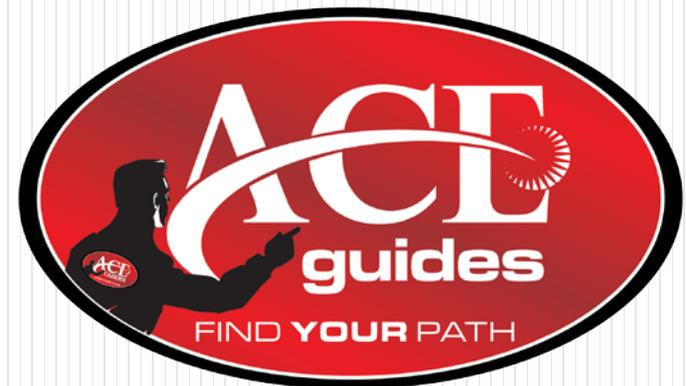


Shrinking the **Elephant**:

If Implementing CMMI® Practices Looks Like
More Effort than it's Worth, Let's Look Again

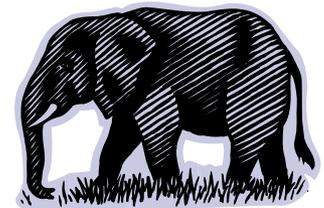
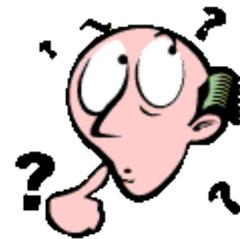
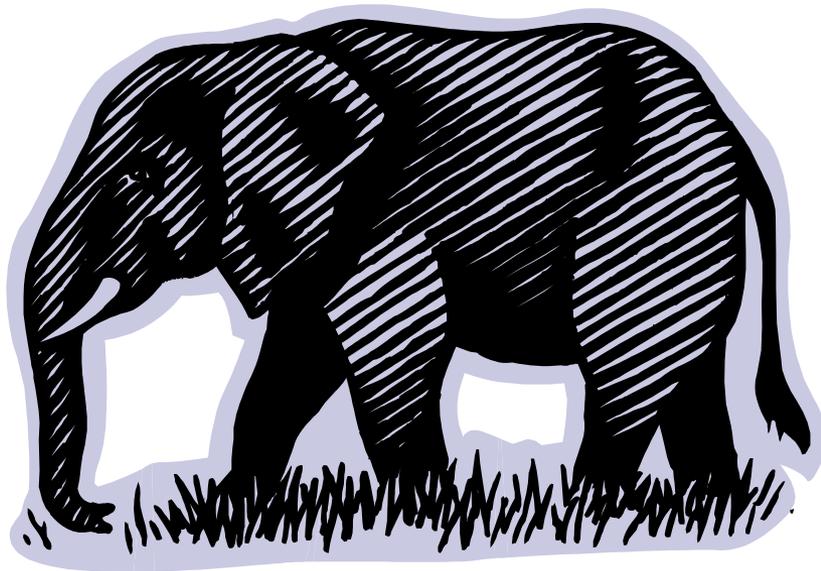
Sam Fogle
ACE Guides,
LLC

2009 CMMI Conference
(NDIA)



Agenda

- Dilemma
- Terms & Concepts
- Impact of Interpretation
- Inappropriate Interpretation



Dilemma



Organizational Training

- OT SP 1.4 Establish and maintain training capability to address organizational training needs.*
- What types of evidence do we normally see for this practice???

*From CMMI® Second Edition
2009 CMMI Conference
(NDIA)



SMALLCO (1)

- 20 FTEs
- Very small main office – most employees telecommute or work at customer site
- Project Alpha (10 FTE)
 - sub to large company, long term development contract.
 - Rated staged level 2 in single project SCAMPI 2 years ago (required by prime)
- Project Beta (10 FTE)
 - Maintenance support at customer site – mostly bug fixes and small enhancements

SMALLCO (2)

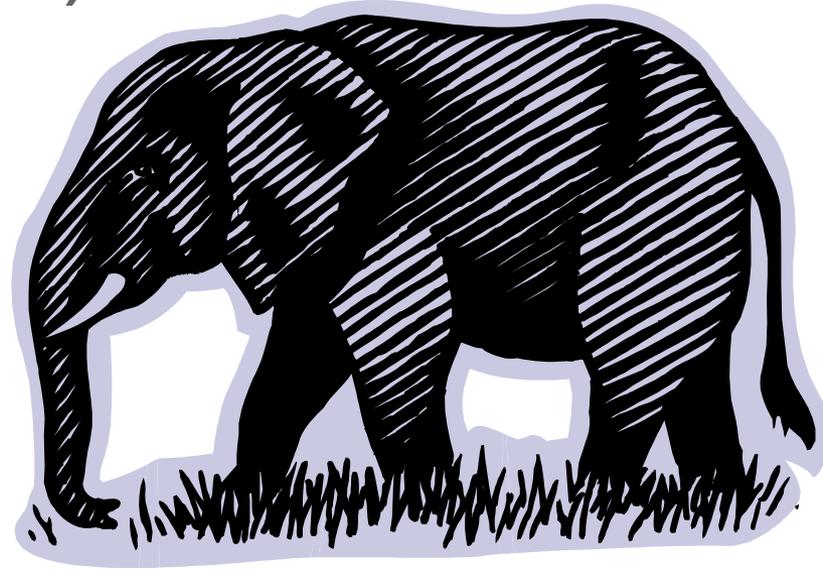
- SMALLCO is considering going to staged level 3 for the entire company but is concerned that many PAs and practices look overwhelming
- Training is one area of concern as they have no training facilities, courses, or instructors
- They typically send people out to training whenever it is required and use mentoring to get people up to speed on how work is done at SMALLCO

SMALLCO (3)

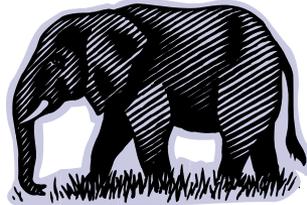
- They read over OT SP 1.4 and got concerned
- They brought in a well respected consultant (he has over 20 year of process experience at BIGCORP!) and asked him what they needed
- He prepared a list (It's on the board)
- The cost and effort is prohibitive for SMALLCO

SMALLCO (4)

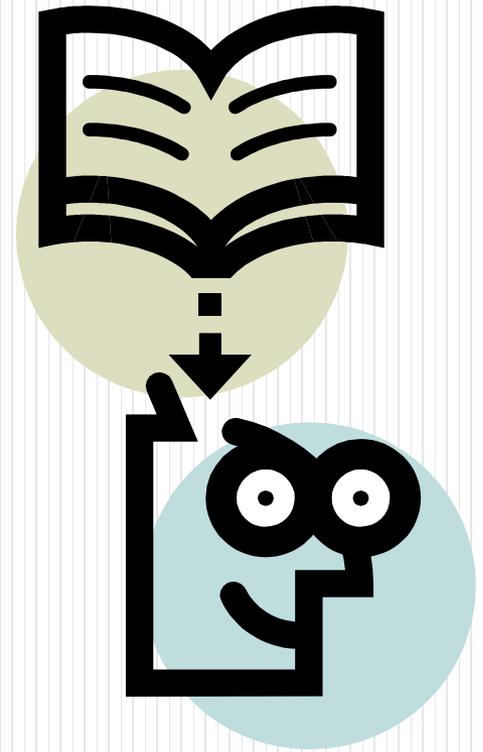
- Is staged level 3 outside their reach?



- Or is there another option???



Terms & Concepts



Appraisal Terms and Concepts

- What is required and what is expected? –
“Specific and generic goals are required model components; specific and generic practices are expected model components in that alternative practices could be implemented that are equally effective in achieving the intent of the associated goals.”*
- A practice may occupy a page or two in the CMMI. What part of that material is “expected”?
- Can we ignore the rest???

*From the SCAMPISM A, V 1.2: Method Definition Document

Appraisal Terms and Concepts (2)

- Alternative Practice –

“A practice that is a substitute for one or more generic or specific practices contained in CMMI models that achieves an equivalent effect toward satisfying the generic or specific goal associated with model practices. Alternative practices are not necessarily one-for-one replacements for the generic or specific practices.”*

*From the SCAMPISM A, V 1.2: Method Definition Document

Supplier Agreement Mgmt

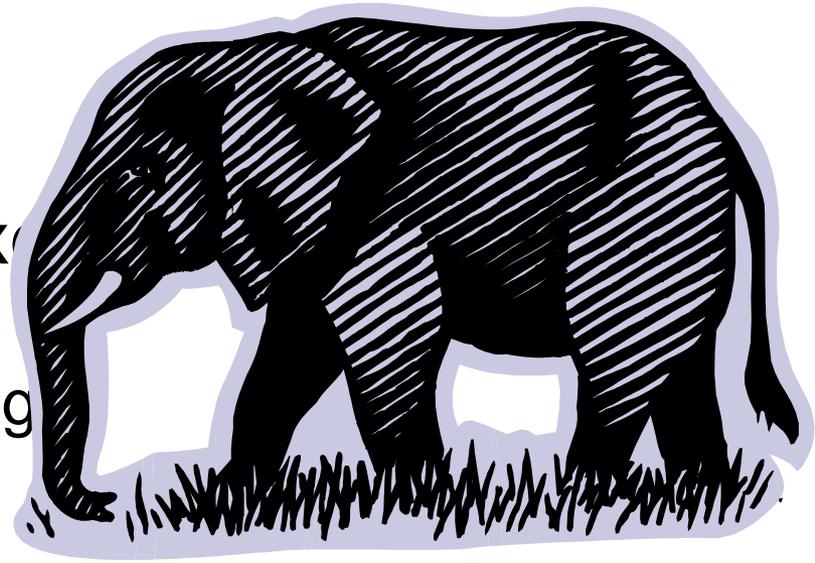
- SG1 – Agreements with the supplier are established and maintained
 - SP 1.1 – Determine the type of acquisition for each product or product component to be acquired
 - SP 1.2 – Select suppliers based on an evaluation of their ability to meet the specified requirements and established criteria
 - SP 1.3 – Establish and maintain formal agreements with the supplier
- Suppose we have a project where we are contractually bound by the customer to use a particular supplier.
- This pre-selection of the supplier by the customer becomes an alternate practice that addresses the intent of SP 1.1 and 1.2 and allows the goal to be satisfied.

Impact of Interpretation



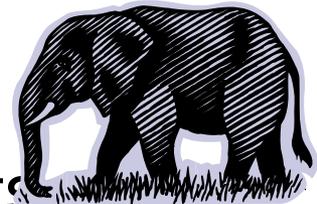
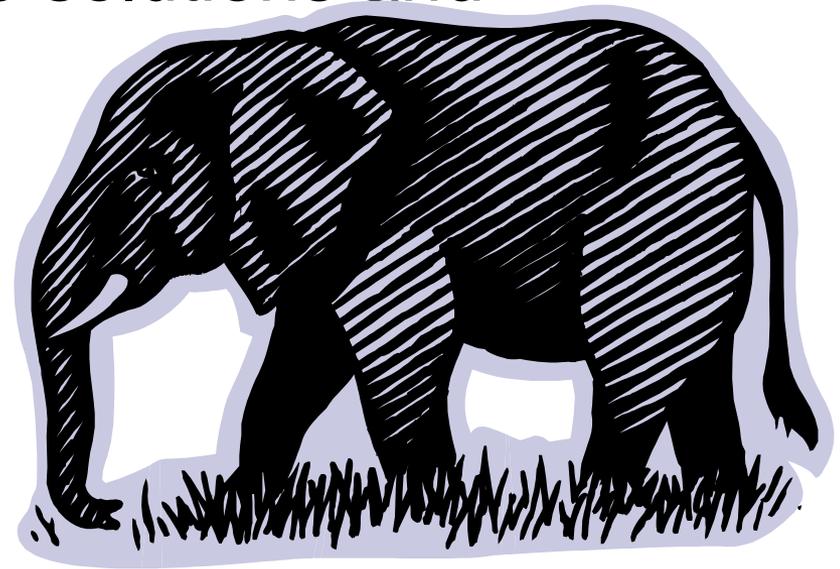
Validation

- Discusses establishing validation:
 - Environment
 - Procedures
 - Criteria
- SMALLCO does bug fixes
 - They don't see how they can implement prototyping or do demonstrations of their proposed fixes.
 - Is having their users participate in SRS (that discuss the changes) and test appropriate validation for them???

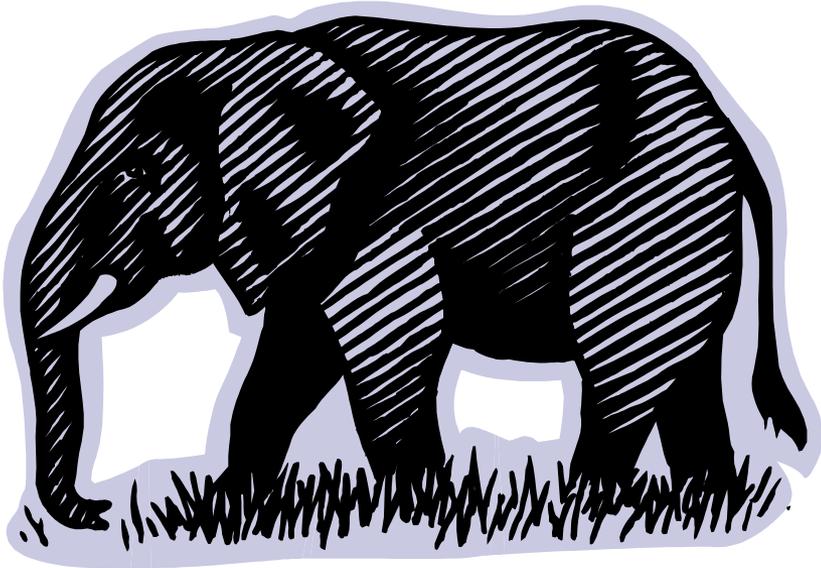


Technical Solution

- SP 1.1 Develop alternative solutions and selection criteria
- Does SMALLCO need to do this for every bug fix?
- Or is it appropriate for them to apply these techniques only to the larger changes where requirements are being introduced or changed?

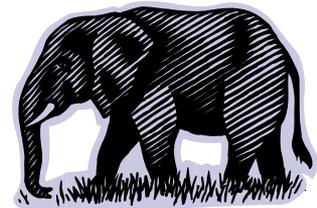
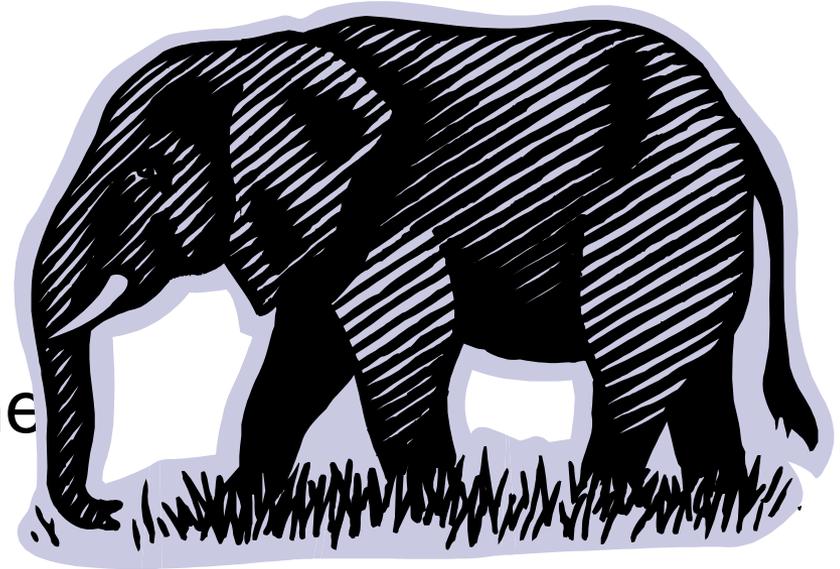


Have you seen any elephants?



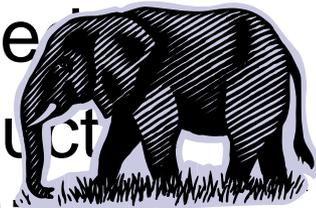
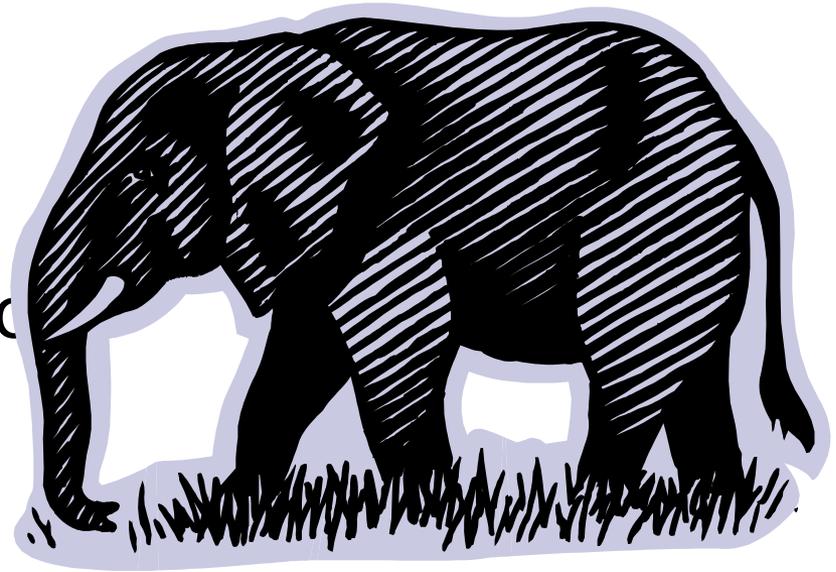
Product Integration

- SP 1.1 Determine the product component integration sequence
- How can SMALLCO show an integration sequence when they only change one line in one component?
- There are times when a simple/trivial implementation is appropriate

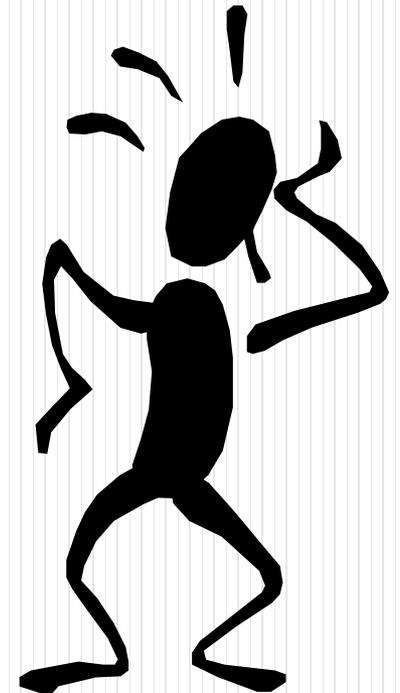


Generic Practice 2.7

- Identify and involve relevant stakeholders
- Does SMALLCO need to create a stakeholder involvement plan?
- Or might they appropriately implement this practice by documenting who needs to review or approve each work product and who needs to attend which meetings?

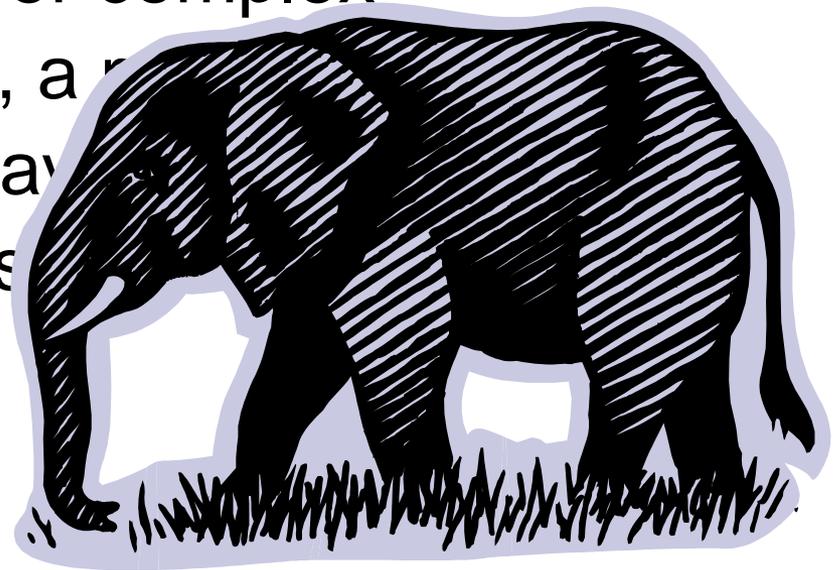
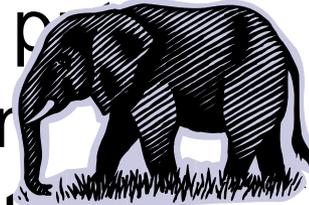


Inappropriate Interpretation



Take Away

- So now we can all go home and put these “easier” implementations in place in our organizations. Right?
- Maybe not! In large and/or complex organizations or projects, a more robust implementation may be appropriate and necessary to satisfy the goal.



Interpretation Suggestions

- Read every practice through a few times
- Try to answer these questions:
 - Why is this practice here?
 - What is the risk if it is absent or poorly implemented?
 - What is my organization doing now to address this risk?
 - Can I use or enhance what is done now to achieve a reasonable implementation of this or an alternative practice?
 - Or does reason dictate a more robust implementation?

Final Thoughts

- “It can’t be as simple as THAT!”
 - Sometime it is
- Do what makes sense
- Appropriate
- Reasonable

Questions



Contact Info

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