Performance Measurement and Benchmarking Workshop

Outbrief

July 28, 2006

Mark Kasunic
Software Engineering Institute

PSM Users Group Conference
24-28 July 2006
Vail, Colorado

Workshop Participants

Name	Company
Jennifer Davenport	Raytheon
Raymond Johnson	Countrywide Home Loans
Gregory Niemann	Lockheed Martin
Joe Lindley	Raytheon
Mei Chen	Lockheed Martin Space Systems Co.
Robert Floyd*	Raytheon

* Workshop Observer & Backup Scribe

Restatement of Objectives

- Obtain PSM Member input about key factors that impact software project performance.
- Learn how companies are collecting and using project benchmark information.
- Identify content & characteristics that would make a Software Performance Benchmark Report useful to an organization.

Workshop Participant Profile

	A great extent	Somewhat	Very little
The extent to which workshop participant's organization performs software project performance benchmarking.	1	3	1

	A great deal	Much	Somewhat
Value of benchmarks to workshop participant's organization.	2	2	1

Factors That Have Very Large Impact

Type of Benchmarking Employed

Type	Description	Frequency
Internal studies	Compare similar operations within different units of organization.	5
Competitive studies	Target specific products, processes, or methods used by an organization's direct competitors.	0
Functional or industry studies	Compare similar functions within the same broad industry or compare organizational performance with that of industry leaders.	1
Generic benchmarking	Compares work practices or processes that are independent of industry.	0

Processes Benchmarked

Process	Measure
Program/Project Management	• Schedule Performance Index (SPI) • Cost Performance Index (CPI) • Earned Value
Requirements Management	Requirements closure rate
Software development	• Defect densities • Function points • SLOC productivity • Defect tracking (defect prioritization scheme and tracking within that scheme)
Inspections	• Defect density rate • Defect containment
Staffing	# of requisitions (open, closed, etc.)
Planning	Schedule milestones (planned vs. actual)
Quality	Mean time to repair, Defects
Financial	Resources and cost structure

Next Steps

Participants have agreed to email the facilitator ideas about

- **content that they would find useful as part of a Software Project Performance Benchmark Report**
- **other characteristics that would make Benchmark Report useful to an organization**

SEI will use workshop output as input into emerging work.