State of the Art on Value Engineering Applications on New Construction Systems At R.C Bridges In Egypt

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Abstract

In this research the value engineering concepts were applied to R.C bridges in Egypt. The effect of different types of construction systems were studied. The basic concept and approach of Value Engineering (VE) is implemented in this research for achieve its objective. VE is a methodology used to analyze the function of the goods and services to obtain the required functions of the user at the lowest total cost without reducing the necessary quality or performance. The application of VE principles causes people to work better as a team, searching always to improve their system of production and services. It helps any organization to improve and investigate its resources with the optimizing cost. Therefore technology factor which has impact on the performance and cost of products or services in construction should be considered in their identification to gain optimum value. Slip Form, Rapid shor, precast and tunnel form are new techniques that have improved itself in the construction industry at bridges in Egypt. We made a comparison between different construction systems with an explanation of elements that effect on choosing it , features , advantages and disadvantages of it. This research aims at create awareness of VE ,and demonstrated the benefits gained when it applied to construction systems at bridges in Egypt.

International Conference, Faculty of Engineering, El Menufia University 2017, December