



Aligning technical and financial management of public school buildings

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Abstract

The Life Cycle Cost concept enables costs prediction throughout the life cycle of building projects. The scientific community and the practitioners of the Architecture, Engineering and Construction (AEC) sector have been developing this concept for the past decades and seeking the development of dedicated public databases with the adequate quantity and quality of economic information. These databases are needed to support both the technical and financial management of public construction projects.

Besides the present problems with these types of databases, such as those of inadequate data granularity, incompleteness and inaccuracy of the information, there is also the need to align the technical and financial perspectives throughout the entire lifecycle of the building project. A relevant example in this regard is the financial depreciation rates which are seldom aligned with the technical depreciation of the building and its assets and components.

In this paper, public school buildings constructed in Portugal since the 1940s are used as a case study to discuss the alignment of technical and financial management. Historical data show the relevance of considering technical and functional characteristics of the building portfolio, as well as the operation and maintenance requirements in the long-term, in order to establish depreciation rates.

Keywords: Life cycle cost; building management; school buildings; historical economic data; financial depreciation rates; technical depreciation rates.