

Carnegie Mellon Software Engineering Institute

Pittsburgh, PA 15213-3890

Best Practice Panel for CMMI Class B and Class C CMMI Technology Conference

Paul Byrnes Margaret Glover Will Hayes Charlie Ryan

Sponsored by the U.S. Department of Defense © 2004 Carnegie Mellon SM SCAMPI is a service mark of Carnegie Mellon

page 1



Outline

Overview

Differentiating SCAMPI Family Members

Operational Scenarios



Motivation for Appraisal



Organizational Intervention

- Assessing culture for change
- Building local championship
- Preparing for improvement
- Finding the stimulus for change

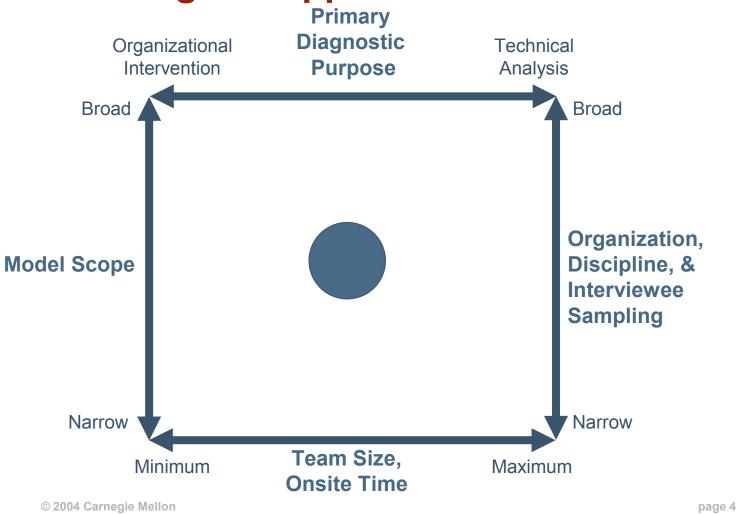
Technical Analysis

- Evaluating detailed practices
- Rigorous data collection
- Carefully defined scope
- Potential external visibility





Tailoring the Appraisal Process





Appraisal Use/Purpose: Examples



Formulating Our Winning Strategy



Fixing Immediate Problems

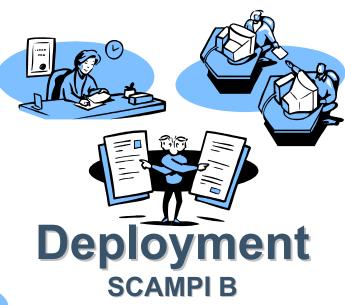


Exploring Goals for Improvement & Training Staff









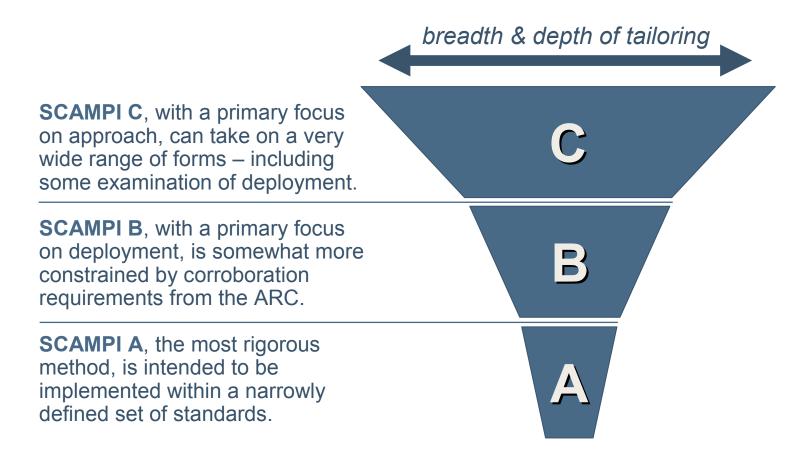


Institutionalization SCAMPIA

© 2004 Carnegie Mellon



Non-Linear Differences in Tailorability



page 7



Outline

Overview

Differentiating SCAMPI Family Members

Implementation Details

Operational Scenarios

Program Overview and Project Status



Three User Perspectives

Professional Consultant

Internal Appraiser

External Auditor



Professional Consultant

Carries the authority of an "outside expert"

Must please the customer while sometimes delivering bad news

Knowledge of process context may be limited at times – especially early planning





Internal Appraiser

Pre-existing relationships within the organization

- Subordinate to sponsor and other management
- Peer relationships with appraisal stakeholders or participants

Long term effect of appraisal outcome is important, personally

Leverage detailed knowledge of the organization to maximize impact of appraisal results





External Auditor

Sponsorship derives from external authority – who may not be very welcome

More formal interfaces required to establish communication and collect information

Restrictions may limit the nature and extent of interaction with members of the organization





The CEO from company A calls you and says 'What is CMMI, because all of the RFPs that we see all say that we have to be Level 3 in the CMMI to bid on these contract?'



We are Level 3 in the SW-CMM and now we need to implement the CMMI. We do not know what to do. We need training, and the SEPG Director quit last month. Can you help?



We are ISO 9000 Registered, and our client wants us to be Level 2 next year. Can we keep our ISO 9000 registration and implement CMMI? Do I need to hire another group? Do I need another group of processes?



Some Lead appraiser told us we could do a SCAMPI C in one day, another one said one week. Why is there a difference in the time for this, and what should we do? We have to be Level 3 in 6 months.



We have had 3 Class Cs in the past 2 years and have closed all the gaps to Level 2. We want to have a Class A to Level 3, what do you suggest?



Gap Analysis

Initial detailed appraisal to baseline an improvement plan

Appraisal used to bridge to new model, or new PAs, or new parts of an organization

Detailed look at target areas found weak in a previous appraisal - anticipating a future benchmark appraisal



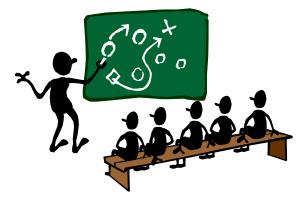


Mini-Appraisal

Interview-intensive first-time experience for new group learning about process improvement and appraisals

Full coverage dress rehearsal for benchmarking appraisal in a group that has a past history of process improvement







Improvement Monitoring Appraisal

Internal progress appraisal using EPG staff to monitor deployment of new practices

Contract incentive award determination based on external auditor

Professional consultants may perform incremental appraisals building PIIDs for a future benchmark appraisal





Organizational Unfreezing Appraisal

Organizational interventions require careful orchestration by skilled and experienced professionals. Frequently the professional consultant is best suited to perform this, though internal change agents can facilitate effective events.

External auditors would not perform an appraisal of this type.







Carnegie Mellon Software Engineering Institute

Pittsburgh, PA 15213-3890

Speakers' Contact Information

Maggie Glover mag@sei.cmu.edu

Sponsored by the U.S. Department of Defense © 2004 Carnegie Mellon

page 22