

Issue of JIT in Indian Steel Industries

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Abstract

This research reveals attributes of just-in-time ('JIT') as practiced by Toyota and its affiliates. Though many researchers have studied JIT in different industry but implementation of JIT in Indian steel industry context is not explored yet. The ultimate goal of any managers is to reduce cost and maximize shareholder's wealth. Over the last decade, steel industries in India are facing increasing pressures to attain and sustain their competitive position and performance. To survive in today's dynamic and competitive markets; firms need to come up with strategies consistent with its environmental demands for efficiency, effectiveness and customer responsiveness.

In view of the escalating threats from global players, especially those from China, companies are compelled to continuously review their strategies and devise plans to improve their operations if they were to survive and prosper. One of the strategies to improve manufacturing performance is adoption of world-class, lean and integrated manufacturing strategies such as just-in-time (JIT) system. Some of the benefits of JIT would allow companies to reduce costs, meet customer's demands, stay ahead of competitors and minimize slack resources which are critical for survival in the increasingly competitive market. The focus of JIT is cost reduction and excellence through continuous improvements in the business process by redefining the structural and procedural activities performed within an organization. Therefore in this paper we have tried to study the significance of JIT for increasing company's financial and non financial performance and pertaining issues of its implementation in Indian Steel industries context.

Keywords: *supply chain, Just In Time (JIT), production planning, strategic resource finding.*

Introduction

In the past two decades, Japanese manufacturing practices in general and Just-In-Time production in particular have received a great attention from western researchers and manufacturing firms in trial to catch-up Japan in terms of quality, productivity, and low cost. The JIT advocates the elimination of waste by simplifying production processes, reductions in set up times, controlling material flows, and emphasizing preventive maintenance are seen as ways by which excess inventories can be reduced or eliminated, and resources utilized more efficiently. Supply chain is composed of all activities required for

delivering a product to a customer, from product design to getting orders, making materials ready, marketing, manufacturing, logistics, customer services, cash payment and so on. Among all these activities, everybody, everything, and everywhere, putting an effect on the product's quality, price, info exchange, and its receiving and delivering to the market are considered as a part of the supply chain. 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. Effective control of materials and components flow in producing and assembling lines is a key for effective production. In an optimal supply chain, all materials and components are received in time to lead to a precise production. Precise production means producing a safe efficient product in a proper place and time with the least costs. In recent years, several achievements have been got to increase production operation outcome and to get an optimal supply chain, among which "Just In Time Production" system has been the kernel of the newest phenomena in industry management and engineering, "just in time production" system has got much more attentions in last decade in the world industrial societies while it is still considered a new idea in this field.

Although this view dates back to several last years and many organizations in the world especially auto producing companies and the like have accepted this system and have successfully applied its rules and techniques in all activities of their organization such as dealing, producing and so on, However, implementation of JIT has posed many setbacks to the firms who are actually following this philosophy. For example, Japanese faced several problems while implementing this philosophy such as suppliers have been blamed for inconsistency in the delivery process due to traffic problems. Some experts also blamed that JIT philosophy switches the responsibility of this inefficiency from more powerful and large manufacturing companies to smaller, lesser powerful vendors. JIT is also vulnerable in the management of natural catastrophes such as earthquakes, floods, storms etc. as evidenced by the Great Hanshin Earthquake in Japan when deliveries were stopped to the facilities of Toyota although the factories were not damaged at all.

Beyond these above mentioned barriers to the successful implementation of JIT approach, companies may also find problems due to gaps between the communication facilities available to manufactures and suppliers. Proper training of the employees as well as the top management involvement is the important factors for the successful implementation of JIT. Presence of accurate data including the accurate and reliable forecast of demand is a key for JIT to operate smoothly.