The study of the identification of using the supply chain to increasing financing efficiency of management project for building construction x in Jakarta

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Abstract. Development in economy in Jakarta can be an opportunity to build residence and office building. It can increase a better profits. To build a building, a good management are needed in every step in construction from implementation, cost, time and quality, till building maintenance. One of concern in construction project was finance management. The benchmark for construction project success is satisfaction from owner and impact to the environment. Lack of material supply in a project can be deficit for the owner or the contractor. This research identified few factors and variables in supply chain that can affect financing management construction project in DKI Jakarta and identify efficiency for using supply chain that can affect to cost management. This research uses many literature and previous relevant research in focus on supply chain, financing management project for building in Jakarta, efficiency for supply chain to financial management, and other previous research for last 10 years. Financial management project can be assumed that some process to ensure that project can be finished in approved estimation of cost. This research is using qualitative and quantitative method. This research uses primary and secondary data. We can identify a supply chain factor and financial management project for completed this project.

Keyword : Supply Chain, Financing Management Project, Construction Processing, Building

1. Introduction
In build a building, management need to be used in every step like construction feasible study, cost, time quality until building maintenance. One of problem that appear is cost management. Basically, success indicator of a project is owner satisfaction and its impact to the environment. In a construction, many factors effect the success of project. One of that is cost management. Lack of material supply and bad quality of product will make addition of cost and will cause loss to the owner and contractor.

Cost in project construction has determined in contrac document. Success of a project can be measured by the cost factor. If project can be finished on time, it means succeed otherwise, if the project has additional cost it means loss. Additional cost appear cause of some factors like late-come of material, minim of access and lack product quality.

To prevent late-come in a project, supply chain is used to resolve the problem beside, there are factors can cause additional cost. This research will analyze problem of what is the factors and variables in supply chain in building construction and how is finance efficiency management in building construction in DKI Jakarta. With the issue, author hope this research can be reference in how to increase efficiency of cost management in a project.
2. Method
This research try to analyze used of supply chain to increase efficiency in cost management at construction of high rise building in Jakarta. First step is literature study and search of previous relevant research in last ten years. Next, is establish the hypothesis from data gathered. Last, make a conclusion from research steps.

3. Result and Discussion
There are two problems, first is about factors and variables in building construction. Second, how is efficiency finance management indicator in building construction in DKI Jakarta. Result describe below.

a. Factor Of Information
- Revision of work plan
- Completeness of design project detail
- Problem in project construction
- Coordination with owner
- Data compatibility
- Coordination path to take a decision
- Communication system for supply and change of material price
- Problem identification of information flow

b. Factor Of Material
- Supplier performance
- Suitability of volume material when material supplying
- Suitability of material quality with specification
- Pause between deliver time with demand
- Warehousing procedure, handling material and packaging
- Direct supply material from company
- Material distribution system and tools from central building until user in project
- Material in and out registration system

c. Factor Of Environment
- Controlling the change of project environment
- Services connecting with initial equipment operation like start up, testing, adjustment and system balancing
- Site visit and divided of work area and layout the construction area for supplier access
- Write and investigate all additional work at project construction
- Coordinates support facilities like water supply, electricity, office, access etc.
- Change of government regulation
- Disaster
- Damage cause of third parties neglect
- Project construction in ramadhan month
- Environment effect not supporting supplier process in X company

d. Human resource Factors
- Obtain personnel as a plan
- Make a project team with enhance kompetency and team working for supply.
- Control the team with coordinate and help solve project problem
- Consultant of construction management require to put supervisor during the project.

**e. Factor Of Communication**
- Create, gather, distribute, save, take back, and disposition from project information as a first plan
- Monitoring and controlling communication during life cycle of project to make sure availability of materials
- Organize field coordination with supplier
- Arrange and submit the report and supplier last report to owner
- Make a report management system effectively
- Make a warning letter about unappropriate job term and give solution

**f. Contract Administration Factors**
- Permission verification, execution guarantee and delivery insurance
- Make a work permit for supplier
- Procedure of contract document
- Make a filed condition daily report

**g. Factor Of Time**
- Make a preliminary schedule
- Inform, adjust and distribute materials
- Monitor the status of supplier to renew project progress and manage the changing to meet a schedule
- Give the report about lateness happening to supplier, give advice and what spouse to do to prevent lateness
- Give solution to owner to work efficiently
- Activity scheduling for short term project
- Report of supplier schedule

**h. Factor of Safety**
- Manage the safety of supplier
- Safety coordination meeting
- Make a safety committee
- Make safety audit periodically
- Make a monthly report about accident frequency

**4. Conclusion**
Suply chain has factors that effect in increasing finance management project efficiency. Few factors often abandoned and not evaluated well, so the purpose of project finance is not as expected. Suply chain can minimalize unsuitable factors toward finance project with concern to material supplies, facilities, transportaion, information and price. Result of this research can be open discourse to all parties.
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