Developing Maturity Models for IT Management – A Procedure Model and its Application

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Abstract

Maturity models are valuable instruments for IT managers because they allow the assessment of the current situation of a company as well as the identification of reasonable improvement measures. Over the last few years, more than a hundred maturity models have been developed to support IT management. They address a broad range of different application areas, comprising holistic assessments of IT management as well as appraisals of specific subareas (e. g. Business Process Management, Business Intelligence).

The evergrowing number of maturity models indicates a certain degree of arbitrariness concerning their development processes. Especially, this is highlighted by incomplete documentation of methodologies applied for maturity model development.

In this paper, we will try to work against this trend by proposing requirements concerning the development of maturity models. A selection of the few well-documented maturity models is compared to these requirements. The results lead us to a generic and consolidated procedure model for the design of maturity models. It provides a manual for the theoretically founded development and evaluation of maturity models. Finally, we will apply this procedure model to the development of the IT Performance Measurement Maturity Model (ITPM3).

Keywords

Maturity model – IT management – IT performance measurement – Design science – Epistemology

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