

Contact us at: 201-947-0150; 201-358-8828; Quality@SoftwareSixSigma.com

# Software Project Management Training

PS&J Software Six Sigma offers a full line of project management training tailored to the needs of software development. Our courses encapsulate 50 years of hands on experience with software project management across multiple application domains including aerospace, industrial automation and controls, financial services, medical instrumentation, telecommunications, and consumer electronics.

All of PS&J Software Six Sigma's courses are about managing real world software development. They are not focused on project management technique. Training that covers only the mechanics and generalities of project management cannot provide the level of depth and understanding that project managers require in order to address the unique issues influencing software development today. Although we provide comprehensive explanations of estimating algorithms, earned value, risk management, and all the traditional topics, our focus is always managing software development. Your managers learn how to dramatically improve the probability of bringing their software projects to a successful conclusion.

Managing a software development program differs from managing many other efforts because the product is essentially intangible until it reaches system integration and test. Managers often rely on the word of their developers or team leads in order to track progress. Frequently, they are given an overly optimistic assessment of program progress, only to be surprised by reality at a future date. Often, this leads to a situation where the project is 90% complete with no real end in sight.

Many experienced managers are unsuccessful at managing software programs because they don't understand the fundamental cause and effect relations of the software development process. They try to directly manage the results, such as cost and schedule, rather than manage the underlying causes. These managers don't have very much leverage over their projects, because they don't know the right points to which to take effective corrective actions. Frequently their actions are counterproductive.

PS&J Software Six Sigma's management courses confront this problem head on by teaching our students the basic economics of the software development process. Our students are successful because they learn the cause and effect relationships that control development process, and, ultimately, project performance. They learn how to avoid common pitfalls, collect the right metrics, generate realistic plans, recognize problems early, and exploit the points of maximum leverage in the software development process by taking timely and effective corrective actions. We provide our students with specifics on effectively managing all the key software development sub-processes, helping them strike a balance between an environment with too little structure and one with the high process overheads common in many CMM level 3 organizations.

The effect is to transform our students' approach to management. The net result is empowerment as their focus shifts from tracking and reporting actuals to managing performance. When effective processes are combined with pro-active management, we frequently see initial estimates that are accurate to 20%, "estimates to go" that are accurate to 5%, and productivity improvements of 20% to 50%.



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## Choosing the Right Course

We offer three different software project management courses targeted at different audiences within the project management community.

### Managing Software Projects

Aimed at experienced project or technical managers that are familiar with all the standard project management techniques but have limited experience with software development. It is a one-day, high level course that provides them with the knowledge required to understand technical and management issues specific to software development well enough to make good decisions and to manage their projects to successful conclusions.

#### Leading Software Projects

Aimed at first and second level software project leads and experienced software engineers making the transition into project management. It provides them with firm grasp of project management methods and techniques in the context of software development, but it also takes them far beyond the typical PMBOK training class by providing specific detailed methods for managing the software development process's cause and effect relations.

For organizations with a CMM, CMMI, or ISO goal, the course includes an optional module addressing model compliance.

### Six Sigma Software Project Management

It has the same target audience as "Software Project Management" and covers all the same material, but it does it from a Six Sigma Perspective, illustrating how to make effective use of the Six Sigma toolkit to managed project performance. It is targeted for an organization that has a Six Sigma initiative, but can be of great value anywhere there is a focus on metrics and fact-based management. It can be used to train project managers or as an elective in a Black Belt training program.