



To Identify Material Procurement and Vendor Development In Pune real Estate sector

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Abstract- In this paper, the supplier performance effected in Just-In-Time implementation was described, the supplier must be introduced and developed before being an approved Just-In-Time supplier.

This research work helped us to know the present material procurement processes and vendor development practices adopted by the contractors engaged in road and highway projects. It completely depends upon the quantity of material to be procured, different levels of firms, availability of suppliers and supplier capabilities

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I. INTRODUCTION

Materials management is a process for planning, executing to insure that the right quality and quantity of materials are Appropriately selected, purchased, delivered and handled on site in a timely manner and at a reasonable cost. After the collection of data, analysis among the various methods was made along with the use of AHP model for selection of vendors. Two cases of main contractors have been taken and studied about the material procurement processes and vendor development practices adopted by the main contractors.

II.OBJECTIVE

The objective of this research work is to get an insight into the procurement systems adopted by the project promoters and the contractors in awarding subcontracts or procuring goods and services. The work aims in understanding the actual procurement systems of road and highway projects and its contractors and then examining its appropriateness with respect to the best practices evolved through the literature survey.

An attempt is made to explore the finding of the importance of procurement of material and services to project promoters engaged in road and highway projects which initiates them to adopt the most efficient methods in order to ensure the smooth flow of the execution of the Project, thereby avoiding delay and cost overrun of projects. It also includes the study of vendor development practices.

III. LITRATURE SURVEY

3.1 Function Of Material Management

The functions of materials management are discussed below:

In order to fulfill the objectives of materials management as Stated above to meet the basic objectives and goals, the

Functions of the materials management are also categorized as primary and secondary functions.

(I) Primary Functions

To meet the primary objectives, the primary functions of the Materials management are given as follows:

- Materials Requirements Planning (MRP)
- Purchasing
- Inventory Planning and Control
- Ascertaining and Maintaining the Flow and Supply of Materials.
- Quality Control of Materials
- Departmental Efficiency

(II) Secondary Functions

- Standardization and Simplification
- Make and Buy Decisions
- Coding and Classification of Materials
- Forecasting and Planning

3.2 project Management

Special training sessions should be arranged on site to Update the workers regarding the latest techniques. Plant and machinery should be updated regularly in order to Avoid any break down. Workers and contractors should be Guided for correct methodology to execute a particular Task. Regular check should be kept on planning so as to Overcome any error. Proper supervision should be done on Site to improve the level of workmanship. Taylor (1913) Pointed out that the economic losses caused by material Waste are smaller than those related to the inefficiency of Human work. Ford (1927) also suggested that human work

3.3 Benchmarking Process

Processes and techniques can be applied to develop Benchmarks for wastage control of building materials. After Selection of project, the following steps is adopted. Work Out estimates of quantities of materials required either from the first or final drawings. From site records/ accounts Records, actual quantities of material consumed obtained. Interviews are held with project managers and owners Concerned to collect other related information.

3.4 Planning

The most commonly used basis for planning things out for Time, cost, material and labour are the four major types of planning undertaken on sites. The planning should be



revised as frequently as possible in order to monitor whether work is progressing as planned.

3.5 Purchasing

According to Ninad Shah and Manish Dave Purchasing Procedure can be described as below:

- Step 1 – Material Indent
- Step 2 – Enquiry to Vendors
- Step 3 – Vendor Comparison
- Step 4 – Vendor Selection and Negotiations
- Step 5 – Purchase Order
- Step 6 – Vendor Evaluation

3.6 Overview of Small and medium Enterprises (SME)

Small and medium enterprise (SME) is the term used to describe a group of enterprise and the way they are being managed. Small business do not conform to specific factors or parameters, this depends on the industry and the aspiration of those who run the business.

3.7 Importance of SMEs

Although small businesses may not generate as much money as large industries, but they contribute greatly to the development of local economies (smallbusiness.chron.com). Small business stimulates economic growth by increasing employment opportunities and also motivates the innovation of new ideas for developing new products. Hence, in the economy presently, small businesses are the technological leader of many industries

3.8 Organizational weakness

. An absence of systematic record-keeping pertaining to the execution of the projects, lack of preplanning and a superficial understanding of contract clauses and documents were the other factors that contributed to procurement delays.

3.9 Supplier default

The market by some suppliers, work stoppages in factories manufacturing materials, fluctuating demands forcing suppliers to wait for accumulation of orders and difficulties in importing required raw materials from other countries.

3.10 Transportation delays

On rainy days transportation of materials like cement should be avoided to ensure that the material remains dry and fit for use. These are the rankings made based on the previous studies

3.11 Stacking And Storage

Industrial Guidelines are also taken into consideration for the stacking And storage of particular materials. Materials are most often Classified as per the comfort level of working of the Workers.

1. The materials should not be affected by impurities or

Atmospheric agencies.

2. Materials like cement should must be stored in covered Sheds and stacked on timber raised platforms.
3. Reinforcing bars should be stacked yards away from Moisture to prevent rusting and also away from oil and Lubricants. Bars of different classification, sizes and lengths Should be stored separately to facilitate issues

3.12 Essence of procurement

These include; supply security in terms of raw materials and end products, lower cost of production, risk reduction, improved quality of products, greater added value, increased efficiency and innovation (CIPS 2013).

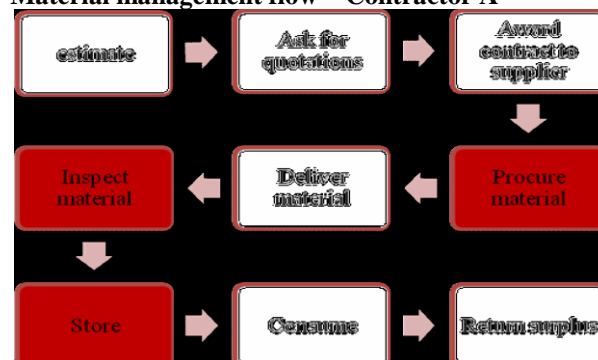
Procurement creates higher profit margin and prevalence over other competitors through managing the ordering, receipt, review and approval of the inflow of items into the organization through the suppliers. Procurement will be effective and profitable if less efficient organization can integrate its philosophy and culture into their system.

3.13 Procurement tools

There are five key main drivers of supply management and procurement that are essential to enhance a successful business, and must be taken into account when making decision in a business organization. These are; cost, quality, time, reliability and technology. (Turner 2011.) Turner (2011) further explained that in an outstanding and successful strategic supply management, concept, tools and resources used include;

1. Price analysis: This involves the comparison of prices between suppliers and against external benchmarks with no direct knowledge of supplier costs
2. Total cost analysis: it includes additional cost of a part (mean time before failure) like transportation, tariffs, special package, warehousing (inventory), and quality control.
3. Total cost of ownership analysis: it includes the total cost value associated with an item over the life span of that item

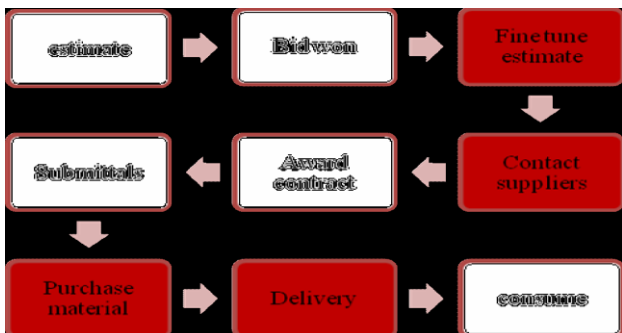
Material management flow – Contractor A



1. PM is in charge of all the releases based on schedule
2. Store keeper coordinates with PM directly if Problems arise and PM contacts vendor
3. Materials stored on site directly till the time they are Consumed, no proper storage facility.



Material management flow – Contractor B



1. PM revises estimate and creates a list of detailed Quantities for materials
2. PM clarifies scope along with purchase department on Site, no involvement of the head office
3. Buying less than estimated
4. Delivery to site directly.
5. No automation, lack of proper MIS, lack of coordination With other projects.

IV. DATA COLLECTION AND ANALYSIS

4.1 Material procurement Processes

In order to collect the information regarding different types of procurement processes used in different circumstances, ten sets of questionnaires were distributed to the targeted respondents. About five sets were distributed to the contractors and five sets to the consultants. The questionnaire survey was completed by directors, project managers, project engineers, site manager, designers/engineer, and supervision engineers.

4.2 Analysis of Results

The objective of conducting the analysis is to know the best procurement process adopted by the various contracting firms used under different circumstances and the ranking was given according to their applicability in given circumstance.

4.3 Vendor Evolution and Selection

An AHP is a structured technique for dealing with complex decisions. It helps decision makers to find out which is the best suitable vendor of their needs. It aims at quantifying the relative priorities for the given set of the alternatives on the ratio scale, based on judgment of decision makers and stresses the importance of initiative judgment of decision maker as well as consistency of the comparison of alternative decision making process.

V. CONCLUSION

This research work helped us to know the present material procurement processes and vendor development practices adopted by the contractors engaged in road and highway projects. It completely depends upon the quantity of

material to be procured, different levels of firms, availability of suppliers and supplier capabilities. The contractors should get into the partnership with the vendors in order to improve the efficiency of the business which increases the profit and reduces the delays due to procurement. Best procurement process should be followed based on the type of work executed and best practices for the development of vendors should be followed. Their rating and evaluation should be done efficiently.

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