SYNOPSIS

A STUDY ON JUST IN TIME LOGISTICS

ABSTRACT

In this paper, Just in Time (JIT) production system has been investigated as a significant efficiency-increasing outcome in the production processes and as an approach to an optimized supply chain. In addition, the role of JIT in the supply chain and the proper way of making use of it are discussed. From there, this method is widespread especially in developed countries and noticeable effects of its usage in obtaining productivity and high quality in production have been proved in these countries, it is necessary to study different factors of its acceptability. For perusing useful effects of this system, a comparison has been done in planning systems of production/demand, resource finding/shipping and transportation/logistics with JIT and without it. JIT production systems, process flexibility improvement, strategic resource finding to support JIT are major subjects discussed in this paper

INTRODUCTION

DEFINITION:

Today in this new era, the basis of competition between the industries is time-based. This means that the focus is on reducing lead time by responding more quickly to customer demand for existing products. JIT II concept - a supplier's representative works full-time in a customer firm while being paid by the supplier. JIT II is based on customer-supplier concept and introduced by ERF industry. The project is to study the effectiveness of JIT II in the purchasing, logistics, concurrent engineering, inter-organizational relationships and other business processes through case studies.

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 parts 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.

Adopting a JIT system is also sometimes referred to as adopting a lean production system.

JIT (also known as lean production or stockless production) should improve profits and return on investment by reducing inventory levels (increasing the inventory turnover rate), reducing variability, improving product quality, reducing production and delivery lead times, and reducing other costs (such as those associated with machine setup and equipment breakdown). In a JIT system, underutilized (excess) capacity is used instead of buffer inventories to hedge against problems that may arise.

JIT applies primarily to repetitive manufacturing processes in which the same products and components are produced over and over again. The general idea is to establish flow processes (even when the facility uses a jobbing or batch process layout) by linking work centers so that there is an even, balanced flow of materials throughout the entire production process, similar to that found in an assembly line. To accomplish this, an attempt is made to reach the goals of driving all inventory buffers toward zero and achieving the ideal lot size of one unit.

OBJECTIVES OF THE STUDY:

To study how the implementation of JIT II is useful in industries in their various business processes. The goal of a JIT approach is to develop a system that allows a manufacturer to have only the materials equipment and people on hand required to do the job

Achieving this Integrating and optimizing every step of the manufacturing process, Producing quality product, Reducing manufacturing cost, Producing product on demand ,Developing manufacturing flexibility, Keeping commitments and links made between Customers and Suppliers.

- ✓ Attacking fundamental problems - anything that does not add value to the product.
- ✓ Devising systems to identify problems.
- ✓ Striving for simplicity - simpler systems may be easier to understand, easier to manage and less likely to go wrong.
- ✓ A product oriented layout - produces less time spent moving of materials and parts.

- ✓ Quality control at source - each worker is responsible for the quality of their own output.
- ✓ Preventative maintenance, Total productive maintenance - ensuring machinery and equipment functions perfectly when it is required, and continually improving it.

ELIMINATING WASTE.

There are seven types of waste:

- ✓ Waste from overproduction.
- ✓ Waste of waiting time.
- ✓ Transportation waste.
- ✓ Processing waste.
- ✓ Inventory waste.
- ✓ Waste of motion.
- ✓ Waste from product defects.

AIM OF DOING THE PROJECT:

To Implement the management study and understand they better in the way of our project.

IMPORTANCE OF DOING THE 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.

SCOPE OF THE PROJECT:

- ✓ 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 objective

RESEARCH DESIGN

This research is conduct for formulating the strategy.

METHODOLOGY OF DATA COLLECTION:

1. Primary Data

2. Secondary Data

PRIMARY DATA

Primary data directly collected from filling the Questionnaire, Survey, data analysis

SECONDARY DATA

Taken data from various magazines, Newspaper and other prominent source of information collected from different websites and search engines.

SAMPLE UNIT

Individual in different occupation of different group were taken into account because all they come under the segment of potential customer.

SAMPLE SIZE

A sample size of respondent of different class falling under this different segment of exiting customer under usages of branded **NATPLIN FIBER AUTO DOOR INDIA PVT LTD AT HYDERABAD** to obtain result of the study.

RESEARCH INSTRUMENT

Contacting the customer through personally and studying the response. The questionnaire fills up, related to usages of particular branded **NATPLIN FIBER AUTO DOOR INDIA PVT LTD AT HYDERABAD**.

CHAPTERISATION

Detailed/final Project Report will include the following chapters

CHAPTER –I

- Introduction
- Significance of the study
- Need of the study
- Objective and scope of study
- Methodology
- Limitations
- Scope

(Details of methodology used in studying and collecting the data and issue will be described)

CHAPTER –II

- Literature review
- Theoretical study

CHAPTER –III

- Industry & company profile

CHAPTER –IV

Analysis of the topic & Interpretation

(Descriptive work on the topic, this chapter will include analysis and interpretation of data tabulation and categorization)

CHAPTER –V

- Recommendation
- Bibliography
- Appendix