

Abstract

Why Implement CMMI with PSP/TSP?

James D. McHale Sr. Member of the Technical Staff Software Engineering Institute

This presentation describes the implementation of CMMI practices using the Team Software Process (TSP), an approach that addresses maturity levels 2 and 3 with significant support for the higher maturity levels. TSP is based upon individual process skills taught in the Personal Software Process (PSP). The approach builds upon field experience by SEI staff and client organizations that have recognized the vast common ground that CMMI and PSP/TSP each address, the former from an organizational "what-to-change" viewpoint, and the latter from the project team (TSP) and individual (PSP) "how-to-do-it" viewpoints, with the following features.

- The AIM approach achieves excellent results in terms of measureable project performance beginning with the first project.
- The approach allows more rapid implementation than CMMI norms, hence "Accelerated Improvement Method", or AIM.
- The nominal AIM timeframe for a small-to-medium-sized development organization to achieve CMMI maturity level 3 is 18 months.
- The approach proceeds on a project-by-project basis, rather than by maturity level or process area (PA), although
 certain groups of PAs are naturally addressed by AIM. The project-by-project approach assures constrained,
 identifiable, incremental costs.
- The approach provides a path to sustain and improve upon excellent (in many cases world-class) results, free from
 ongoing reliance upon outside resources.

The presentation provides the rationale for using PSP/TSP to implement CMMI, a description of the AIM steps, and scenarios that highlight some of the challenges faced and opportunities available when using these methods.