A SYSTEMS THINKING APPROACH FOR PERFORMANCE BASED BUILDINGS

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ABSTRACT

Modern buildings are designed to enhance the match between environment, spaces and the people carrying out work, so that the well-being and the performance of the occupants are all in harmony. Buildings are systems that facilitate a healthy working environment within which workers productivity can be optimised in the buildings.

The building is also required to support business attainment. Failure of the building structure or infrastructure, or its services will generally result in reduced business performance. The cost of running a business far outweighs the construction, maintenance and building operations costs. The use of Integrated Logistic Support (ILS), as a management discipline, assures the requisite “building” availability is met. ILS provides the discipline and process for building availability attainment to be met. ILS offers potential for through life cost saving coupled with business efficiency.

At the University of Reading an integrated approach has been developed to assemble the multitude of aspects inherent in this field. The means records required and measured achievements for the benefit of both building owners and practitioners. This integrated approach is represented in a Through Life Environmental Business Model (TLEBM) format using the concept of Integrated Logistic Support (ILS). This approach supports the construction practitioners in delivering and maintaining a better performance based building throughout the life of the building.

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