HP PSP/TSP Implementation Strategy

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PSP/TSP Program – High Level Goals

- The HP program goal is to increase developer’s quality and productivity through the use of personal best practice processes developed by the Software Engineering Institute (SEI).

- PSP/TSP builds on the HP CMMI capability already in place, and enables CMMI Level 4 and 5 performance at the developer level.

- Collecting accurate data that is USED at the developer level enables HP Level 4 and 5 activities.

Ref: 1. SEI Technical Report 2003-014
What are PSP and TSP?

Personal Software Process (PSP):
- Provides individual developer processes for productivity and quality, to:
  - Improve personal estimating, planning, and quality management
  - Meet schedule/delivery commitments
  - Reduce defects; development quality not a matter of chance but built-in

Team Software Process (TSP):
- Targeted at team goals, commitments, cohesion, structural issues, processes and practices, to:
  - Build highly motivated teams quickly and reliably
  - Optimize Team performance
  - Accelerate continuous team performance improvements

Supports:
- Metrics-based reporting and data-based decision making
- HP common processes for Applications Development
- Global Resource Centers using best practices, training, and tools
- Automated personal metrics collection
Where Do PSP & TSP Fit In?

- **PSP**
  - Personal Focus
  - Improves skills and discipline
  - Improves quality

- **TSP**
  - Team Focus
  - Improves Performance

- **CMMI**
  - Management Focus
  - Improves Organization Capability
PSP/TSP Program Objectives

• Increase Developer’s quality and productivity through the use of personal best practice processes developed by the SEI
• Track size, time, defects, and task completion
  – Time & defects are tracked by phase, e.g., planning, design, code, personal reviews, test, postmortem
• Produce verifiable designs
• Conduct structured personal design and code reviews
• Improve individual development processes by using personal historical data
• Streamline and integrate PSP/TSP processes and tools into Developer’s daily activities
• Integrate PSP/TSP activities in HP common processes
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Phased Rollout:

- Executive-level kick-off
- Begin with local pilot(s) to demonstrate quality improvements/savings
- Cascade through organizations/accounts including BestShore

Integrated Interactive Training:

- Full training curricula (developers, management, supporting teams)
- Performance support training model with J-i-T training at project launch
- ‘Bite-sized’ on-line modules taken by developers at their workstations
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**HP Coaching Approach:**

- Regional Coaches trained, mentored and authorized by SEI
- Provide TSP training to non-TSP team participants
- Facilitate TSP project launches & re-launches (site based and remote)
- Review and support personal & team process usage and data analysis
- Recommend/facilitate corrective actions
- Work with leaders, teams, and team support to ensure project success
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Performance Management

• Coaches work with all levels of leadership to ensure leaders understand key behaviors that should be encouraged

• Leadership understands what behaviors are appropriate, and these behaviors are rewarded – leaders express, model and reinforce behaviors

• TSP coaches are valued and seen as an important role in the organization
  – Respected by leaders and developers
  – High level of technical knowledge and project management experience
  – Excellent communication skills

• All levels of leaders understand how to use TSP data to provide oversight on activities - data driven decisions
PSP/TSP Current Status

• 6 HP TSP coaches have been trained, and one coach has been observed and authorized
• 4 HP PSP instructors have been trained and authorized, 2 are scheduled for Instructor training
• Initial TSP deployment is underway in the United States and China, and plans are underway for deployment in India
• InnerWorkings PSP Fundamentals training is being used, supported by authorized TSP Instructors
• HP is working with SEI and Davis Systems on training, mentoring and launching projects