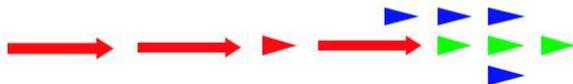# CAPABILITY COUNTS 2016

Annapolis, MD | May 10th – 11th

No Money, No Time, Need Results: Now What? Bootstrapping Your CMMI Program

Richard Bechtold, PhD
Abridge Technology
President

Abridge Technology

Organization Overview

Standard "Small Business" Client Organization

- 25 or fewer FTEs
- Contractor to the government (or more typically, as a subcontractor)
- Usually 1 or 2 very strong personnel in one or more of
    - Management
    - Technical / Services
    - Support Areas (HR, Accounting, etc.)
    - Business Development
- Considerable amount of 'client-side' constraints (such as staff augmentation work)
- Highly competitive contract environment

Organization Overview - 2

Standard "Medium Business" Client Organization

- 300 or fewer FTEs
- Contractor to the government; often a variety of agencies, some Defense, some Civilian
- Often have onsite personnel who have been in their positions for 10 to 20+ years (usually under a variety of contractors)
- The organization may have already been through one or more major quality initiatives, possibly with mixed results
- Considerable investment often has already been made in organizational procedures, templates, and related assets (but adoption may nonetheless be rather sparse)

Business Challenge

Typical Challenges for Small Businesses

- Very limited budget

- Need results in 3 months (or less)

- General rank-and-file resistance to top-down change

- Considerable "corporate knowledge", but very little of it has been captured

- Significant risk of single points of failure

- Little or no experience with framework compliance

- Ambiguity and confusion regarding distinctions between policy, requirements, standards, guidelines, etc.

Business Challenge - 2

Typical Challenges for Medium Businesses
- Very limited budget
- Need results in for an upcoming RFP
- Uncertainty regarding what part of the organization should be the focus of improvement efforts
- Fairly entrenched attitudes regarding how things should be done
- Significant pride in "just knowing from experience"
- Competing corporate initiatives
- Key executives with almost no knowledge of the contents of the CMMI, nor its structure, intent, usage, etc.
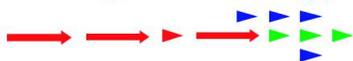
The Plan

Implementation Strategies

- Don't start over—build from what you have
    - Remove (or relocate) what isn't essential
    - Leverage reliable sources of best practices (CMMI, ISO, Agile, Scrum, IEEE, COBIT, etc.)
- Implement the easiest areas first
- Prioritize by "highest likelihood of success"
- See results within 30 days
- Avoid "great claims" -- Only acknowledge measureable victories

The Plan - 2

Implementation Strategies (cont.)

- Establish an improvement team of at least two people—even if process related work is only a part-time responsibility for each

- Manage, plan, and implement your process improvement efforts like any other project (i.e., assign a manager)

- Do NOT confuse compliance with improvement
  - PPQA – Compliance with identified and selected requirements, standards, frameworks, procedures, etc.
  - OPF – Reviews expressly seeking opportunities to improve efficiency and effectiveness of processes

The Plan - 3

Implementation Strategies (cont.)

- Keep policy statements as minimalist as possible (maybe only a few sentences to cover a key area)
- Keep procedure descriptions direct, clear, focused, and also fairly minimalist (maybe only a few pages to describe the activities of a key process)
- Put a significant majority of your process information, ideas, preferences, guidance, examples, etc., into "supplemental material"
- Develop training material before the procedure (i.e., be sure you can "picture" a given process before attempting to document it)

The Plan - 4

Implementation Strategies (cont.)

- When defining processes…
    - Do NOT ask local experts to develop the documentation
        - They often will tend to document everything they know (and it's way too much for a typical user)
    - Instead, ask a good technical writer to interview the local expert, and document the key concepts
- Avoid working in isolation
    - When a procedure or artifact is reasonably close to usable, go ahead and release it for 'beta'
    - Collect feedback from others, incorporate, and continue improving

The Results

Typical Outcomes

- Rapidly functional "pocket PAs" (RSKM, DAR, MA) capturing and retaining corporate knowledge

- Improved clarity of required vs. optional

- Improved processes, AND improved attitudes

- Reduced (eliminated?) false dichotomy between process improvement and business development

- Visible and objective data for marketing process-related efforts (and victories) as competitive advantage

- Increasing intrinsic understanding of benefits—even when no longer a contract requirement

Lessons Learned

Essential Principles

1. Start with what you have; augment w/ published best practices
2. Seek very brief "version 1" development and deployment
3. If it looks like it'll cost too much, you are approaching it wrong
4. Trust your instincts: if it makes no sense, there's another approach
5. Collect, analyze, and report clear "victory data"
6. Connect/blend/merge process efforts with business development efforts
7. For real: focus on improving each person's work-life

NOTE: Full presentation available at: www.abridge-tech.com

Lessons Learned - 2

Essential Principles (cont.)

8. Avoid common misperceptions:
   - "18 process areas will require 18 procedures"
   - "Our evidence needs to include the examples in the model"
   - "All projects have to implement everything"
   - "Once we achieve the target level, we are done"

9. Above all else, remember:
   - CMMI adoption has always been about improving your ability to change, and adapt, with increasing success
   - Even compliance is a lifestyle – not an end-state

Contact Information

Dr. Richard Bechtold

President; Senior Consultant

Abridge Technology; Broadlands, VA

703.729.6085

rbechtold@abridge-tech.com

rbechtold@rbechtold.com

www.abridge-tech.com

Biographical Summary

Dr. Bechtold is a senior consultant for Abridge Technology, a Virginia-based company he founded in 1996. ***Abridge Technology is a CMMI Partner*** and is authorized to provide CMMI Institute licensed training and appraisal services. Dr. Bechtold provides consulting, training, and support services in the areas of project management, process improvement, process definition, measurement, and risk management. Dr. Bechtold has assisted government and industry with implementing the Software CMM since 1992, the Acquisition CMM since 1996, and the CMMI since 2000. Dr. Bechtold's expertise spans organizations of all types and sizes, including multi-million dollar companies, Federal agencies, small businesses, and organizations with less than 10 personnel.