ABSTRACT

Contractors is in charge of the construction company as a provider of construction services in the physical development of a construction project. Nowadays, competition among contractors is increasing, which in doing the employment, contractors are required to offer the lowest possible cost, the shortest possible time, and quality service in accordance with user expectations.

Construction project is still not popular in Indonesia, although this technique has been recognized as an important aspect in the management of construction projects. Constructability is defined as the optimum use of construction knowledge and experience in the process of planning, design, procurement, and construction to achieve the project objectives. The basic concept of this approach is to integrate constructability engineering phase, which consists of the construction project: Conceptual Plans, Design, Procurement, Construction Implementation, and Utilization, into a system that is sustainable, such as knowledge construction and knowledge gained from the experience of users construction and use of a building used as inputs for the implementation of construction projects.

Implications of the results of this study is very useful for businesses in general construction services and construction service providers in particular in decision-making and establish confidence constructability during the implementation stage of construction.

The majority of the respondents have already a strong mastery of constructability techniques, however only 46,67% of respondents have already heard about constructability.

Factors of successful implementation of constructability as the findings from this study are: (1) mastering the implementation of work methods, (2) Material selection and construction of appropriate tools, (3) Technical capabilities of the team, (4) completeness of the action plan and implementation schedule, (5) Constructability leader's personality, (6) Project Manager support in constructability implementation, (7) Top Management support for the implementation of constructability, (8) Ability to identify and analyze major item of work, (9) Data collection and technical requirements of the project (images, time schedule, etc) and site information, (10) The ability of analyze and evaluate project plan data calculation.

Constraints in the implementation of constructability are: (1) Lack of knowledge of constructability, (2) Lack of communication between design consultants and contractors, (3) Reluctance to adopt a new system, (4) Awareness of the benefit function, (5) There has been no legislation on the constructability, (6) There is no national standardization constructability, (7) Lack of expertise technical analysis (structure, architectural, M/E, interior and landscape), (8) Owner does not agree with the contractor in performing constructability, (9) Difficulties to coordination in many multi disciplines, (10) There is no allocation time for constructability.

Key word: Contractor, Constructability, Construction Documents