



CMMI Institute

HIGH MATURITY APPRAISALS- NAVIGATING A COURSE IN UNCHARTED WATERS

Ryan Bays, Lead Technologist

Tunde Oyalowo, Lead Associate

BOOZ ALLEN HAMILTON

AGENDA

- **Booz Allen Hamilton Background**
- **Business Challenge**
- **SCAMPI Strategy**
- **Timeline and Milestones**
- **Team Composition**
- **Observations**
- **Lessons Learned and Best Practices**
- **Questions**

BOOZ ALLEN HAMILTON BACKGROUND

- **Founded in 1914**
- **Headquarters: McLean, Virginia**
- **22,000+ employees**
- **Leading provider of management and technology services to the US government**
- **Internal process improvement program & Corporate Quality Office (integrated teams)**
 - Systems Delivery Execution organization: CMMI-DEV Maturity Level 5 (ML5), June 2016
 - Corporate Quality Office: CMMI-SVC Maturity Level 3 (ML3), November 2016
 - ISO 9001-2015, and related standards registration since 1997 for multiple sites/business units
- **Website: www.boozallen.com**

BUSINESS CHALLENGE

- **As a Maturity Level 3 organization for almost a decade, we had never prepared for a High Maturity appraisal**
- **Today's presentation will include sharing of lessons learned, team composition tips, leadership requirements, as well as insights into the differences in planning and preparing for each of the SCAMPIs along this 22 month journey to High Maturity**

SCAMPI STRATEGY

- Integrated within the overall High Maturity strategy, we planned to use SCAMPI appraisals to drive the change required within our appraisable organization
- Started with a gap analysis in 2014 which provided a baseline of actions and recommendations, along with priorities for a potential target ML4/5 appraisal rating
- Developed and deployed new High Maturity processes
- Updated business objectives and created Quality and Process Performance Objectives
- Introduced appraisal team and organization on the principles and requirements of the high maturity process areas (QPM, OPP, OPM and CAR) and High Maturity SCAMPI appraisal requirements
- Conducted two (2) SCAMPI B appraisals and developed action plans to address findings
- Completed SCAMPI A Maturity Level 5 appraisal

SCAMPI TIMELINE AND MILESTONES

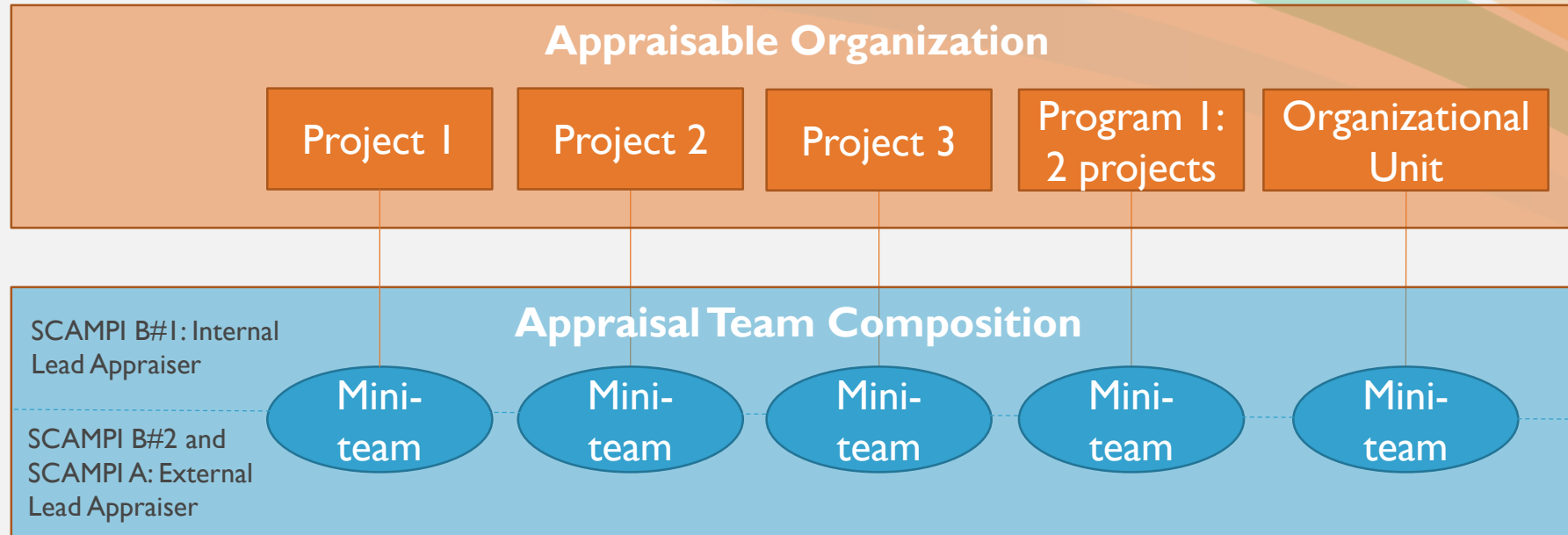
Task/Milestone	Date
Initial ML 4-5 Gap Analysis	July 2014
Projects & Org Begin Executing Against HM Processes	May 2015
SCAMPI B#1	Sept - Oct 2015
<i>Readiness Review</i>	<i>Sept 14-16</i>
<i>Conduct Phase 1: Week 1 (Virtual)</i>	<i>Sept 28 – Oct. 2</i>
<i>Conduct Phase 2: Week 2 (Onsite)</i>	<i>Oct 5-9</i>
SCAMPI B#2	Feb 2016
<i>Readiness Review</i>	<i>Feb 1-2</i>
<i>Conduct Phase 1: Week 1 (Virtual)*</i>	<i>Feb 16-19</i>
<i>Conduct Phase 2: Week 2 (Onsite)</i>	<i>Feb 22-26</i>
SCAMPI A	June 2016
<i>Readiness Review</i>	<i>June 1-2</i>
<i>SCAMPI A Onsite</i>	<i>June 13-17</i>

For SCAMPI Bs, week 1 was conducted virtually and week 2 was conducted on-site and in person.

Because many of our appraisal team members were geographically disbursed, working virtually during Week 1 was cost-effective as well as productive in terms of employee travel time.

*some staff were Onsite for both phases

SCAMPI TEAM COMPOSITION



- ✓ Each mini-team was composed of 2 to 3 FTE (mini-team composition included at least one experienced Appraisal Team Member and one “new” Appraisal Team Member)
- ✓ Mini-team readiness and mini-team initial project evidence reviews were conducted virtually
- ✓ Mini-teams collaborated under Lead Appraiser guidance for readiness reviews as well as for full team consensus

OBSERVATIONS – SCAMPI B#1

- Team composition:
 - We staffed the appraisal team with all of our key High Maturity analysts, even though they had never been on a SCAMPI
 - We had some 3-person mini-teams to expand High Maturity training and awareness as well as to build in backups for future appraisals
 - Used internal Lead Appraiser
 - During our Virtual Week 1, we were able to use teleconference calls and Skype meetings to handle virtual interviews and activities
 - Some mini-teams were geographically dispersed so Skype enabled those teams to review evidence together
- Team size:
 - We tried to pull in others from outside our immediate organization to serve on SCAMPIs, but we had challenges
 - We were able to get commitment for one external project practitioner who participated in all the SCAMPIs

OBSERVATIONS – SCAMPI B#1 (CONT.)

- Time constraints for first SCAMPI B:
 - We underestimated the time needed for the onsite SCAMPI B#1
 - This underestimation resulted in some extremely long days for a couple of reasons
 - Several of the projects had significantly backslid with their ML 3 maturity activity and there were significantly more findings than anticipated
 - We evaluated the high maturity evidence considering the sub practices as we wanted to leave no stone unturned ahead of the SCAMPI A
- Waistline expansion: we ate approximately 10 pounds of dark chocolate M&Ms during our long hours
- Post-SCAMPI after action planning:
 - All actions were assigned to owners with due dates and were tracked to closure
 - The projects and organization unit were pushed by the action plan to have all actions closed prior to the second SCAMPI B

OBSERVATIONS – SCAMPI B#2

- Used an external Lead Appraiser
- We used the same scope as the previous SCAMPI B#1
- We used a slightly smaller subset of the appraisal team members used in the SCAMPI B#1
- We shifted more interviews in to the virtual week 1 to provide more balance across both weeks
- Significant improvement in terms of number of findings from SCAMPI B#1

OBSERVATIONS – SCAMPI A

- Used the same external Lead Appraiser as the SCAMPI B#2
- We also kept the appraisal team the same as the SCAMPI B#2, even though we could have easily rationalized reducing the size of the team
- In addition, we kept the assignment of mini-teams to their respective projects/program the same; some benefits of this include:
 - Appraisal team familiarity of artifacts
 - Appraisal team familiarity with project/program specific terminology
 - Appraisal team familiarity with project defined processes
- We piloted the CMMI Next Gen appraisal sampling which significantly reduced the timeframe of the appraisal. As part of the pilot:
 - The appraisal plan, and the initial project scoping were presented to the CMMI Institute 60 days prior to “Conduct Onsite”
 - The CMMI Institute adjusted the appraisal sampling based up the new SCAMPI criteria
 - This resulted in a reduction in what the appraisal team were required to review as part of the appraisal
 - This reduction did not affect the outcome of the appraisal or the integrity of the appraisal process
 - As part of the pilot effort, feedback from the appraisal team was provided to the CMMI Institute to evaluate the effects of the proposed SCAMPI updates.

LESSONS LEARNED AND BEST PRACTICES

- Adequate funding and resources for process improvement
- Knowledge of both the CMMI model and statistical concepts is required so pairing mini-teams with seasoned practitioners allowed us to leverage an array of diverse skill sets from across the broader team (e.g., training, software development, Lean Six Sigma, etc.)
- Training of High Maturity concepts was integral to expanding the size of the appraisal teams
- On-going coaching/mentoring “war room” with the project staff focused on process implementation and relevant evidence collection
- SCAMPI B after action planning was extremely impactful in helping the projects/program and the organization unit close gaps and enhance capabilities
- Pay very close attention to scope when defining projects versus programs to ensure that the appropriate projects are being appraised

QUESTIONS?

- Questions from the audience?

CONTACT



- Ryan Bays
- Lead Technologist
- Phone 678-360-3274
- Email: bays_ryan@bah.com



- Tunde Oyalowo
- Lead Associate
- Phone 301-825-7566
- Email: oyalowo_tunde@bah.com