
Editorial

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This special issue puts forward the topic of standardisation and asset management maturity. A timely topic as the field of engineering asset management has recently received much attention through the publishing of new standards for asset management. Many professionals from the field were involved in the development of three ISO Standards for Asset Management and many asset intensive companies are now implementing the asset management paradigm put forward in these standards. While the development of the standard provides recognition of a relatively new field, this development raises questions with respect to: the added value of the asset management paradigm, the evaluation of the asset management paradigm, and the performance of the organisations that have adopted the asset management paradigm. The authors of the different papers in this special issue provide a first start in helping to address these questions.

With the first companies now working according to the asset management standard the issue about the added value that the standard may bring to the companies needs to be addressed. Standardisation requires large upfront investments by companies and therefore there is a need to define and quantify the benefits of certification. The paper by Hodkiewicz provides an excellent discussion on the value of standardisation. In the paper, lessons are drawn from the quality management community that was faced with a similar situation in the eighties: a lack of (scientific) evidence of its claimed performance. In the paper, Hodkiewicz puts forward testable hypotheses related to asset management practice, asset management cost, organisational outcomes, and improved organisational performance of certification.

In practice, maturity models are used to evaluate asset management implementation. These models assess how organisations perform with respect to a set of prescriptive standards. As the asset management field is developing its practices, the result is a wide variety of maturity models that have been developed to help assess and guide the implementation of the asset management paradigm in asset intensive organisations. Mahmood et al. discuss the role of these models and compare five well known maturity models to five dimensions of effective asset management. In the paper, Mahmood et al. show that current maturity models neglect the spatial dimension which should be included in a well-designed capability model for managing assets.

Although maturity models are widely used to help guide asset management implementation the limitations of these models should also be understood. Schraven et al. bring forward many of these shortcomings. One particular shortcoming of maturity models is that the role of employees in organisations influence the outcomes of maturity assessments and that one should be aware of this. As many organisations use maturity

models to help guide the implementation of asset management Schraven et al. note that while maturity models provide criteria to aim for, they do not identify to what extent employees understand the organisation's strategy behind asset management and how they coordinate their activities in practice. The paper develops and illustrates a employee-focused, criteria-free evaluation approach to complement maturity models.

In order to develop strong asset management in companies a well-developed performance management system is essential. One of the key issues with respect to performance management is the alignment of the performance management between asset owners, asset managers and service providers. The paper by Schoenmaker and van der Lei focuses on the alignment of the asset owners and asset managers for different states in the USA and different European countries. In the paper, Schoenmaker and van der Lei report on a survey done on the development of performance management practices for road authorities. They show that in most states and countries surveyed the objectives of the asset owner are not aligned with the objectives of the asset manager. This limited line-of-sight complicates the effectiveness of the performance measures at the level of the asset owner.

Also, the role of asset manager and service provider is subject to change when the new asset management paradigm is implemented. Altamirano et al. agree that much is expected from the new asset management paradigm and discuss the need for introducing dynamic standards for contracts. One of the roles of asset management is to make trade-off between cost, risks, and performance more transparent, the choices between these trade-offs are limited by the current contract managing paradigm between asset managers and service providers that aims at complete contracts and is based on static standards. Altamirano et al. argue for the use of dynamic decision support tools that periodically allow for the setting of the performance standards and key performance indicators that are enforced in adaptive relational contracts. In the paper, Altamirano et al. describe a system dynamics model to illustrate that these models are suitable to support organisations in long-term dynamic contracts.

Together the papers bring forward issues related to the maturing asset management field. While the new ISO standard is an acknowledgement of the field, the proof of the pudding is in the eating. Issues regarding the value of standardisation, objectively measuring maturity levels and performance, and the introduction of new contracting practices may be key to further development of the field in future.