

AVOIDING ISSUES IN APPLICATION OF THE LIFE CYCLE COST ESTIMATE, WHICH ARE HIGHLIGHTED IN THE BUILDING CONSTRUCTION INDUSTRY IN SRI LANKA AS PER THE QUANTITY SURVEYOR PERSPECTIVE

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ABSTRACT

The application of Life Cycle Cost (LCC) is widely used in other industries than the construction industry. It is a major decision tool, which is accounted for initial capital cost, operational cost, maintenance cost, repairing cost, and disposal cost the total lifetime. Life Cycle Cost method is an important concept which can be used in the construction industry and can be taken various advantages. The purpose of this research is how to avoid issues when applying the method of Life Cycle Cost estimate in the building construction industry in Sri Lanka. The dissertation presents a summary of the extensive literature on Life Cycle cost application, theories, issues, recommendation, and benefits, which have identified.

There were qualitative and quantitative analyzing methods through questionnaires and interview process to collect the data about the application of life cycle cost estimate in Sri Lankan building construction industry. Questionnaires were sent out through electronically by email to Quantity Surveyors who are in Sri Lanka by randomly selecting sample test, and 07 interviews were conducted only from senior Quantity Surveyors who are in Sri Lanka construction industry present with an organized/selected test. For the Questionnaires descriptive statics analysis method and for the interviews, the analytical writing analysis method would be used to achieve the research objectives. However, for the questionnaire it was responded 52 out of 95 as respondents rate 54.74%.

The study identified most of the people do not know LCC benefits, lack of standard guideline and reliable data, lack of knowledge about LCC and lack of expert person in Sri Lanka, are the major issues when applying LCC. However, by introducing the LCC standard tool, encourage all parties about the benefits of LCC, prepare standard guideline and documents, manage cost data and share with others, which can avoid issues. The data analysis revealed that many benefits can be taken from LCC as, best decision tool for investments, cost saving and preventing unnecessary cost, optimize total cost of ownership, select best alternative options, and sustainable construction concept. However, in present days LCC is applied only in some area of the construction industry in Sri Lanka. Quantity Surveyor should involve preparing the LCC with the help of all the parties to reach the benefits of LCC for the construction projects.

Keywords: *Life Cycle Cost estimate, Building construction industry, Quantity Surveyor.*