

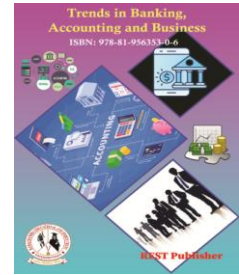


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A Study on Just in Time Logistics in ERF Rubber Industry

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Abstract. *The recent success of the ERF rubber industry stems from the competitiveness of local firms in the upstream industry and the leadership of foreign firms in the downstream sector. To further strengthen competitiveness, a more concerted effort to encourage innovation and technology absorption by local downstream firms is required. Originality/value – This research provides a comprehensive overview of one of Hosur most significant agricultural exporting industries. It systematically analyzes the sector's strengths and weaknesses and offers recommendations for policy makers to manage future opportunities and threats.*

1. INTRODUCTION

Just-in-time (JIT) is easy to grasp conceptually, everything happens just-in-time. For example, consider my journey to work this morning, I could have left my house, just-in-time to catch a bus to the train station, just-in-time to catch the train, just-in-time to arrive at my office, just-in-time to pick up my lecture notes, just-in-time to walk into this lecture theatre to start the lecture. Conceptually there is no problem about this; however, achieving it in practice is likely to be difficult! So too in a manufacturing operation component part could conceptually arrive just-in-time to be picked up by a worker and used. So, we would at a stroke eliminate any inventory of parts, they would simply arrive just-in-time! Similarly, we could produce finished goods just-in-time to be handed to a customer who wants them. So, at a conceptual extreme, JIT has no need for inventory or stock, either of raw materials or work in progress or finished goods. Obviously, any sensible person will appreciate that achieving the conceptual extreme outlined above might well be difficult, or impossible, or extremely expensive, in real-life. However that extreme does illustrate that, perhaps, we could move an existing system towards a system with more of a JIT element than it currently contains. For example, consider a manufacturing process - whilst we might not be able to have a JIT process in terms of handing finished goods to customers, so we would still need some inventory of finished goods, perhaps it might be possible to arrange raw material deliveries so that, for example, materials needed for one day's production arrive at the start of the day and are consumed during the day - effectively reducing/eliminating raw material inventory.

2. OBJECTIVES OF THE STUDY

Primary objective: To study on Just in Time logistics in ERF industry.

Secondary objectives:

- To analyze the methods used to identify the problems.
- To determine the level of products that does not add value to the firm.
- To identify the implementation of product-oriented layout inside the firm.
- To understand the reasons for applying less time spent on moving of materials and part in the output end.
- To examine the methods of eliminating waste in the firm.

3. NEED/SCOPE

- To Implement the management study and understand them better in the way of our project
- Acquiring detailed knowledge in a particular topic.
- Dealing with the practical corporate environment.
- Dealing with the practical models.
- Throwing out best possible project skills to stand out of the crowd.
- Enhancing the Creative and Innovative skills.
- The impact of addition of JIT II on purchasing, logistics and concurrent engineering processes

- How Better inter-organizational relationships are maintained through JIT II.
- Defining the planning process for a JIT manufacturing system requires an understanding of the objectives of JIT, and the goals and objectives of the JIT system. After the objectives are established for the manufacturing, the process of planning becomes one of determining what is required to meet those objectives.

4. REVIEW OF LITERATURE

(Zhu et al. 2016) The manufacturers operating in the moreen era face a lot of challenges among them the factors of most pivotal focus are making operations faster, customer service improvement, and cost reduction. In order to compete globally, US companies are looking for new ways for improving their abilities. during the past decade a technique that has grabbed a greater attention in order to compete globally is the concept of Just-in-time).

Wafa and Yasin (2017) pointed out that JIT is a continuous goal-oriented process in order to remove waste and increase productivity. They also mentioned that JIT is used for the description of manufacturing system where different parts are produced that are essential to complete finished products or delivered where needed. In the past, "JIT was considered to be an inventory reduction mechanism that can be used to decrease the levels of inventory in a production process continually until it is stopped by some occurrence Missing to which the firm may encounter some of the problems like losing market shares, high scrap, high levels of inventory, low quality in labor and products, longer lead times and the survival of many sources of waste in the process of production

Gyampah and Gargeya (2017) have contributed to the literature by conducting a study on the process of implementation of just-in-time (JIT) in manufacturing firms of Ghana. They came to know that there is huge difference between JIT firms and non-JIT firms in terms of their efforts for set up time reduction, suppliers' partnership and the training of employees for ensuring continuous quality improvements. Though, there is no significant difference pertaining to the use of measurement systems.

5. RESEARCH METHODOLOGY

Research Design: The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions is normally referred as research and this research is conduct for formulating the strategy.

Sampling Design: Sampling technique used in this study is simple random sampling. The researcher selected the respondents based on his convenience.

Sample Size: This study is conducted with a sample size of 100 respondents.

6. DATA ANALYSIS

Primary Data: Directly from filling the Questionnaire by Contacting the customer through personally and studying the response. The questionnaire fills up, related to usages of particular branded ERF industry.

Secondary Data: Source of data taken from various magazines, Newspaper and other prominent.

Analytical Tools:

1. Simple percentage analysis
2. ANOVA Test
3. Correlation Analysis

Finding:

- From the analysis, we can conclude Preventative maintenance of machinery the employee are 24% of the respondents are highly satisfied with their work progress.
- The Total Productive maintenance of machinery employee are 24% of the respondents are highly satisfied with their work progress.
- The Reduction in preliminary finishing time of products the employee are 16% of the respondents are highly satisfied.
- The Reduction in series of work the employee are 18% of the respondents are highly satisfied.
- The Manufacturing plant layout of firm the employee are 20% of the respondents are highly satisfied.

- The Balance of working process in production of product by the employee are 21% of the respondents are highly satisfied.
- The Task time for employee are 23% of the respondents are highly satisfied.

- The Overall equipment efficiency in the organization used for the production of firm employee are 21% of the respondents are highly satisfied.
- The Demand driven supply chain of the product in the market employee are 24% of the respondents are highly satisfied.

- The Lean procurement principle of firm the employee are 19% of the respondents are highly satisfied.
- The Kaizen system of management and employee are 30% of the respondents are technology, 25% of the respondents Employee, 18% of the respondents Infrastructure, 17% of the respondents Health and Safety.

7. SUGGESTIONS OF STUDY

In current situation, safety training is very important for all employees and as well as for newcomers, so safety training has to be conducted periodically.

- Pollution control mechanism should be implemented in the company. So that there will not be any damages to our environment.
- Should concentrate in the eliminating waste.
- Waste like
- waste from overproduction.
- waste of waiting time.
- transportation waste.
- processing waste.
- inventory waste.
- waste of motion.
- waste from product defects.

8. CONCLUSION

JIT can only be achieved by a combination of strategic capacity considerations, strategic supply chain management and detailed ways to make workflow using pull systems in ERF Rubber Industry. This can only be achieved by a holistic view such as Business Process Reengineering, followed by a focused approach to continuous improvement. To sum up, we should make full use of company in order to improve the performance of production line, which is under control by generally speaking, combined with base stock or immediately improvement to create a hybrid production control system. Simulation results based on the firm shows that this policy meets through targets with significantly lower inventories than others. As a result, the firm research considers a line production system which purchases raw materials from a supplier, processes them in to finished products and delivers them to a buyer just in time.

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