

ABSTRACT

The Evaluation of Information Systems (IS) Project Performance: A Multi-perspective Approach to Improved Understanding

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Measuring the performance of information systems (IS) projects is an important strategic activity. Empirical evidence shows that these projects have been used to provide key changes and innovations in organisations worldwide. Despite this importance, there are few formal approaches used in practice, outside of the triple constraint method (TCM), to assess the performance of these projects. Further, researchers have opined that the TCM is incomplete and that some of the challenges encountered in projects can be attributed to issues such as mismatched stakeholders' expectations and unclear project objectives. The research responds to these issues through the development of alternative measurement perspectives suited for current business and project contexts. The research uses projects from different organisations to illustrate and communicate the alternative approaches proposed.

The research applied the design science methodology to deliver the research results. The principles of this approach are applied in the formulation, design, evaluation and communication of the developed research artefacts. A multi-paper approach is used to develop four artefacts: Project Performance Scorecard (PPS)

and Project Objectives Measurement Model (POMM) as measurement methods that can be used to assess the performance of IS projects; the Project Performance Development Framework (PPDF) proposed to help strengthen project design and facilitate improved evaluation of projects; the Multi-objective Realisation method (MORE) proposed to meet the evaluation needs of IS programmes. Two of the methods are also empirically evaluated against the TCM on basis of users' perception.

The research provides strong research and practical implications. The multiple artefacts developed extend the theoretical framework of performance evaluation studies through the synthesis of existing tools and theories that have been applied in other disciplines and are shown to aid project practitioners in their analysis of performance. The research responds to some key challenges and seeks to improve the effectiveness and efficiency of measuring project performance, enhance stakeholder satisfaction and improve the understanding of key indicators of success or failures.

Keywords: Corlane Barclay; IS projects; IS programmes; performance evaluation; performance criteria; measurement methods; success.