



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 6 Issue: III Month of publication: March 2018

DOI: <http://doi.org/10.22214/ijraset.2018.3687>

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

To Study Of Supply Chain Management In Construction

Prof.N.M.Patil¹, Rahul D. Kumbhar², Prajakta T. Kedar³, Jyoti S.Jagadale⁴, Tejas S. Patil⁵, Akshay A.Wagh⁶

¹Asst.Prof, Department of Civil Engineering, Sanjay Ghodawat Institutes, Atigre 416118

^{2, 3, 4, 5, 6} Department of Civil Engineering, Sanjay Ghodawat Institutes, Atigre 416118

Abstract: *This paper is aimed to introduce the concept of Supply chain management in construction. The present situation of construction supply chain management is investigated by means of case studies and a comparison with previous research. A case study approach was followed for the research work.*

Keywords: *Supply chain management, Material management in construction.*

I. INTRODUCTION

Since, the beginning of the 1990s, there has been tremendous change in the business scenario, due to the liberalization policy of various economies all over the world, so supply chain management is most important for developing purpose. Supply chain management is a network through which the raw materials are transforming into intermediate and finished products and distribute these finished products to customers by using distribution channel. Supply chain management is all about better relationships. It encompasses all the processes from 'Mother earth to point of sale'. 'Supply' is the flow of resources used to satisfy a demand, such as materials, labour, information, skills and so on. 'Chain' represents the notion of links within and between both resource and competencies. 'Management' is the exercise of formal authority within a structured organisational setting that is directed towards aims and objectives through the efforts of other people using systems and procedure.

A. What is Supply chain Management?

Supply chain management is the flow of information, materials and services from the supplies through factories and stores to final customer as a business system. Supply chain management is the management of the flow of goods and services, involves the movement and storage of raw materials, of work-in-process inventory, and of finished goods from point of origin to point of consumption.

II. AIM

A. To study the supply chain management in construction.

III. OBJECTIVE

A. To study the supply chain management in construction.

B. To study and analyse current material management practices in construction project.

C. To reduce transportation cost by making decisions on vehicles to use, route to follow

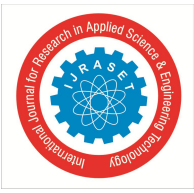
IV. METHODOLOGY

A. ABC Analysis

ABC Analysis is performed in excel sheet using following method. First select number of materials to be analysed, Calculate annual consumption and total cost of each material, next step is arrange all the materials in descending order on the basis of their annual consumption value then segregate the materials in three categories as "A" Category, "B" Category and "C" Category and follow the guidelines for each individual group discussed in detail in this thesis. ABC Analysis will help to keep effective control over selective important materials.

B. EOQ Analysis

EOQ Analysis will help to keep ordering cost and inventory carrying costs to optimum level. EOQ Analysis is performed in excel Sheet. Data required for analysis is obtained from site store department such as GRN, and Annual material Consumption, Unit Cost of materials etc. These values are tabulated in standard format first and Annual consumption of each material is calculated then we



have to assume average ordering cost as well as average inventory carrying cost. Finally all these values are put into the standard EOQ formula to get final Economic Order Quantity for each material. Detailed Information on EOQ Analysis is given in following chapter

C. Steps involved in EOQ Analysis

- 1) First gather all information i.e. list of materials, unit cost, annual consumption, procurement cost, holding cost etc.
- 2) Make tabular form in excel sheet to calculate EOQ
- 3) Calculate total cost, holding cost, and procurement cost for each material.
- 4) Put all these values in EOQ formula to get the final solution

V. CONCLUSION

Above study was mainly carried out to promote the importance of easy and cost effective Material management techniques such as ABC Analysis, EOQ Analysis and from the results of this thesis we can say that we have achieved those objective quiet effectively leading to more profit for the company. Before this study was conducted it was observed through literature review these inventory control techniques being so effective in actual practice but steel neglected by the most of the company. Therefore this study was conducted to make realize big industries importance and major impact of these techniques on profits through case study which is quiet significantly done in this thesis.

REFERENCES

- [1] Logistics and supply management by D K Agrawal
- [2] Chopra Sunil and Pete Meindl, Supply chain management, Strategy, Planning and Operation (2001), Prentice-Hall Inc., New Jersey
- [3] Sahay B.S., Supply chain management for Global Competitiveness (1999), Macmillan India Ltd., New Delhi.
- [4] Raghuram G. and N. Rangraj (2000), Logistics and Supply chain management, Concept and Cases, Macmillan India Ltd., New Delhi
- [5] Tersine Richard J., Principles of Inventory and Material management (1994), PTR Prentice Hall, Eaglewood Cliffs, New Jersey.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)