

Common Sources of Confusion in Appraisal Scoping

Two sources of common confusion for organizations and Lead Appraisers are discussed below. Using sample scenarios and references, this document is intended to provide clarity and a common point of reference.

1. Apparent Reluctance About “Not Yet” Characterization

Often, in situations where a project is at a point in its lifecycle where it has not been able to perform certain practices, Lead Appraisers will designate that project as a Non-Focus Project or exclude it from the Organizational Unit, rather than using the “Not Yet” characterization. In cases where many projects are involved in the appraisal, this approach is feasible. However, in cases where the Organizational Unit is comprised of 3 or fewer projects, this choice leads to a violation of the sampling requirements specified in the Method Definition Document. Consider the simple scenarios below:

Scenario 1

The Organizational Unit is comprised of 3 projects:

- Project 1 has just started, and is in the midst of their “implementation phase”
- Project 2 is completing “customer acceptance testing phase”
- Project 3 has just completed the “project closure phase”

In determining the organizational scope of this appraisal, you might be tempted to designate Project 1 as a non-focus project, because they have so many activities in the normal lifecycle of projects in this organization that have not yet been performed. For example, while the “testing phase” may have been planned, and test cases (as well as other work products) have been generated, the engineers on the team will not be able to discuss the conduct of testing activities or their results. This suggests that the amount of information available relating to the Verification process area is rather limited for Project 1. Despite this, you must use all three of these projects as focus projects in the appraisal. In this scenario, Project 1 would have “Not Yet” characterizations for those practices that it has not yet performed because of its current lifecycle stage.

Scenario 2

Organizational Unit is comprised of 2 projects:

- Project 1 has just completed the “project closure phase”
- Project 2 has just completed the “initial requirements gathering phase”

In similar fashion as above, you might wonder if Project 2 can provide enough information to warrant including it in the appraisal at all. However, if the appraisal sponsor wants the results to apply to this Organizational Unit, then the second project must be included, and the “Not Yet” characterization would apply to those practices not yet performed because of its lifecycle stage. An alternative that might make more sense in this case is to explore the utility of appraisal results that represent only the first project – thus re-defining the Organizational Unit as just that single project. Notice that a similar choice is possible in the first scenario as well.

Discussion

As mentioned above, in cases where the Organizational Unit is comprised of many projects, it is **less likely** that you will encounter issues relating to a sufficient organizational scope. This is due to the fact that non-focus projects can be used to add instantiations of a process area where selected projects would be characterized as “Not Yet” for one or more practices within that process area. However, in cases where the Organizational Unit can offer no more projects, the Lead Appraiser must exercise care to avoid violating the minimum sampling requirements.

Some References Related to “Not Yet” Characterizations:

- Definition of “Not Yet” characterization found in the glossary of the MDD:

“A practice characterization value assigned when the project has not reached the phase in the lifecycle within the appraisal scope to have implemented the practice.”

- A similar definition can be found on page II-97 of the MDD, in the Parameters and Limits for 2.4.2 Characterize Implementation of Model Practices.

- Page II-98 (in the same Parameters and Limits mentioned above) contains a table showing the rules for aggregating instantiation-level characterizations to derive Organizational Unit-level characterizations. A careful reading of this table shows that the presence of “Not Yet” characterizations at the instantiation-level does not affect the Organizational Unit-level characterization unless ALL instantiations are characterized as “Not Yet.”

Some References Related to Minimum Sample Size

- Page II-11 of the MDD, in the Parameters and Limits for 1.1.3 Determine Appraisal Scope, includes the following paragraph:

“In appraisals where the reference model scope includes any project-related PA, the organizational scope must include at least one focus project. If the organizational unit includes more than 3 projects, then the organizational scope must include sufficient focus projects and non-focus projects to generate at least 3 instances of each practice in each project-related PA in the model scope of the appraisal.”

- Recognizing that the above paragraph does not address cases where the Organizational Unit consists of three or fewer projects, the following paragraph was published as errata item 14:

“When one or more focus/non-focus projects have not reached the state in the lifecycle to have implemented a practice for a PA assigned to the project, other projects must be identified to provide objective evidence for that practice in order to generate at least three instances for that practice unless there are no other projects in the organizational unit that have reached that stage. If the organizational unit includes three or fewer projects, all of the projects in the organizational unit must be focus projects.”

Conclusion

Don't be afraid to rely on the "Not Yet" characterization to handle legitimate situations similar to the ones above. There is no 'threat to the rating' unless all projects would be characterized as "Not Yet" – in which case there are different issues to be dealt with.

2. Applicability of SAM to Part of the Organizational Unit

As the only CMMI-DEV process area that can be designated as "Not Applicable," Supplier Agreement Management is sometimes treated differently than other process areas. When projects in an Organizational Unit differ in their ability to demonstrate implementation of SAM, the Lead Appraiser faces a unique challenge in determining the model scope for an appraisal. Consider the simple scenarios below:

Scenario 1

Organizational Unit is comprised of 3 projects:

- Project 1 used SAM processes and is in the final stage of project closure

- Projects 2 and 3 had no suppliers and are at different stages of their lifecycle

Because Projects 2 and 3 will not be able to provide information on the application of the organization's SAM-related practices, the Lead Appraiser faces a situation where the team can only examine one instantiation of practices mapped to SAM. This does not meet the minimum of three instantiations specified in activity 1.1.3 of the Method Definition Document. Some Lead Appraisers are tempted to re-define the Organizational Unit to exclude Project 1, and conduct the appraisal on only Projects 2 and 3 – because it seems like a "cleaner solution." Other Lead Appraisers are tempted to find some way to construe that SAM is applicable to the other two projects, but use the "Not Yet" characterization as a "work-around." However, because Project 1 represents 100% of the available information on SAM in this Organizational Unit, it can be accepted as the sole instantiation. If the organization has more than three projects, and one or more of the other projects can demonstrate implementation of SAM-related practices, it will likely be a better solution to define the Organizational Unit to include more projects that can provide data relating to SAM.

Scenario 2

Organizational Unit is comprised of three projects:

- Project 1 used SAM processes and is in the final stage of project closure

- Project 2 used SAM processes and is in the initial planning stages

- Project 3 used SAM processes and is half-way through the lifecycle

Because Projects 2 and 3 will not be able to provide information on the application of the organization's SAM-related practices for all stages of the lifecycle, the Lead Appraiser faces a situation where different practices in SAM will have different numbers of instantiations available for the team to examine. Here again, the concern for meeting the requirements in MDD Activity 1.1.3 comes into play. However, as discussed above, if the team examines 100% of the available instantiations in the Organizational Unit, it will be considered compliant with the MDD. Just as in the above scenario, if the organization

includes more than the three projects listed above, it may make more sense to define the Organizational Unit to include more than these three projects. However, this must be weighed against the business considerations that make the '3-project OU' desirable. If the only division in the organization engaged in the process improvement program is made up of these three projects, involving projects from other divisions may be inappropriate in terms of accurately reflecting the results of that process improvement program.

Conclusion

You can't improve on 100% sampling; if you have all instantiations of SAM-related process areas in the Organizational Unit, then that has to suffice. Other process areas are not eligible to be designated as "Not Applicable," so this logic must not be generalized to other process areas. The rationale for scoping the Organizational Unit in such a way as to leave the team with only one or two instantiations of SAM should be carefully examined. (Rationale for scoping decisions is recorded in the Appraisal Plan.) While excluding legitimate examples of SAM to enhance the likelihood of a desired rating is against the spirit of the SCAMPI method, forcing organizations to 'artificially implement practices' or include unrelated projects just to satisfy an over-interpretation of the SCAMPI method is equally unacceptable.