

Applying the foundations of enterprise systems engineering in complex real-world environments: lessons learnt from real-world project examples

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ABSTRACT:

Enterprise systems engineering (ESE) is a multidisciplinary approach that combines traditional systems engineering (TSE) and strategic management to address methods and approaches for aligning system architectures, system development and system implementation with enterprise business rules, enterprise strategic objectives and enterprise capabilities within diverse complex subsystems. ESE therefore refers to TSE at the enterprise level. ESE is a complex approach by itself, but in this paper, we argue and illustrate that value from ESE thinking can be obtained without following the entire ESE set of processes. This paper presents two real-world examples that illustrate the potential value of applying ESE thinking and presents a number of lessons learnt in doing so.