Implementing CMMI Improvements in a New, Large Diverse Organization. Problems, Solutions & Should Haves

Natural SPI, Inc.
Donna Voight

TYBRIN Corp
Rick Long

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The Objective of This Presentation

We are hoping to share some of our successes so you can borrow some of the ideas, and some of the mistakes we made so you don't have to repeat them.

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The Starting Point

Newly formed organization

- Management team members not yet sure how to work together
- Still defining infrastructure, networks, repositories, timekeeping system, purchasing, security
- Relationships between CMMI and other process groups and projects not defined
- Multiple companies brought together in the partnership

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The Starting Point (cont)

- Four physical locations spread across 3 states
- Different cultures and customers
- Different levels of process expertise
- Different types of services provided
  - Development
  - Sustainment
  - Large, multi-year projects
  - Small, 1-week tasks

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Problems and Solutions that Worked

Problem:

- Diverse group of people didn't know how to work together

Solutions:

- Involved opinion leaders in the baseline appraisal
- Defined a common language, project, task, system
- Good practices were found and recognized from all areas

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Problems and Solutions that Worked

Problem:

- People had other jobs, hard to keep them focused

Solutions:

- Face to face meetings once a month
- Weekly teleconferences
- Sub-groups formed to develop process assets

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Problems and Solutions that Worked

Problem:

- Hard to track budget and other resources used, infrastructure not in place yet

Solutions:

- Manual tracking until time-keeping system in place
- Schedules converted to format everyone can read and emailed out

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Problems and Solutions that Worked

Problem:

- Hard to track progress and manage configurations, intranet not available to all groups

Solutions:

- Progress communicated and tracked in meetings
- Put someone in charge of CM for the group, made sure to email products to those with no access

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Problems and Solutions that Worked

Problem:

- Lack of definition of responsibilities and authority between CMMI and other process improvement groups

Solution:

- Define the key functional groups and their interrelationships, QA, Training, CM
- Make key members of the other groups part of the CMMI team

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Problems and Solutions that Worked

Problem:

- Some parts of the organization reluctant to be involved because of past efforts that didn't work

Solution:

- CMMI team members are senior, well-respected leaders
- Proven performance, it is working

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Problems and Solutions that Worked

Problem:

- Hard to manage the large geographically diverse organization

Solution:

- Two-tiered SEPG structure
  - Top-level organization has representation from the local SEPGs
  - Local SEPGs deploy processes at the different locations
- Extensive use of teleconferences and some travel

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Problems and Solutions that Worked

Problem:

- How to train the new processes

Solution:

- Training developed by the CMMI group
- Coordinated by local training points of contact
- Delivered by local subject matter experts
- Used the infrastructure that was in place for training ISO procedures

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Problems and Solutions that Worked

Problem:

- How to ensure end customer buy-in

Solution:

- Communication, newsletter keeps them informed
- Invite them to training on the new processes

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Things We Should Have Done Differently

We should have found a way to make the project important to all of the senior management

- Some team members were pulled back into their home organizations
- Not all team members given enough time to work on team
- Some disruptive changes in personnel

Maybe tie the success of the CMMI project to the senior management performance appraisals

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Things We Should Have Done Differently

We should have communicated status differently

- Plan for the 1st phase was interpreted as plan for entire fiscal year
- Insufficient funds for 2nd phase
- Need to rebuild momentum

The status report is now explicit about total required funds and released funds

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Things We Should Have Done Differently

We should have managed the working groups more closely

- Not all groups had sufficient level of expertise
- Interpreted silence as “ok”
- Some rework necessary to get different groups to have integrated solutions
- Caused by scaling back of resources in 2nd phase

The experts are now assigned more evenly and status meetings are more specific

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In Summary

- Involve the leaders from the different areas to build buy-in and respect
- Define the functional groups and their interrelationships
- Define the common language and use it to communicate in several ways
- Managing a group this geographically disbursed, takes extra travel and teleconferencing ability
- It takes extra effort to overcome infrastructure issues common to new organizations, allow extra time and effort

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Contact Information

Donna Voight
Natural SPI, Inc.
Donna@NaturalSPI.com
520-360-6863

Rick Long
TYBRIN Corp.
Rick.Long@edwards.af.mil
661-277-2429

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