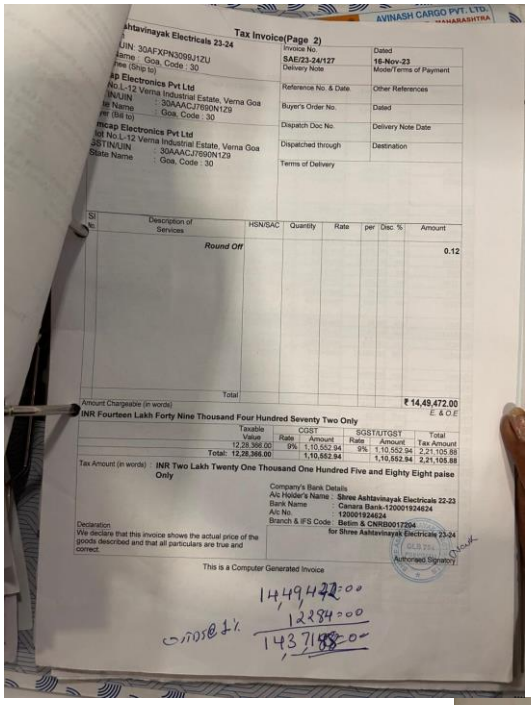
## LEARNINGS:

I gained knowledge about how the Jim cap finance department operates, How the inventory management works and also the waste management while production of capacitors, how freight entries are made into the tally for documentation, how to handle daily invoicing, and how to maintain current cheque entries.

## CHALLENGES

During my internship at Jim cap, I faced various obstacles that are common in a fast-paced workplace. One difficulty was adjusting to the electronics industry's fast-paced environment. Learning how to check bank reconciliation.

# APPENDIX1: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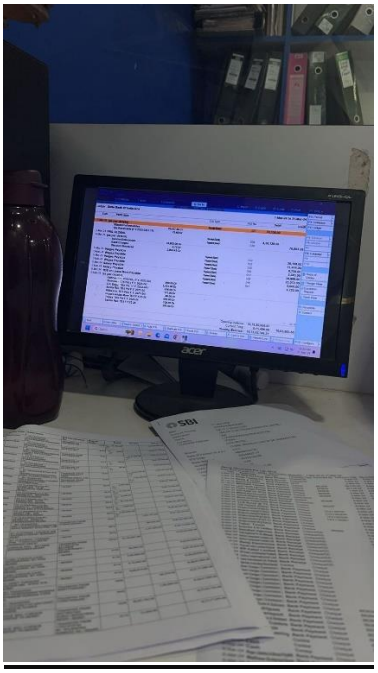
Declaration
We declare that this invoice shows the actual price of the goods described and that all particulars are true and correct.
Authorised Signatory
This is a Computer Generated Invoice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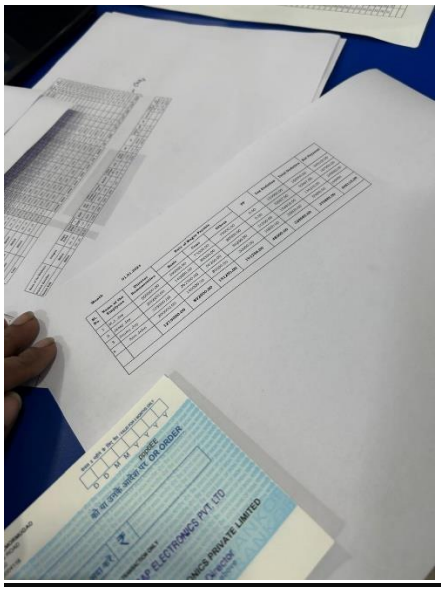
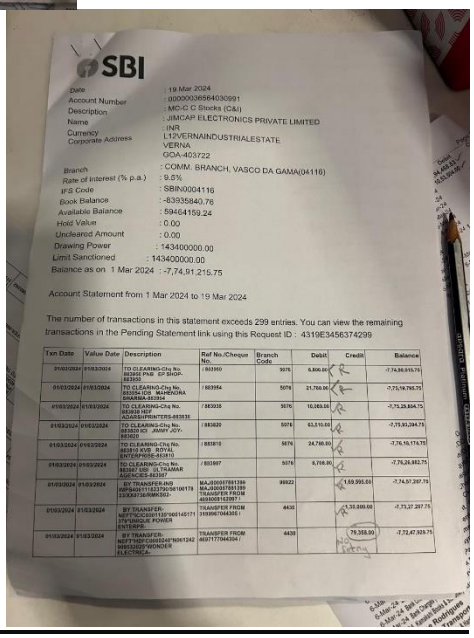
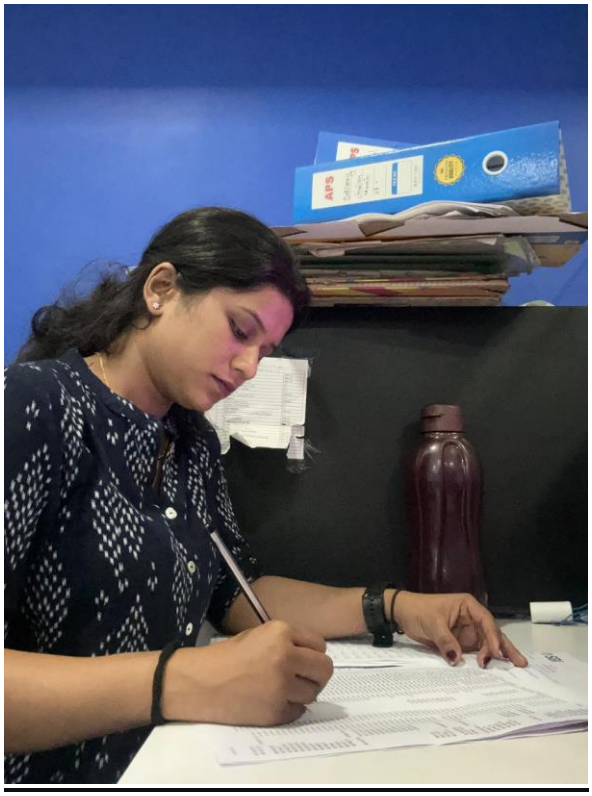



SBI
Date : 19 Mar 2024
Account Number : 00000036564030991
Description : MID C C Blocks (C&I)
Name : JIMCAP ELECTRONICS PRIVATE LIMITED
Currency : INR
Corporate Address : L12VERNAINDUSTRIALESTATE VERNA GOA-403722
Branch : COMM. BRANCH, VASCO DA GAMA(04116)
Rate of Interest (% p.a.) : 9.6%
IFS Code : SBIN0004116
Book Balance : -83935840.76
Available Balance : 59464159.24
Hold Value : 0.00
Uncleared Amount : 0.00
Drawing Power : 143400000.00
Limit Sanctioned : 143400000.00
Balance as on 1 Mar 2024 : -7,74,91,215.75
Account Statement from 1 Mar 2024 to 19 Mar 2024
The number of transactions in this statement exceeds 299 entries. You can view the remaining transactions in the Pending Statement link using this Request ID : 4319E3456374299
Txn Date
Value Date
Description
Ref No./Cheque No.
Branch Code
Debit
Credit
Balance

# APPENDIX2:



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