

ABSTRACT

Kevin Valerian (02120080010)

APPLICATION METHOD OF LEAN SIX SIGMA THEOREM ON THE PERFORMANCE OF A CONSTRUCTION PROJECT THROUGH PROJECT MANAGEMENT: A CASE STUDY, TERMINAL TERPADU PULO GEBANG PROJECT

(xv + 98 pages: 26 figures ; 29 tables ; 12 attachment)

Indonesian Construction Platform Industry until 2030, issued by the The National Construction Services Development Institute (LPJKN) aims to create Indonesia's construction industry with competitive advantage, sustainability, professional, and added value. Currently, the situation in Indonesia's construction has some high-risk conditions such as: fluctuations in dollar, material price that continue to rise, inflation in the economic, and political, also low return such as: long execution time and difficulty in payment. With these conditions it is difficult to achieve the objectives referred above. Terminal Terpadu Pulo Gebang Project is one of the example of these conditions which has high risk and low return. The project has difficulty in performance which is sourced, based on the resources. This thesis attempt to provide an alternative solutions to the problems that exist in Pulo Gebang, by using one of the productivity theory known as Lean Six Sigma. This theory is a productivity theory that has been proven and tested in the world of manufacturing and now will be applied to a construction project. Lean Six Sigma is a theory that focuses on reducing productivity and eliminating waste by continuously improving on a regular basis to achieve the perfect sigma value, which is the ideal productivity. Systematically theory of Lean Six Sigma work from the big problem and pursuing the problem through root cause and and finally making continuous improvement, on the crucial aspects of the process The application of lean six sigma productivity theory can help improve productivity and performance of a construction project.

Key Word : productivity in services, lean, six sigma, lean six sigma, performance improvements in construction, construction management.