SEI SCAMPI B/C Project: A Partner's Perspective

Larry McCarthy
Motorola Point-of-Contact

3rd CMMI Technology Conference
Hyatt Regency Tech Center, Denver
November 17-20, 2003

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Agenda Topics

- The SEI's SCAMPI B/C Project
- Motorola Pilot Examples
- Learning and Opportunities
- What's Next

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Why the SCAMPI B/C Project?

- **Industry needs…**

- **SEI needs…**

ARC - Appraisal Requirements for CMMI

Characteristics	Class A	Class B	Class C
Amount of Objective Evidence Gathered (relative)	High	Medium	Low
Ratings Generated	Yes	No	No
Resource Needs (relative)	High	Medium	Low
Team Size (relative)	Large	Medium	Small
Appraisal Team Leader Requirements	Lead appraiser	Lead appraiser or Person trained and experienced	Person trained or experienced

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

The SEI's Vision of a "Family of Appraisal Methods"

Appraisal methods that:

- meet the requirements and constraints of the ARC
- produce "upwardly compatible" outputs
- reduce overall appraisal effort
- match the organization's needs

C

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

The SCAMPI B&C Collaboration

- DoD Acquisition
- Honeywell
- Intel
- Lockheed Martin
- Motorola

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Project Charter

1. Purpose
2. Team Members & Stakeholders
3. Scope
4. Goals / Outcomes
5. Project attributes & Ground Rules
6. Sign-off

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Work Products

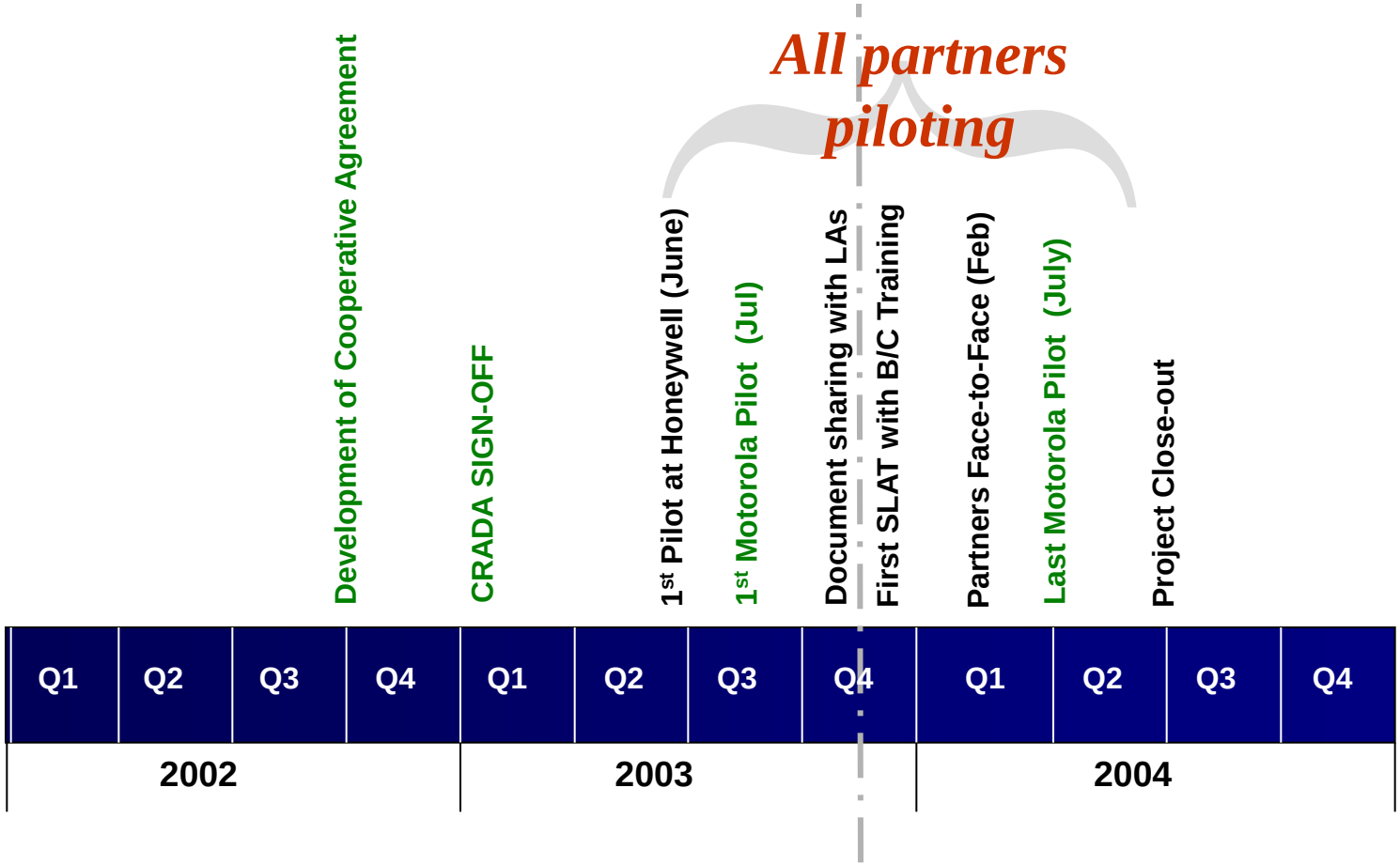
- ✓ Requirements – ARC, User Needs
- ✓ Appraisal Types
- ✓ Framework Document
- ✓ Prototype Pilot Methods & Reports
- Method Descriptions
- Training Assets
- Release Support

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Project Timeline and Milestones



MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Appraisal Types

- Getting Started
- ✓ Mini-appraisal
- Gap Analysis
- ✓ Improvement Monitoring
- Delta Appraisal
- Incremental Appraisal
- Benchmarking Appraisal

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Project Pilots – Motorola Examples

- **GSG Canada –** SCAMPI C (July)
  - CMM L5 organization targeting Engineering PAs
- **GSG Canada –** SCAMPI B (December)
  - Monitor improvements over 5 months since SCAMPI C
- **CGISS UK –** SCAMPI C (November)
  - Baseline status of practices in target profile, identify actions
- **CGISS COP –** SCAMPI C (November)
  - Baseline target profile in a small hardware engineering organization

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Project Pilots – Motorola Examples (2)

GSG Canada

- **Overview**
  - **Mature CMM L5 operation**
  - **Transitioning to CMMI**
  - **Cover Engineering and "new" PAs**
  - ***Purpose: to baseline current practices***
- **SCAMPI C Appraisal**
  - **4.5 days, ~8 participants, team size of 6**
  - **Covered 10 PAs, ~3hrs/PA**
  - **PIIDs with embedded findings, risk matrix**

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Internal Pilots – Motorola Examples

- **GSG Russia**
  - **Mature CMM L5 operation**
  - **Transitioning to CMMI**
  - ***Purpose: to baseline current practices***

- **GSG Chile**
  - **New, small Center, no rating**
  - **Planning for CMM assessment**
  - ***Purpose: to baseline current practices***

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Internal Pilots: Motorola Examples (2)

- GSG Russia
  - 4.5 days, ~30 participants, team size of 3
  - Cover 22 PAs, ~3hrs/PA
  - PIIDs with embedded findings, risk matrix
- GSG Chile
  - 2.5 days, ~15 participants, team size of 2
  - Cover 18 KPAs, ~2hrs/KPA
  - PIIDs with embedded findings, risk matrix

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Motorola Internal Pilot Products

SCAMPI Plan/Schedule

Begin	End	Duration	Activity	Location	Participants
MONDAY, October 20, 2003					
10:00 AM	11:00 AM	1:00	Kick-off Meeting	Presentation room with projector	All participants and invited staff
11:00 AM	12:00 PM	1:00	Participants Training - Presentation	Presentation room with projector	All participants (appraisers, subject matter experts)
12:00	1:00 PM	1:00	Participants Training - Practice	Presentation room with projector	All participants (appraisers, subject matter experts)
1:00 PM	2:30 PM	1:30	Lunch		
2:30 PM	5:30 PM	3:00	Session 1: RM Session 2: SAM Session 3: MA	(3 separate areas and workstations)	Mini-Team A: LM, SMEs, MEDIA Mini-Team B: SC, SMEs, MEDIA Mini-Team C: DH, SMEs, MEDIA
5:30 PM	7:30 PM	2:00	Wrap-up	Team work room	Appraisal Team
TUESDAY, October 21, 2003					
Begin	End	Duration	Activity	Location	Participants
10:00 AM	1:00 PM	3:00	Session 4: VER Session 5: TS Session 6: PI	(3 separate areas and workstations)	Mini-Team A: LM, SMEs, MEDIA Mini-Team B: SC, SMEs, MEDIA Mini-Team C: DH, SMEs, MEDIA
1:00 PM	2:30 PM	1:30	Lunch		
2:30 PM	5:30 PM	3:00	Session 7: RD Session 8: VAL Session 9: RSKM	(3 separate areas and workstations)	Mini-Team A: LM, SMEs, MEDIA Mini-Team B: SC,SMEs, MEDIA Mini-Team C: DH,SMEs, MEDIA
5:30 PM	7:30 PM	2:00	Wrap-up	Team work room	Appraisal Team
WEDNESDAY, October 22, 2003					
Begin	End	Duration	Activity	Location	Participants
10:00 AM	1:00 PM	3:00	Session 10: IPM Session 11: DAR Session 12: QPM	(3 separate areas and workstations)	Mini-Team A: LM, SMEs, MEDIA Mini-Team B: SC, SMEs, MEDIA Mini-Team C: DH, SMEs, MEDIA
1:00 PM	2:30 PM	1:30	Lunch		
2:30 PM	5:30 PM	3:00	Session 13: OPP Session 14: CAR Session 15: OID	(3 separate areas and workstations)	Mini-Team A: LM, SMEs, MEDIA Mini-Team B: SC, SMEs, MEDIA Mini-Team C: DH, SMEs, MEDIA
5:30 PM	7:30 PM	2:00	Wrap-up	Team work room	Appraisal Team
THURSDAY, October 23, 2003					
Begin	End	Duration	Activity	Location	Participants
10:00 AM	1:00 PM	3:00	Session 16: Low Priority PA Review	Team work room	Appraisal Team
1:00 PM	2:30 PM	1:30	Lunch		
2:30 PM	5:30 PM	3:00	Analysis & Outbriefing Preparation	Team work room	Appraisal Team
5:30 PM	7:30 PM	2:00	Wrap-up	Team work room	Appraisal Team
FRIDAY, October 24, 2003					
Begin	End	Duration	Activity	Location	Participants
9:00 AM	12:00 PM	3:00	Analysis & Outbriefing Preparation	Team work room	Appraisal Team Members
12:00 PM	1:30 PM	1:30	Lunch		
1:30 PM	3:30 PM	2:00	Outbriefing Meeting	Presentation room with projector	All participants and invited staff
3:30 PM	5:00 PM	1:30	Postmortem	Team work room	Appraisal Team

Compliance Risk Matrix

PIID

Practice Implementation Indicator Documents

CMMI Feature	Description	Project Reference	Artifacts	Comments	Risk
TS SG 1	Product or product-component solutions are selected from alternative solutions			**Generic comment for TS guidelines: Make more clear what is mandatory and what is optional (carefully study all SHOULD and SHALLs in TS guidelines) so that all CMMI practices are covered unambiguously.**	
TS SP 1.1-1	Develop alternative solutions and selection criteria	c\srio\doc\hld\RIO_PM	Technical Solution Guideline: http://sqe.spb.mot.com/processvob/process/guidelines/ts_guideline.pdf Architectural Meeting Minutes: http://sqe.spb.mot.com/processvob/template/project/Text/arch_meeting_minutes.txt	TS guidelines define criteria; Not yet fully deployed	Medium
TS SP 1.1-2	Develop detailed alternative solutions and selection criteria.	c\srio\doc\hld\RIO_PM	Technical Solution Guideline: http://sqe.spb.mot.com/processvob/process/guidelines/ts_guideline.pdf Architectural Meeting Minutes: http://sqe.spb.mot.com/processvob/template/project/Text/arch_meeting_minutes.txt	The process to develop alternate solutions defined in the guidelines with selection criteria; to be fully deployed	Medium
TS SP 1.2-2	Evolve the operational concept, scenarios, and environments to describe the conditions, operating modes, and operating states specific to each product component	OLCC for EBTS Phase 1iden_projects \olcc_ph1\acg\doc\hld	Functional Specification Template "Operational Scenarios" http://sqe.spb.mot.com/processvob/template/project/func-spc.doc	Operational scenarios part of template for functional sepcifications. To be fully deployed	Medium

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Key Learning from the Project

- **Strong reuse of SCAMPI assets and thinking reinforces values of the appraisals**
- **Level of focus (detail) in the SCAMPI C's held have been valued by the organizations and the appraisal teams**
- **The collaborative nature of the SCAMPI C's held have been useful to teach and mentor the participants**
- **Correlation in CMM / CMMI maturity (and it's assessment)**

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Key Opportunities for the Project

- Continuously improve the coordination of the limited project resources in order to meet the project's objectives and timeline
- Start to define the methods being used as soon as possible
- Begin to discuss and draft the "rules" for SCAMPI B/C (e.g., who can lead a SCAMPI B?)
- Define specific measures to support the release and use of the methods

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

What's next

- Complete the planned pilots
- Continue to capture learning
- Define the SCAMPI B/C methods
- Release the methods to the Industry

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.

Questions & Contact Info

?

Larry McCarthy

L.Mccarthy@motorola.com

MOTOROLA

intelligence everywhere™

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2003.