



Workshops to Jumpstart Measurement Planning

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Rationale for Workshop Strategy

- Measurement is an evolutionary process
- Workshops are a primary tool to accelerate planning and development of measurement
 - Practical, usable solutions to each organization's actual problems and priorities
- Part of a strategy to provide focused guidance and usable solutions as the measurement program evolves
 - Different workshops presented at strategic points as the organization grows in process maturity

Different Workshops Support a Long-term Strategy

- Establishing a measurement process
 - Management Planning Workshop
 - PSM Workshop
- Growing toward higher maturity levels
 - CMM Business Case Development Workshop
- Higher order maturity workshops
 - Organizational Quantitative Management Planning Workshop
 - Project Quantitative Management Planning Workshop

Roadmap

Establishing a measurement process

- Management Planning Workshop
- PSM Workshop

Growing toward higher maturity levels

- CMM Business Case Development Workshop

Higher order maturity workshops

- Organizational Quantitative Management
Planning Workshop
- Project Quantitative Management
Planning Workshop

1. Management Planning Workshop

Purpose

- Insight into operational and strategic performance planning, establish essential drivers of management by fact

Attendees

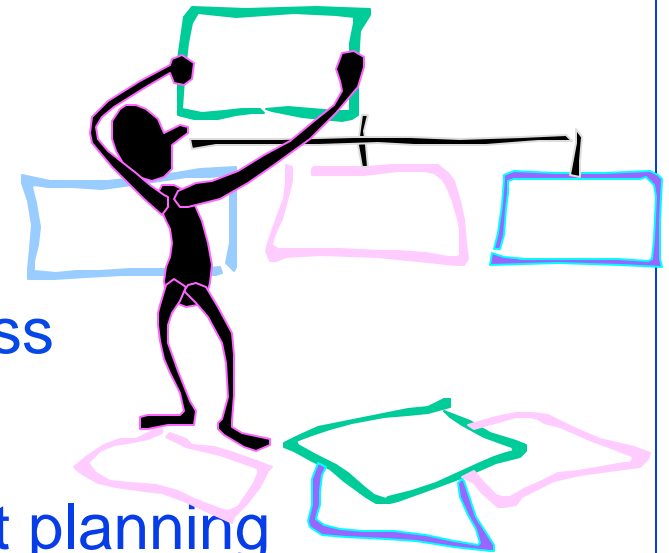
- Senior managers and direct reports

Prerequisite

- Enterprise Performance Management Briefing

Management Planning Objectives

- Determine initial scope of measurement program
- Identify Strategic Initiatives
 - Objectives
 - Critical Success Factors
 - Initial Indicators for CSFs
- Define Deployment and Analysis Process
- Define Assessment/Feedback Process
- Initial set of goals to drive measurement planning
 - Prioritized and quantified business goals
- Discuss possible organizational structure for measurement
- Establish policy regarding measurement program





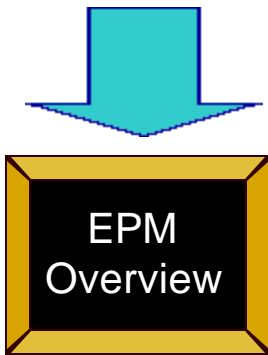
Management Planning Workshop

Business Performance Issues

Techniques For Enterprise Measurement

ROI Guidance

Balanced Scorecard



Understand Measurement Concepts

Briefing

Workshop

Strategies, Critical Factors And Scope

Alignment And Feedback Guidelines

Ongoing Processes

Deploy Process

Assess Results

Hand-off to PSM



Management by Fact

2. PSM Workshop

Purpose

- Establish an initial measurement process and organizational framework based on PSM principles

Attendees

- Software engineering process group (SEPG) staff
- Software engineering leadership
- Representative(s) of sponsor organization(s)

Prerequisite

- PSM Course

Workshop Objectives

- Develop a PSM-based measurement plan
- Define project-specific issues and measures based on higher-level issues and indicators
- Explore issues for defining measures and obtaining buy-in
- Define data collection and measurement database issues
- Define analysis and reporting process
- Establish an Action Plan for implementing the measurement process

Roadmap

Establishing a measurement process

- Management Planning Workshop
- PSM Workshop



Growing toward higher maturity levels

- CMM Business Case Development Workshop**

Higher order maturity workshops

- Organizational Quantitative Management
Planning Workshop
- Project Quantitative Management
Planning Workshop

3. CMM Business Case Development Workshop

Objectives

- Develop initial estimates of the costs and benefits of improved maturity for a specific organization
- Build a business case
 - Determine if progressing to a higher state of maturity is cost effective

Workshop Approach

- Collaborative effort of management team to:
 - Identify business areas
 - Define alternative scenarios
 - Identify costs of scenarios
 - Identify benefits of scenarios
 - Evaluate results
- Benefits structured like Balanced Scorecard
- Organizational and industry data applied where appropriate and available
- Output is consensus estimate

Costs for Area Y in Year Z

Cost Element	Current State	Alternative Scenario A	Alternative Scenario B
SEPG			
External Assessment Team			
Assessment Participants			
Training			
Project Impact (Cost to Adopt)			
Management Attention			

Benefits for Scenario X, Area Y, Year Z

Benefit Element	Estimated Impact	Value	Confidence
Profits	Increase sales/margin		Medium
Sales/Market Share	L4 discriminator (5%)		High
Customer Satisfaction	Improve predictability		High
Productivity	10% - 20%		Medium
Quality	20%		Low
Cycle Time	15%		Low
Innovation & Learning	New SPI capabilities		Medium

Costs and Benefits

- Costs
 - Maintain Level 3 - \$190,000
 - Additional Cost for Level 4 - \$195,000
 - Additional Cost for Tailored - \$160,000
- Benefits
 - Level 4 - \$492,000+
 - Tailored - \$496,000

Roadmap

Establishing a measurement process

- Management Planning Workshop
- PSM Workshop

Growing toward higher maturity levels

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Higher order maturity workshops

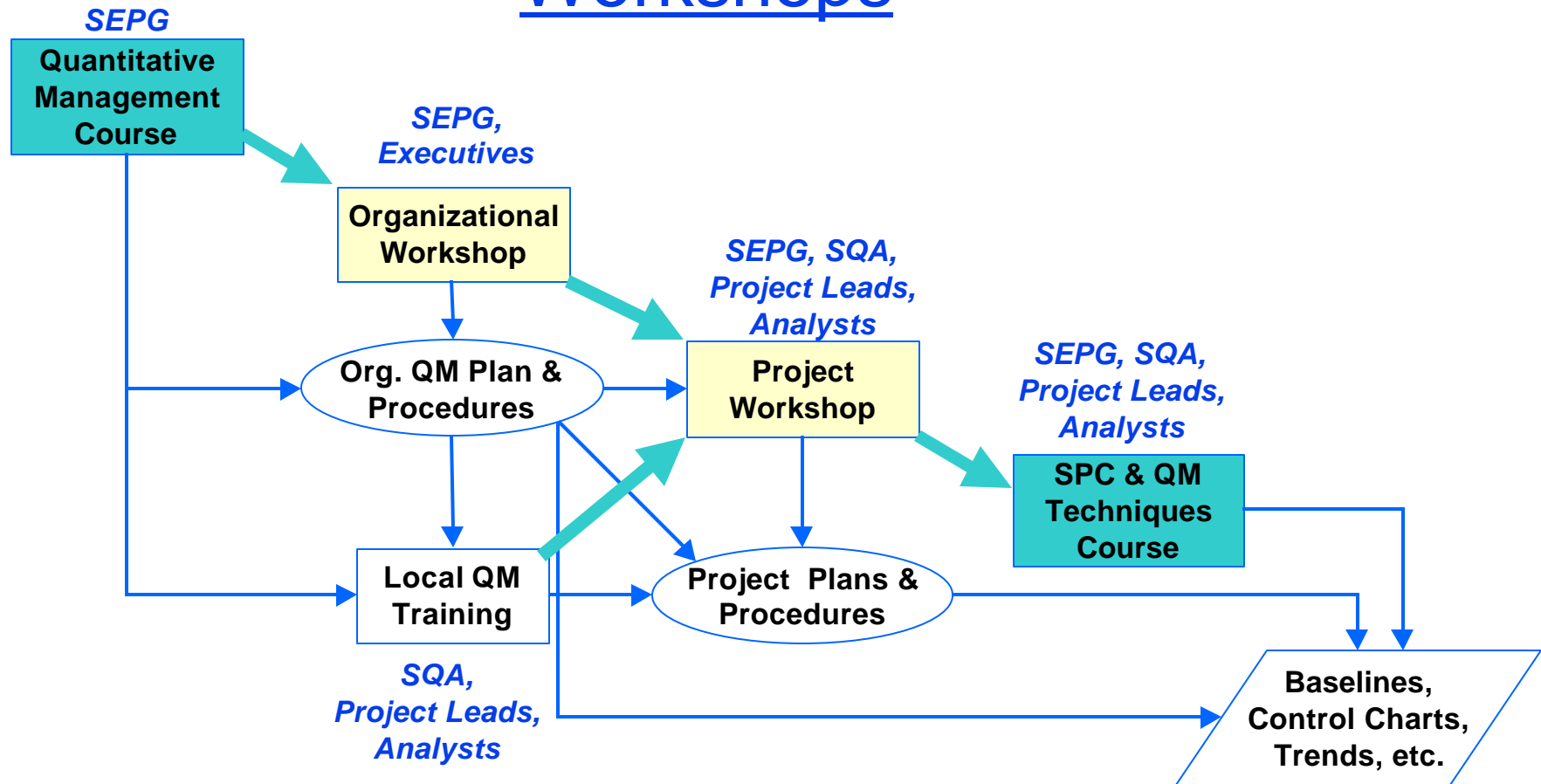
- Organizational Quantitative Management

Planning

Project Quantitative Management

Planning

4. & 5. Higher Order Maturity Workshops



Legend

→ Knowledge used to produce

→ Training sequence

Italic Personnel Participating

□ Company activity

Steps to Developing QM Strategy

Organizational Workshop

- Elicit and quantify business goals
- Identify software process strategies and goals to support achieving business goals
- Determine measurements required to track goal achievement
- Document results in Organizational QM Plan
- Elicit and quantify customer goals

Project Workshop

- Establish project-specific goals based on organizational and customer goals
- Determine products and process elements that affect goal satisfaction
- Identify initial indicators of product quality and process performance related to goal satisfaction
- Establish targets and/or baselines for those indicators for each product and process activity
- Assess project ability to meet the targets
- Document results in Project QM Plan

Organizational Workshop Approach

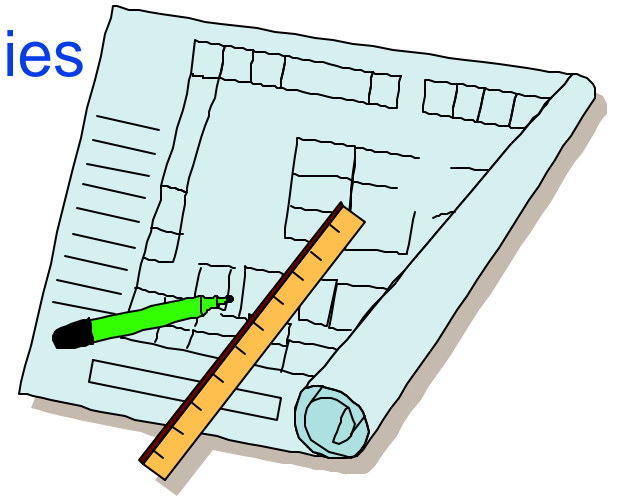
Systematic planning process

Based on a hierarchical system of goal setting

Integrated into local CMM[®] Level 4 approach

Results in:

- Established set of Business Goals
- Established Software Process Strategies
- Software Process Goals
- Measurement Requirements



Project Workshop Approach

Systematic planning process

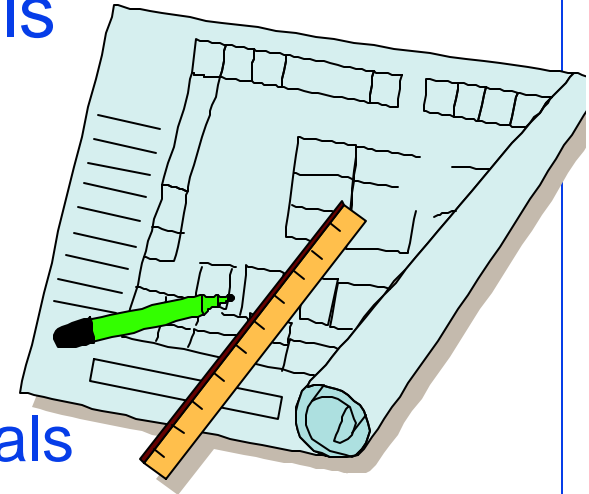
Supported by worksheets and templates

Integrated into local CMM[®] Level 4 approach

Driven by established organizational goals

Activities:

- Quantify and Prioritize Project Goals
- Establish Customer Goals
- Establish Project Process and Product Goals
- Review Process Baselines
- Initiate Documentation of QM Plans



Summary

- Begin measurement program early
- Strategically position tailored workshops based on level of maturity
- Get management involved up front
- Include training for each workshop
- Key Elements:
 - Consistency of focus on business issues
 - Common definition of measures
 - Early development of baseline project data

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