

State of the Art Review On Application of Value Engineering On Construction Projects: High Rise Building

Ibrahim Mahmoud Mahdi Mostafa , Khaled M. Heiza; and Nagwan E. Abo Elenen

Abstract

Value Engineering (VE) concept does not mean a cost reduction only, but it extends beyond. VE is a powerful problem-solving tool that can reduce costs while maintaining or improving performance and quality requirements. It's a function-oriented, systematic team approach to providing value in a product or service. Construction project as a product or service is generally considered to have good value if this product or service has appropriate performance and cost. The construction product's characteristics differ than those in manufacture in many aspects such as immobility, complexity, durability, cost lines, and high degree of social responsibility. These characteristics are highly affected by the construction technology. Where, adopting these new technologies and working method in proper work environment can maximize the product with a working time reduction by 25% and cost reduction by 20% in average. Slip Form (S.F) is considered one of these common methods of construction. An assessment of the S.F includes productivity, appropriate speed in addition to auxiliary resource combinations. This research aims at create awareness of VE, and demonstrated the benefits gained when it applied to construction projects.

International Journal of Innovative Research in Science, Engineering and Technology 2015, May