



# 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***

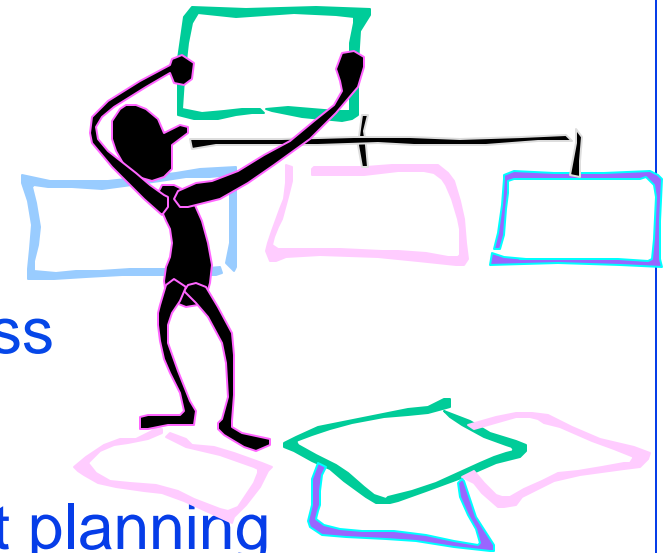
- Senior managers and direct reports

## ***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





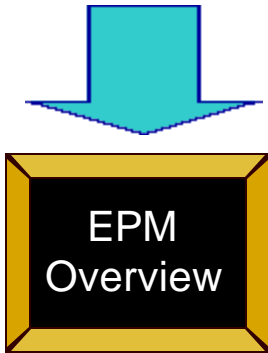
# Management Planning Workshop

*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

<b>Cost Element</b>	<b>Current State</b>	<b>Alternative Scenario A</b>	<b>Alternative Scenario B</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

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## Higher order maturity workshops

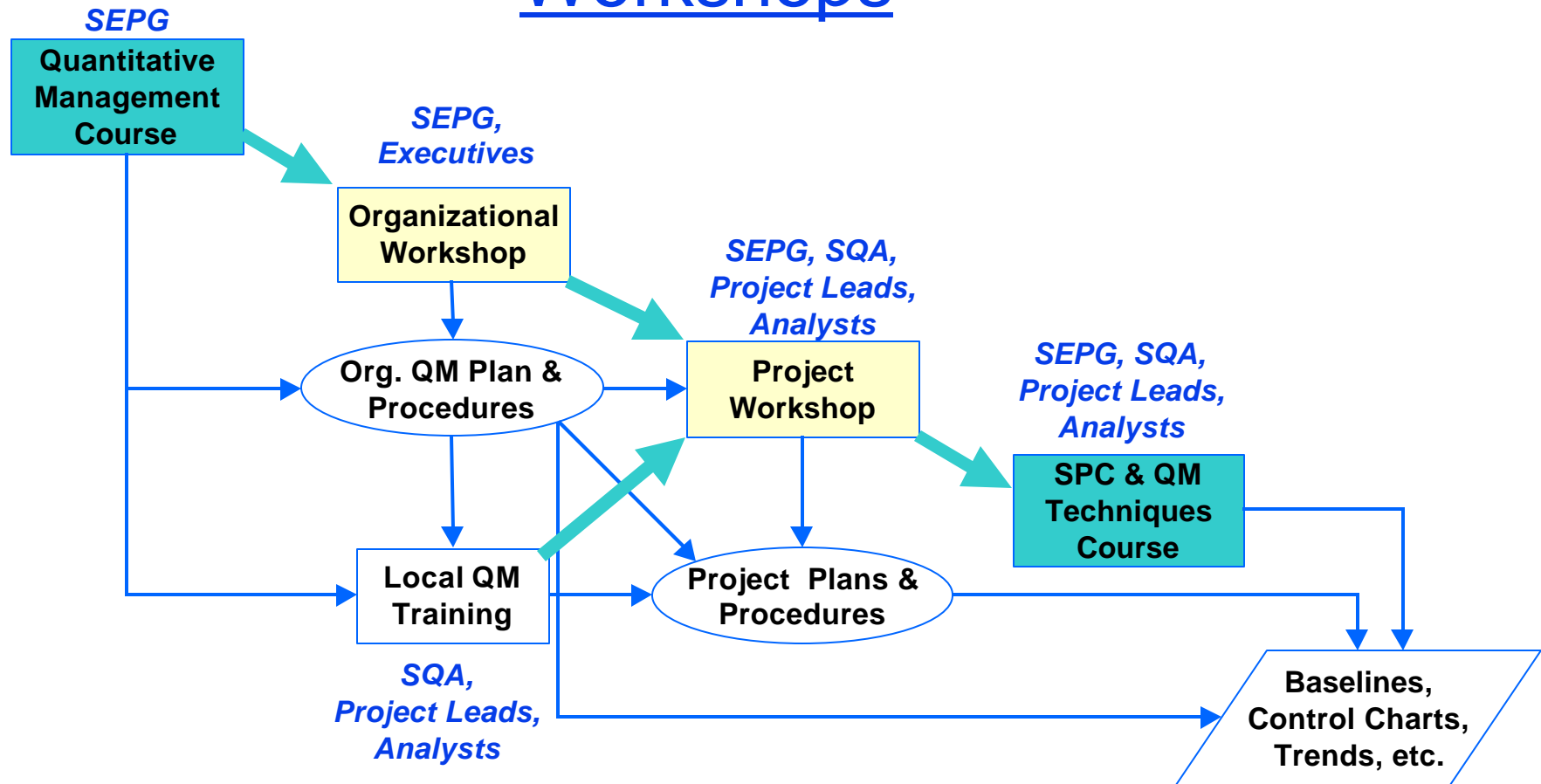
- Organizational Quantitative Management

**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

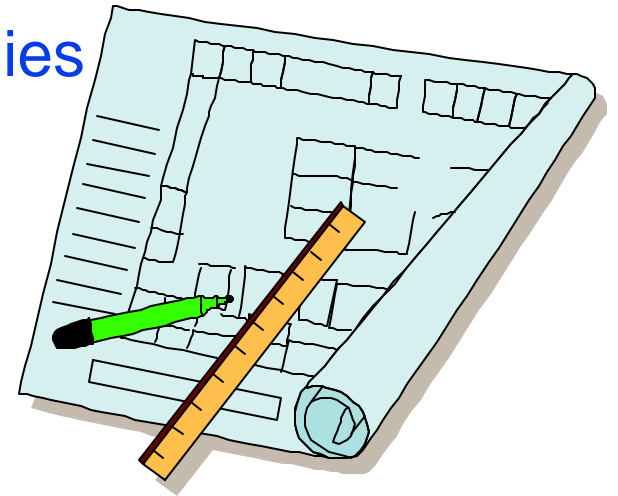
Systematic planning process

Based on a hierarchical system of goal setting

Integrated into local CMM<sup>®</sup> 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

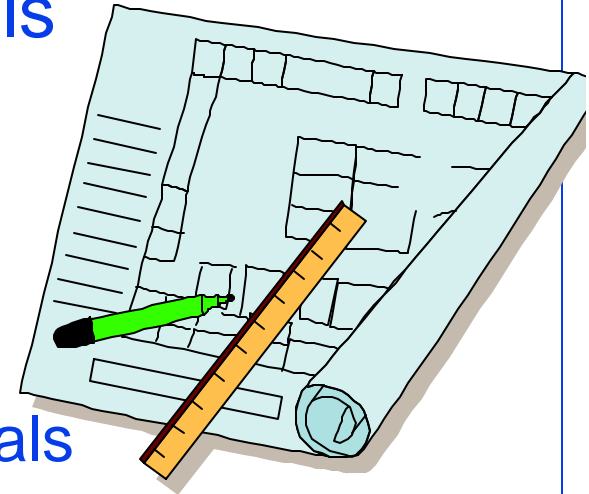
Supported by worksheets and templates

Integrated into local CMM<sup>®</sup> 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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