Clarification of the Essential of Life Cycle Cost upon Decision-Making Process: An Empirical Study in Building Projects

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Abstract : Life Cycle Cost (LCC) is one of the goals and key pillars of the construction management science because it comprises many of the functions and processes necessary, which assist organisations and agencies to achieve their goals. It has therefore become important to design and control assets during their whole life cycle, from the design and planning phase through to disposal phase. LCCA is aimed to improve the decision making system in the ownership of assets by taking into account all the cost elements including to the asset throughout its life. Current application of LCC approach is impractical during misunderstanding of the advantages of LCC. This main objective of this research is to show a different relationship between capital cost and long-term running costs. One hundred and thirty eight actual building projects in United Kingdom (UK) were used in order to achieve and measure the above-mentioned objective of the study. The result shown that LCC is one of the most significant tools should be considered on the decision making process.

Keywords : building projects, capital cost, life cycle cost, maintenance costs, operation costs

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