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A Review Paper on the Effect of Supply Chain Management Process in Real Estate

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Abstract:-

In the present competitive market, the construction industry demands for delivery of top quality project at very competitive prices. To get the success in market and effective management, construction supply chain is to be planned. In the present time, the construction industries are introducing the supply chain management. It is very promising approch to achieve integration between several steps of the chain (Internal and external suppliers, vendors, contractors clients, designers). Many international construction companies have carried out extensive research and developed computer based programs to experiment the current supply chain management concepts. The supply chain management are identifying factors that cause the budget overruns and schedule delays in the construction industry. The importance of supply chain management has been discussed the scientific literature and especially to improving project performance. The using RII method is control and managing the entire delay factor in construction industry. The objective of this paper is to provide for improving construction supply chain management such as improving of suppliers/contractors performance, elimination of wastage, training and information sharing between parts of the supply chain. The trends of the supply chain management in construction industry.

***Keywords*:- Supply chain management, construction management, literature review.**

1. Introduction

The term supply chain management was first introduced by Keith Oliver in 1982, the concept of supply chain management was of great impor-tance long before in 20th century. However the term supply chain management encompasses all activities involved in the transformation of goods from the raw material stages to final stage, when the goods and services reach the end customer. The Supply chain management became widely adopted after the publication of the seminal book "Introduction of supply chain management".

The aim of supply chain management is always to arrange the material and machinery and to sim-plify the operations so that practically no orders are necessary. The era of supply chain evolution is labour intensive processes of material handling and how to take better warehouse design and layout.

The supply chain revolution can be classified in three stage network. The first revolution “The ford supply chain” (1910-1920), second revolu-tion “The Toyota supply chain (1960-1970) and the third revolution “The Dell supply chain (1995-2000).

Traditionally firms have focused on supply chain management because today firms that do not manage their supply chain will incur huge inven-tory costs and eventually end up losing a lot of customers because the right products are not available at the right place and time.

2. Literature Review

Supply chain management is an essential for proper management in the construction industry to let the work go in a flow. The researcher has given their review on supply chain management which are as follows Christopher1 view about the concept of supply chain management is that the material flow (supplier, production, deliveries etc.) and information flow (orders, schedules, forecasts etc.) are connected through upstream and down-stream linkage. Cooper and Ellram2 mentioned the triple P (people, planet and profit) concept which provides great impact in Supply chain management. The triple p is related to social, en-vironmental and financial problems. The author Lauri Koskela3 provided the present status of construction supply chain. Three main present status are- a).The normal situations the construc-tion supply chain has a large quantity of waste and problems. b).Most of these is caused in an-other stage of the construction supply chain when detected. c).Waste and problems are largely caused by obsolete, myopic control of the con-struction supply chain. Bob. I. Young and Keith Case4, tells that the supply chain to have the right products in right quantities, at the right place, at the right moment and at the minimum cost and conditions. They suggest the use of supply chain communication in manufacturing industry that improves the production. The author tells Douglas M. Lambert5, the successful supply management requires improving customer satisfaction and re-ducing operational inefficiencies. The supply chain is the network of organizations that are in-volved the upstream and downstream linkages in the different processes and activities that produce the products and services in the hands of the ulti-mate consumer. Thomas Olofsson6, tell the pur-pose of Construction Company only to execute a small part of the project by its own capacity. This is a way to compensate for an unstable market.If the construction company wants to establish a new concept, from engineer to order. Nadia Zamer7 tells the trends of the supply chain man-agement in construction industry. Towill8 defined the process of supply chain in the construction industry such as first is materials supplies, second is production facilities and third is distribution services to customers, each process are connected. Srinagesh Gavirneni, Sridhar Tayur9 provided these three models enable us to understand the relationships between capacity, inventory and in-formation at the supplier level. Muya et al10. tells concept of supply chain which is related with the production process in counstruction industry. There are providing three types of supply chain use in counstruction industry-Primary, Support and human resource supply chain. Lambert and Cooper11, tells that the three ways in supply chain management; process, management com-ponent and network. William J.O. Brien12 tells the development of an interdisciplinary research that draws from both fields. a).Industrial organi-zation economics. b).Analytic modeling of supply chains. Saad et al13 defined the relationship be-tween client, contractors, and subcontractors and investigates the relationship in terms of colllabo-ration. Jinming Hu, Jianxun liu, Shensheng Zhang14 provided the system design and imple-mentation and discusses their experiences. Pro-fessor Martin Skitmore15 describes of the factors affecting the implementation of supply chain management in the construction industry:- a).Customer needs approches, b). Supply chain technical background, and c).following company procedures in dealing with supply chain man-agement. Professor Peter J.O.Grady16 developed an exteneded Bayesian Network (also known as belief networks, probability networks) approch to analyze supply chain disruptions. Dr. Olivier. Mtapuri17 mentioned the impact of the supply chain management on service delivery on the Limpopo Department of Economic, Development, Environment and Tourism (LEDET). Dr.Siddig Balal Ibrahim18 mentioned the practices of sup-plier's management have a significant positive effect on supply chain performance effectiveness. Aziz Muysinaliyev19 tells the up to date and brief review of supply chain management literature that was focused on broad areas of SCM concept. Elisa Kusrini20 discussed good criteria for supply chain performance measurement their level of importance.The criteria are divided into two categories- efficient and effective. KS Krishnan21 mentioned the important drawbacks of the current supply chain are high level of wastage, poor

infrastructural. Lana Lovrencic Butkovic, Alica Grilec Kauric, Josip Mikulic22 tells the purpose of SCM to improving companies's performance. The performance base a).Data base, b).Level of analysis, c).Research focus, d).Type of study, e).The supply used f).Analyzed relationship .Yan Coelho Albertin23, says that the understanding and facing the main risks on the Supply Chain. These risks are unexpected events that might disrupt the flow of materials or the planned operations. They can be late deliveries; poor forecast or involve rarer scenarios such as hurricane and earthquake.
Hence the review paper gives the basic knowl-edge about the supply chain management and its effect on the construction industry in today's scenario which plays a vital role.

3. Inference:

Supply chain management is very essential for a proper management on construction site as without it people are facing many problems such as losing of customers because the right products are not available at the right place and time, financial loss and many more to analyse the effect of it on construction industry am heading with this topic.

4. Methodology:

There have been many method used to analyse the effect of supply chain management and earlier many researchers have analysed it with various methods which were logistical issues of supply chain, that were quality rates, inventory, lead time and production cost, ROI (return on investment), NPV (net present value), IRR (internal rate of return) and payback period. So further going to ahead my project with RII method is determine the relative importance of the factors that affected project success of construction projects, and the factors causing time overruns of the projects, identified by the literature survey. Some of these questions intended to capture background information of the respondents.
RII=Sum of weights (W1+W2+W3+……..+Wn) / A x N

Where W= weights given to each factor by the respondents and will ranges from 1 to 5
Where '1' is less significant and '5' is extremely significant.

A= Highest weight (i.e. 5 in this case),

N= Total number of respondents.

Data received from questionnaire survey will be analysed by RII method to find the effects of supply chain management process and to identify the delay factors in construction industry.

5. Conclusion :

The Effect of supply chain management process in real estate in construction industry that manages the supply chain involves understanding the ob-structions in the path of progress of project. The main aim of supply chain management is to improve relation trust and collaboration among supply chain partners. These processes are improving the inventory visibility and inventory velocity and it is an invention that appears to be having potential value for the construction management project. Thus the mainstream management, the construction management ideas on supply chain have been developing with corresponding influences from the theory of the production, distribution and strategic procurement but there has been considerable research behaviour on the exert to which the construction industry is coming together the supply chains and industrial organisation fields. The concept of supply chain is method has been partially implemented in construction industry in India.

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