Ageing gracefully: how can a whole life support services framework enhance the life of the building services systems?

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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. Building services are systems that facilitate a healthy working environment within which workers’ productivity can be optimized in the buildings. However, the maintenance of these services is fraught with ageing problems that may contribute significantly to the total life cycle cost of the building. Maintenance support is one area which is not designed into the system.

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 can be represented in a Through Life Business Model (TLBM) format using the concept of Integrated Logistic Support (ILS). This TLBM approach facilitates the successful development of a databank that would be invaluable in capturing essential data (e.g. reliability, MTBF of components) for enhancing designs, life cycle costing and decision making by practitioners, in particular facilities managers in alleviating the ageing problem.

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