

Team Software Process in GSD Teams: A Study of New Work Practices and Models

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ABSTRACT

Distributed software development is becoming the norm for the software industry today as an organizational response to globalization and outsourcing tendencies. In this new environment, centralized models for software development team building models have to be reanalyzed. Team Software Process (TSP) guides engineering teams in developing software-intensive products and is intended to improve the levels of quality and productivity of a team's software development project. In this paper, the authors assess the difficulty of using TSP in distributed software development environments. The objective of this assessment is twofold; firstly, know the general difficulty for using TSP in these environments, and secondly, know the caveats to be addressed in future software development team building models designed specifically for distributed environments.

Keywords: IT Outsourcing, Software Development, Software Development Teams, Team Management, Team Software Process (TSP)

INTRODUCTION

Software development is a collaborative and knowledge intense process where success depends on the ability to create, share and integrate information (Walz et al., 1993). This process has been evolving since its origins in the NATO Software Engineering Conference at end of the 60's. During this evolution, new forms of software development have appeared, i.e., open-source software development (Lerner & Tirole, 2002) or outsourcing development (Sahay et al.,

2003). Along with the evolution of software development, the research about it has evolved and branched too. Moreover, an external but nearly related factor to software development process and its characteristics is still a top issue since, which are people (Gannon, 1979; Laughery, Jr., & Laughery, Sr., 1985); "People factors" seem to dominate "tools and techniques" as Blackburn et al. (1996) pointed in their study. Within people issue, other issues such as teams (Krishnan, 1998), people's factors (Blackburn et al., 1996), and human resources management issues such as assigning roles (Acuña & Juristo, 2004), productivity management of IT projects

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