



# A Study on Inventory Management Practices in G.S. Knits, Tiruppur

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**ABSTRACT:** In the modern competitive world of manufacturing, inventory management is extremely significant to the cost control and efficiency. Effective inventory management assists in the minimization of wastes, shortages, and smooth operations of production. It also is important in reducing the price of raw materials and enhancing the overall profitability. The primary aim of the research paper is to learn the role of inventory management practices in minimizing the cost of raw materials in an organization G.S. Knits, Tiruppur. The research is also aimed at assessing the effectiveness of the current system of inventory in the cost control. It explores the idea of effective relationships with their suppliers, which can assist in securing lower prices and minimizing costs. It also examines how technology can be used in the production process and the way it enhances cost savings. Lastly, the paper deconstructs the efficiency of production and various methods employed to control and cut down on the cost of raw materials. Descriptive research design and convenience sampling method has been used. The sample size of this study is 120. Questionnaire has been used as a primary data. Simple percentage analysis have been applied to reach the findings of the study. It can be concluded that the effective practices in the inventory management are very important in guaranteeing the efficiency of the operations, costs and continuous production in an organization. Close observation of the level of inventory, keeping the optimum stock, and reducing wastage have a significant impact on the overall productivity and profitability. Thus, the effective, flexible, and dynamically designed inventory management system is very critical to the attainment of a long term sustainability, competitiveness and better performance of the organization. The conclusion is that technology, strategic supplier management, and continuous improvements are some of the keys that should be integrated in improving the practice of inventory management.

**KEYWORDS:** Inventory management, Inventory control systems, Just-in-Time (JIT), Lean inventory techniques, Stock optimization.

## I. INTRODUCTION

Cost reduction refers to the aspect of reducing the costs of a company to increase the profit. It entails the discovery, and elimination of the costs that do not add value to customers besides streamlining processes to enhance efficiency. Reduction in costs usually aims at creating short term savings. Cost reduction is the act of determining and lowering costs involved in operation of business. Cost reduction aims at reducing the total costs of running the business without affecting the quality or poor performance of other aspects of the company. Cost reduction can be defined as the practice or rather a reduction of the costs that are used in production of goods or the provision of services permanently. It occurs without causing unnecessary impairment of the end use or quality of that product or service. A reduction in cost is vital in long term profitability and sustainability of a business. Through cutting down on the cost, an organization may make a lot of profits and put it back to other sectors of business or it can use the money to bring down the prices and make them more competitive. More Profits: The most obvious advantage of lowering business cost is that it may allow raising profits. Cost reduction in a competitive market place is a little thing and when an organization can find means of minimizing its cost it will be ahead of its competitors. Enhancing Cash Flow Cost reduction can also be used to improve cash flow besides increasing profits. Use of fewer funds on supplies and overhead results in more funds to go back into the business or settle debts. Better cash flow can become the true savoir of the companies especially when economic times are difficult. Staying Competitive With the low cost, the businesses are able to maintain their prices at low prices that are appealing to the consumers. Also, it is possible to use a cost reduction to enhance profitability and make a company more sustainable. Cost Reduction Strategies: Companies have a host of strategies that are used to cut costs. A few of the more universal methods are looking at the existing expenditure, process optimization, bargaining with suppliers, and automating work with the help of technology. Waste minimization and increasing efficiency can

also be used when it comes to cost reduction. Check on Current Spending: Examination of current spending patterns can assist the companies cut costs by pointing at discretionary spending. Some examples include the removal of unnecessary travel expenses or reduction of advertising expenses.

#### OBJECTIVES OF THE STUDY

- To assess the effectiveness of current inventory management practices in reducing raw material costs
- To evaluate the impact of supplier relationships on raw material cost reduction within the company
- To investigate the technology adoption, specifically in manufacturing processes and its influence on reducing raw material costs
- To analyze the production efficiency metrics and raw material cost reduction strategies in the company

### II. REVIEW OF LITERATURE

**Liang, P., Yang, F. and Shan, F. (2023)**, The objective of this paper is to analyze the best sourcing practices and pricing option of competing toy companies and also comment on the implications of the decisions of the manufacturers in relation to competition. They both have the option of using virgin material and recycled material. The authors use two categories of consumers, sensitive consumers who are concerned about the safety of the product and the insensitive consumers who do not care about the material used in the toy. The findings indicate that there is a special instance of win-win scenario between the producer and the consumer. Moreover, the price of toys made of virgin-material does not necessarily increase with the increase of the number of sensitive consumers.

**Joseph Berk (2022)**, Cost Reduction and Optimization for Manufacturing and Industrial Companies addresses all key cost reduction areas, with examples and recommendations being simple to read and follow. It gives the plan of action towards taking suggested measures using real and tested approaches by giving a contemporary comprehensive view of the manufacturing processes. The book contains simple to understand easy to implement cost reduction ideas based on the experience of the author in reducing costs in 30 years of senior operations and consulting engagements with hundreds of organizations and then systematized in five broad categories namely labor, material, design, process and overhead. It is also more qualitative and design oriented compared with other books in the market, which allows the reader to be better informed about important concepts.

**Aditya Ajay Choudhari (2019)**, The study fundamentally seeks to critically reduce the production cost, how to utilize properly machineries, proper budget, strategies, automation, materials, utility, skilled labors, designs, supply chain management, quality than quantity, expanding networks, efficiency of machines, reuse of materials (waste), and assessment of the business plans periodically. . Since all the condition and measures are capable of being taken seriously, organization may succeed in surpassing its competitors by making quality product with lower price and emerge as a leader in the market.

### III. RESEARCH METHODOLOGY

This study adopts a descriptive research design. Convenience sampling is adopted in this study. Both primary data and secondary data are applied to the study. The size of the sample to be used in this study is 120 respondents. Simple percentage analysis has been used in this study.

### IV. DATA ANALYSIS AND INTERPRETATION

Table No. 1 GENDER OF THE RESPONDENTS

Gender	Number of Respondents	Percentage (%)
Male	70	58.30%
Female	50	41.70%
<b>Total</b>	120	100%

Source: Primary data

**Interpretation**

Respondents reveal that 58.3% of the sample are male, while 41.7% are female, based on a total sample size of 120. This shows that both genders are represented among the participants, with males forming a slightly higher proportion of the respondents.

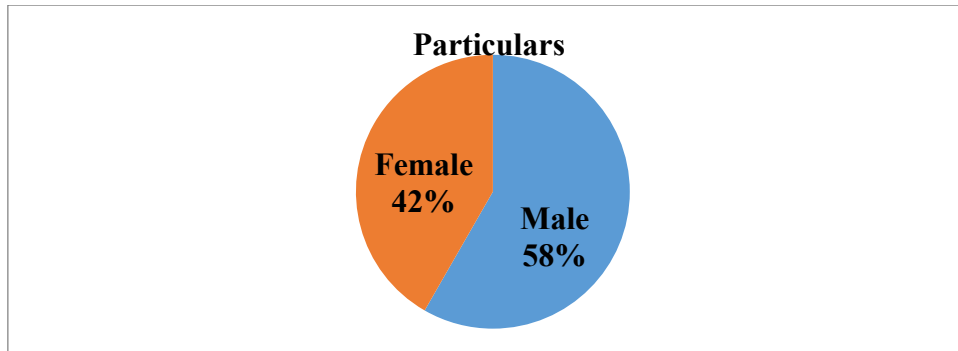


Table No. 2 DEPARTMENT OF THE RESPONDENTS

Department	Number of Respondents	Percentage (%)
Production	30	25%
Supply Chain	25	20.80%
Purchasing	20	16.70%
Finance	25	20.80%
Others	20	16.70%
<b>Total</b>	<b>120</b>	<b>100%</b>

Source: Primary data

**Interpretation**

Respondents reveal that 25% belong to the Production department, 20.8% to Supply Chain, 16.7% to Purchasing, 20.8% to Finance, and 16.7% to other departments, based on a total sample size of 120.

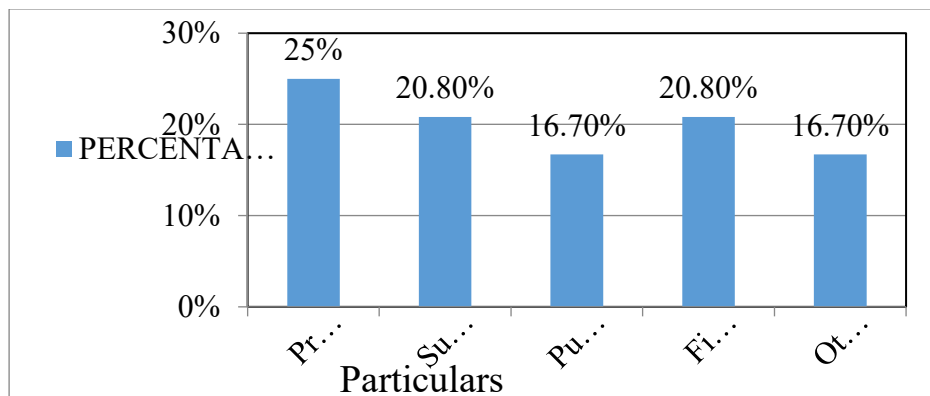


Table No. 3 INVENTORY MANAGEMENT PRACTICES

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
The company effectively monitors and controls inventory levels to	34 (28.3%)	50 (41.7%)	18 (15%)	10 (8.3%)	8 (6.7%)	120 (100%)

minimize excess stock						
Inventory turnover rate is regularly analyzed and improved upon to optimize raw material usage	30 (25%)	48 (40%)	24 (20%)	12 (10%)	6 (5%)	120 (100%)
Just-in-time inventory systems are efficiently utilized to reduce holding costs and waste	36 (30%)	54 (45%)	18 (15%)	7 (5.8%)	5 (4.2%)	120 (100%)
Inventory management practices prioritize minimizing stock outs to ensure smooth production operations	32 (26.7%)	50 (41.7%)	22 (18.3%)	10 (8.3%)	6 (5%)	120 (100%)
Safety stock levels are appropriately set to mitigate the risk of supply chain disruptions	31 (25.8%)	48 (40%)	24 (20%)	12 (10%)	5 (4.2%)	120 (100%)

Source: Primary data

**Interpretation**

Respondents reveal that 28.3% strongly agree and 41.7% agree that the company effectively monitors and controls inventory levels, while 15% are neutral, 8.3% disagree, and 6.7% strongly disagree. Regarding inventory turnover rate optimization, 25% strongly agree and 40% agree, with 20% neutral, 10% disagree, and 5% strongly disagree. For the utilization of Just-in-Time systems, 30% strongly agree and 45% agree, while 15% are neutral, 5.8% disagree, and 4.2% strongly disagree. On prioritizing the minimization of stockouts, 26.7% strongly agree and 41.7% agree, with 18.3% neutral, 8.3% disagree, and 5% strongly disagree. Finally, 25.8% strongly agree and 40% agree that safety stock levels are appropriately set to mitigate supply chain risks, while 20% are neutral, 10% disagree, and 4.2% strongly disagree. Overall, the majority of employees perceive that inventory management practices are effective in optimizing stock levels and ensuring smooth production operations.

**Table No. 4 PRODUCTION EFFICIENCY**

Statements	Excellent	Good	Average	Bad	Poor	Total
Production processes are optimized to minimize raw material waste and maximize yield	30 (25%)	50 (41.7%)	25 (20.8%)	10 (8.3%)	5 (4.2%)	120 (100%)
Lean manufacturing principles are effectively applied to streamline production workflows and reduce inefficiencies	28 (23.3%)	52 (43.3%)	25 (20.8%)	10 (8.3%)	5 (4.2%)	120 (100%)
Cross-training initiatives are implemented to ensure flexibility and efficiency in production operations	25 (20.8%)	50 (41.7%)	30 (25%)	10 (8.3%)	5 (4.2%)	120 (100%)
Continuous improvement efforts are encouraged and supported to drive ongoing gains in production efficiency	32 (26.7%)	48 (40%)	28 (23.3%)	8 (6.7%)	4 (3.3%)	120 (100%)

Equipment schedules are rigorously followed and downtime productivity	maintenance are followed to minimize and maximize	30 (25%)	50 (41.7%)	25 (20.8%)	10 (8.3%)	5 (4.2%)	120 (100%)
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Source: Primary data

### Interpretation

Respondents reveal that 25% rate the optimization of production processes as excellent and 41.7% as good, while 20.8% are average, 8.3% rate it bad, and 4.2% poor. Regarding the application of lean manufacturing principles, 23.3% rate it excellent and 43.3% good, with 20.8% average, 8.3% bad, and 4.2% poor. For cross-training initiatives, 20.8% rate it excellent and 41.7% good, while 25% are average, 8.3% bad, and 4.2% poor. Continuous improvement efforts are rated excellent by 26.7% and good by 40%, with 23.3% average, 6.7% bad, and 3.3% poor. Equipment maintenance schedules are rated excellent by 25% and good by 41.7%, with 20.8% average, 8.3% bad, and 4.2% poor. Overall, the majority of respondents perceive production efficiency practices positively, highlighting effective process optimization, lean principles, cross-training, continuous improvement, and rigorous equipment maintenance.

### V.SUGGESTIONS

- Inventory monitoring systems should be enhanced to ensure that the company manages the level of stock and minimizes unsafe stock.
- The company must also perform frequent analysis of the inventory turnover and take necessary actions to enhance optimization on the use of raw materials.
- The company ought to maximize on the application of just-in-time systems in order to reduce holding costs and also prevent unnecessary wastes.
- The firm needs to embrace effective inventory management in order to avoid cases of shortages and in order to maintain uninterrupted production processes.
- The company ought to keep the right amount of safety stock to minimize the possibility of supply chain breakdown.
- The company is to establish and sustain good relationship with the suppliers of raw materials to enhance consistency in supply and coordination.
- The company needs to enhance its negotiation techniques in order to achieve better prices and conducive terms of the contract with suppliers.
- The business ought to have various sourcing strategies in order to minimize the risk of suppliers and enhance competitiveness.
- Every now and again, the company ought to renegotiate supplier contracts to be cost effective.
- The company ought to adopt powerful supplier performance appraisal systems to improve on supplier relationships.
- The company is advised to invest in high level of technology solutions that will facilitate procurement processes and automate them.
- The company would also require employing data analytics technology to determine areas of cost savings in sourcing operations.
- Automation technologies should be implemented at the company to reduce the number of errors and enhance production efficiency.
- Consideration: The company ought to offer frequent training activities to enhance the competence of the employees in the use of the technological equipment.
- The firm should constantly modernize itself using new technologies to remain competitive in sourcing and production.
- The company is supposed to streamline the production processes in order to minimize the wastes of the raw materials and enhance the yield.
- The firm needs to employ lean manufacturing processes properly in order to eradicate ineffectiveness in processes.

- The company will need to encourage cross-training programs in order to increase the workforce flexibility and efficiency.
- The company ought to promote the persistence of the improvement practices in order to attain the sustained efficiency of production.
- It is important that the company has strong implementation of equipment maintenance schedules to ensure that the company reduces its downtimes and makes most of its productivity.

## VI. CONCLUSION

It can be concluded that the effective practices in the inventory management are very important in guaranteeing the efficiency of the operations, costs and continuous production in an organization. Close observation of the level of inventory, keeping the optimum stock, and reducing wastage have a significant impact on the overall productivity and profitability. Nonetheless, the inventory systems may be inhibited by the lack of diversification in suppliers, the implementation of lean practices, sophisticated analytical systems, and so forth, which contribute to the infiltration of inefficiencies and increased operational expenses.

## REFERENCES

1. Liang, P., Yang, F., & Shan, F. (2023). Inventory management and performance: Review and future research directions. *International Journal of Production Economics*, 257, 108709.
2. Berk, J. (2022). *Cost reduction and optimization for manufacturing and industrial companies*. McGraw-Hill Education.
3. Choudhari, A. A. (2019). Analysis of inventory management practices in manufacturing firms. *International Journal of Management and Applied Science*, 5(3), 45–52.
4. Xiaoli Zhu,,Chenglong Li (2022), “Cost Changes and Technical Efficiency of Grain Production in China against a Background of Rising Factor Prices”, *Sustainability*, Vol.14,No.19, Page no.134-138.
5. Rien Agustin Fadjarenie , Citra Rachmadani , and Deden Tarmidi (2023), “Cost Reduction Strategy In Manufacturing Industries Empirical Evidence From Indonesia”, *Jurnal Akuntansi*, Vol. 28, No. 01, Page no.61-79.
6. Cossa, A. (2023), “Impact of Cost Reduction Strategies on Purchasing and Procurement in Mozambique”, *Global Journal of Purchasing and Procurement Management*, Vol. 2 No.1, Page no. 12–20.
7. K.E.K., V., Raja, S., Yendeti, V.S.P., Kancharla, A. and Kandasamy, J. (2023), "Investigating the effect of carbon tax on sharing network participation", *Journal of Modelling in Management*, Vol. 18 No. 3, Page no. 876-905.
8. Jakob Trauer, Simon (2021), “Improving Production Efficiency with a Digital Twin Based on Anomaly Detection”, *Sustainability*, Vol.13,No.18, Page no.123-129.



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