SCAMPI V1.1 Method Overview

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Objectives

Review key characteristics of SCAMPI.

Describe the flow of appraisal activities at a high level.

Discuss appraisal outputs.
Standard CMMI® Appraisal Method for Process Improvement (SCAMPI)

1. Appraisal Requirements for CMMI (ARC), V1.1
2. SCAMPI Method Definition Document (MDD), V1.1
3. Appropriate Capability Maturity Model ® Integration (CMMI SM), Version 1.1 document (Staged/Continuous, SE/SW, IPPD, SS)
SCAMPI Characteristics

An ARC compliant appraisal method defined in the MDD

Designed to provide benchmark quality ratings relative to CMMI

Applicable to a range of appraisal usage modes

Performed by a trained and experienced team

Led by an SEI-Authorized SCAMPI Lead Appraiser
Multiple Usage Modes

SCAMPI is intended for a variety of uses:
• Internal Process Improvement
• Supplier Selection
• Process Monitoring

Usage-specific considerations drive method tailoring and enactment decisions.

All method requirements are satisfied in each usage mode.
Appraisal Flow

Plan and Prepare for Appraisal

1.1 Analyze Requirements
1.2 Develop Appraisal Plan
1.3 Select and Prepare Team
1.4 Obtain and Analyze Initial Objective Evidence
1.5 Prepare for Collection of Objective Evidence

Conduct Appraisal

2.1 Examine Objective Evidence
2.2 Verify and Validate Objective Evidence
2.3 Document Objective Evidence
2.4 Generate Appraisal Results

Report Results

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Appraisal Scope

Defining the “Organizational Unit”

Selecting a CMMI model, representation, and scope
A “Representative” Organization Sample

Compromising among competing criteria
- Percentage of personnel represented
- Mix of “lines of business” included
- Balance of profit/loss centers sampled
- Including enough specialties and departments
- Focus on “showcase projects” and/or “in-house efforts”

Weighing priorities of the sponsor
- Focus on one receptive department
- Emphasis on a particular “line of business”
- Exploit “showcase projects” to spread best practices
- Benchmarking for process monitoring
Sampling and Instantiation in Appraisals

1. A sample of practice instantiations (within the organizational unit) is identified.

2. Implementation of practice is appraised for each member of the sample instantiations.

3. Extent to which the practice is implemented across the sample is used to indicate the extent to which the practice is implemented in the organizational unit.
Projects Comprised of Individuals
The Appraisal Input identifies select planning parameters that require sponsor approval.

The appraisal plan is reviewed and signed by the sponsor and relevant stakeholders.

Resources, cost, schedule, logistics, and risks are managed using the appraisal plan.

Required elements of the plan are documented on page II-30 of the MDD.
Preparing the Organization

Applicability of a benchmarking method
- effort and cost must be justified by need
- alternative methods may be more common
- rigorous standards not to be compromised

Verification and discovery-oriented appraisal
- organizational unit’s understanding must be verified
- unknown implementations of practices must be discovered

Interplay between preparedness and schedule
- appraisals don’t have to require extended work hours
- people work best when the conditions aren’t adverse
- effort invested early pays great dividends later
Readiness Reviews

Negotiations and estimates are based on assumptions.
• assumptions change due to unforeseen events
• new information leads to different assumptions
• feasibility of the plan is contingent on key assumptions

Plan to evaluate the feasibility of the plan and be prepared to re-plan based on revelations and unplanned events.

Do not compromise your obligation to negotiate for a reasonable appraisal plan. The quality of the outputs is governed, in large part, by the process used.
Data Collection

Instruments

Interviews

Documents

Presentations
Characterizing Implementation

The aggregate of objective evidence is used as the basis for determining practice implementation.

Every sampled instance of the practice is characterized.
  • Fully Implemented (FI)
  • Largely Implemented (LI)
  • Partially Implemented (PI)
  • Not Implemented (NI)

Practice implementation at the organizational unit level is a function of the degree of practice implementation at the instantiation level.
## PI Characterization Criteria*

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*SMDD Part II: Activity 2.2.2: Parameters and Limits*
Validating Preliminary Findings

Findings Presentation

Focus Group

Survey Instrument
Rules for Rating CMMI Goals

Goal ratings are a function of the extent to which the corresponding practices are present in the planned and implemented processes of the organization.

Team judgement is used to rate goals where the objective evidence doesn’t render the outcome plainly obvious.

- If all practices are FI, then the goal must be satisfied.
- If all practices are NI, the goal can’t be satisfied.
- The conditions between the two extremes require professional judgment.
Appraisal Output

Team must produce and report
- Appraisal Disclosure Statement
- findings (statements of strengths & weaknesses)

Team must produce but need not report
- ratings of specific and generic goals

Optional outputs
- capability level ratings for process areas (PAs)
- maturity level
Appraisal Disclosure Statement (ADS)

Summarizes the appraisal results and conditions under which the appraisal was performed

- Contains essential information to adequately interpret the meaning of assigned maturity and/or capability level rating

Prepared by the Team Leader and provided to the appraisal sponsor at the conclusion of the appraisal
ADS Contents [1]

- Appraisal sponsor’s name, organizational affiliation
- Team leader name, organizational affiliation
- Team members names, organizational affiliations
- Identification of organizational unit to which the ratings are applicable, domains examined
- CMMI model used (version, representation, domains)
- Appraisal method name and version
- Itemization of process areas rated, and those not rated
- Maturity level and/or capability level ratings assigned
- Dates of on-site activities
ADS Contents [2]

Statement affirming all SCAMPI requirements were met

- Signature of appraisal team leader
- Signatures of appraisal team members and appraisal sponsor (optional)
- Date of issuance of ADS
## Detailed Data Profiles

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Capability Profile
Equivalent Staging

A profile of capability level ratings can be used to derive an “equivalent” maturity level rating, using appendix F from the CMMI models.

Exclusion of process areas from the appraisal scope may preclude the derivation of an equivalent maturity level rating.
Conclusion

The types of appraisal uses and important features were reviewed.

Many choices and customizations must be made by the SCAMPI Lead Appraiser based on customer needs and method requirements.