Sorting Out Software Quality: The Empirical Basis and Selected Results

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Abstract:

Software quality is growing in importance: we are increasingly dependent on software for everything from transportation to public safety. The Carnegie Mellon® Software Engineering Institute has pioneered excellent methods for software process improvement, namely its Capability Maturity Model Integration (CMMI®) and Team Software ProcessSM (TSPSM). This paper provides a brief overview of software quality and its history, a short treatment of CMMI, and an introduction to the TSPSM, the SEI’s “how to” guide to achieving process maturity. Empirical results are presented.