Transitioning From a CMMI Implementer to an Appraisal Team Member

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The Set Up

- After years of helping projects implement the CMMI, the author was asked to become a member of a CMMI SCAMPI A Appraisal Team.

- This presentation will share my experience in making this transition.

- With this experience fresh in mind, this presentation will also inform potential appraisal team members about what to expect when joining a CMMI appraisal team.

- Suggestions will also be made on how to make the appraisal process easier and more rewarding for all stakeholders.

Going from supplier to reviewer

What's It Like To Go From Being The Assessed To Being The Assessor?

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The Set Up

Adjusting to a change in viewpoint

How enlightening is this change in viewpoint?

Benefits to team

Surprises, irritants, frustrations, and confusions

Rewards

Lessons Learned

Climbing the CMMI Experience Ladder Mirrors the CMMI Model Levels of Maturity

- Each level of CMMI experience is a step to better understanding
  - Starts with the view that there needs to be a better way
  - Seeing it work is believing
  - Helping others: by your students you will be taught
  - A view from the top of the mountain is revealing

Level 5
Assess an Organization

Level 4
Bring to a Project

Level 3
Use on a Project

Level 2
Initial Understanding

Level 1
No clue

The Ad Hoc Sink Hole

Adjusting to A Change in Viewpoint

- Is there a conflict of interest going from the role of evidence gatherer to the role of objective evaluator of evidence?
  - Having helped some of the projects to prepare for the appraisal, would shifting to the appraisal team bias my judgments?
  - Would frustrations experienced during evidence collecting resurface during evidence review?

- How would project workers react to my change in position?
  - Would they resent my acting as inquisitor?
  - Would they take me less seriously than the other appraisers?

- Time horizon changed from months to weeks

- Being at home, would I be able to concentrate on this project, forsaking all others?
  - Subject to being called away to handle an emergency
  - Family obligations

The Lead Appraiser Wisely Used The CMMI Model to Produce a High Maturity Team
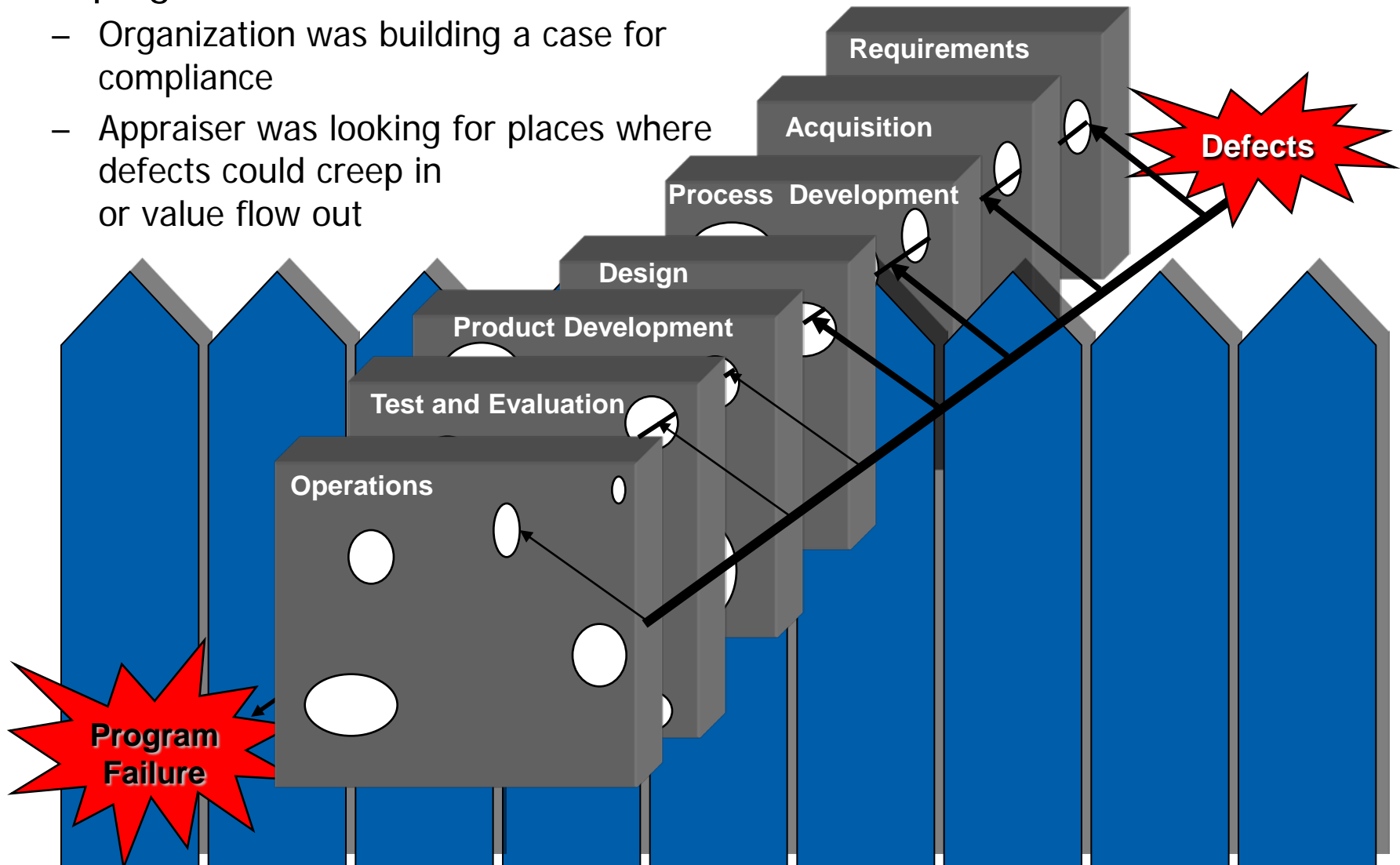
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- Good use of CMMI Generic Practices
  - Organizational policy (GP 2.1) – SEI guidance
  - Organizational processes and tailoring (GP 3.1) – Process and procedures
  - Plan the process (GP 2.2) – Schedule, milestones, training
  - Provide resources (GP 2.3) – Binders, Excel workbook, coffee
  - Assign responsibility (GP 2.4) – Formed teams, divvied up work
  - Train people (GP 2.5) – CMMI & Appraisal Team Member training provided
  - Manage configurations (GP 2.6) – Team repository used
  - Involve Stakeholders (GP 2.7) – Constant communication with all involved
  - Monitor and Control (GP 2.8) – Morning and midday schedule adjustments
  - Objectively Evaluate Adherence (GP 2.9) – SEI oversight
  - Senior management review (GP 2.10) – Constant updates to Sponsor

- Ensured team consensus before moving on
  - Explained actions and decisions points in great detail
  - Used three thumb position polls

To See with New Eyes is Enlightening

- Gained a better insight into how the CMMI model works
  - New perspective provided by venturing into a different organization
  - Better understanding of what lead assessor is looking for, and why

- Helped gauge the effectiveness of the evidence gathering effort

- Helped gauge the usefulness of evidence gathered

- Highlighted the importance of stakeholder involvement
  - Adherence to schedule and procedures was important to success
    - Late arrivals to interviews very disruptive
    - Needed even playing field between sets of interviewees
  - Delivery of promised artifacts needed to be timely
 - Senior management involvement assured goals were being met at several levels

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- Helping the wall builders find the holes to be filled in
  - Organization was building a case for compliance
  - Appraiser was looking for places where defects could creep in or value flow out

Requirements

Acquisition

Defects

Process Development

Design

Product Development

Test and Evaluation

Operations

Program Failure

8

The Value of Being There

- Helped appraisal team members working other projects find what they were looking for faster
    - Able to guide them to significant artifacts like schedules or plans
    - Provide explanations previously provided without need for interviews

- Drew on experiences on past assessments to help get consensus on what is typical

- Gained new insights into best practices

- Heard about other experiences and environments
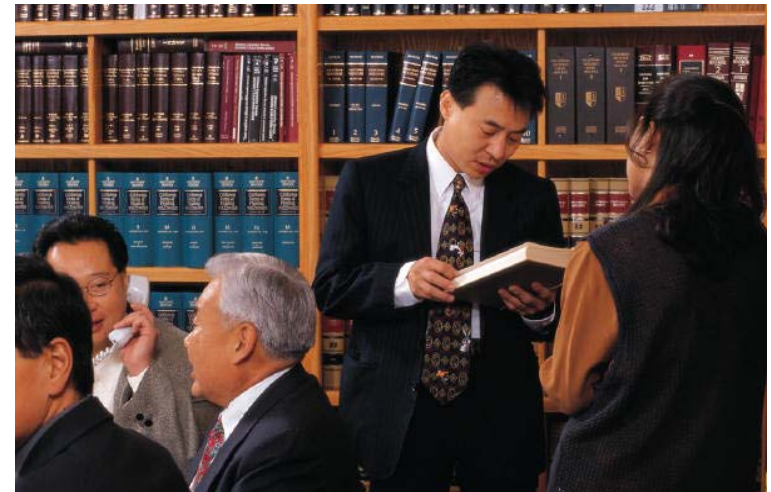
Surprises, Irritants, Frustrations, and Revelations

- Interrelationships between Specific Practices in addition to Generic Practices was surprising
  - GP 2.5 (Train People) vs Project Planning SP 2.5 (Provide Needed Knowledge and Skills) was obvious, but connection to OT was not.
  - Project Planning SP 2.3 (plan for data management) vs Process and Product Quality Assurance SP 1.1 (assess the configuration management process) was surprising

- No penalty for non-sequitur artifacts, Nomad would be disdainful
  - Having no clue as to what part of artifact provided was relevant to practice was frustrating
  - Hard to find a paragraph in a 300 page document

- Nothing is as constant as change
  - Needed to check freshness of artifacts
  - Two year old documents mean practice is no longer relevant, or audit system is not working

More Surprises, Irritants, Frustrations, and Revelations

- Redundancy of artifacts presented was frustrating
  - Wasted time reviewing the same evidence
  - Boring as well on the third and subsequent viewing

- Give the benefit of the doubt or assume the worse?

- Team discussions often clear up holes

- Looking for diamonds in the rough: Bring me a rock
  - Requests for additional evidence often frustrating

- Final view is like a fine Swiss watch
  - All parts interlocking to produce a smooth operation
 - Everyone working together to produce success

The Reward: A Great Learning Experience

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- A Master's Class in process improvement
  - Lots of stories
  - More examples of how to make it work right

- Environment was different but familiar
  - More hardware intensive
  - Worked as software supplier to hardware groups
  - Slightly different implementation of Northrop Gruman values
  - Good use of plans, processes and tools

- Slightly different view on processes highlighted their strengths and weaknesses
  - Quality assurance attitude very different from home organization
  - External lead compared processes to those found in other countries and domains

Lessons (re)Learned

- Climbing to new heights is always rewarding

- Not a difficult transition, just a more intense CMMI experience

- Easier getting volunteers if they knew it will be a learning experience

- Hard for team to move forward until everyone showed up

- Electronic tool versus hardcopy has its pros and cons
    - Easier to pile on irrelevant artifacts
    - Harder to find point of interest
    - Color coded sections a best practice
    - Annotated versions produce huge folders
    - Links allow less redundancy of documents
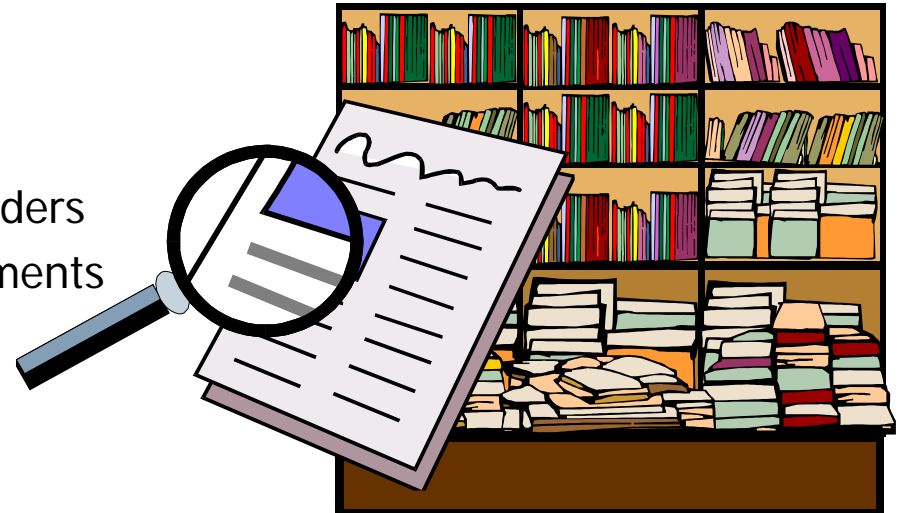
Lessons (re)Learned

- Consider not showing colors during draft findings to concentrate on significance of findings and its validity (don't worry about the score)

- Increase organization's understanding of the appraisal process
  - Senior management must not only sponsor the effort, it must lead the charge by exhibiting the same process-disciplined behavior that they expect the troops to adopt

- Some team members run on coffee

- Don't let a vegetarian order the food

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