Just-In-Time Training Scenarios:
What They Are &
How They Can Help Your Organization

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Topics

✓ Motivation

✓ What Are Just-In-Time Scenarios?

✓ Two Broad Scenario Types & Some Examples

✓ Sample Structure To Easily Locate Scenarios & Address CMMI GP 2.5 & OT Process Area

✓ Why Focus on “Stretch Points” & Example

✓ Questions/Discussion
Two Common Training Scenarios

**Agile Organization**

“We only hire people with the skills to do the job, so I don’t need to train my people”

**CMMI Mature Organization**

“We need to reduce our training costs to stay competitive”
Consider the Following Facts

**Agile Organization**

- Hiring people with right skills is a good strategy, but you can’t hire people from outside who know how you operate on the inside.

- CMMI model leads us to ask questions about training in each Process Area (GP 2.5), but it doesn’t tell you how “heavy” or “lean” the training should be.

- Experience indicates about 80% of most processes are written clearly. How are you handling other 20%?

**CMMI Mature Organization**

- We hear from the people in the trenches of many CMMI Mature organizations that their processes, and formal training don’t help them with the real job they face each day in the trenches.

- If you want to save cost, consider pruning your training material to focus on the key 20% where your people need help the most.

**Just-In-Time Scenarios Focus on the 20% Your People Need Help**
Further Motivation

✓ Traditional project management techniques and training often don’t fit today in agile organizations or traditional organizations moving in the agile/lean direction.

✓ Difficult for team members to break away for dedicated training time.

✓ Comprehensive training difficult to apply when needed.

✓ Nevertheless, training is needed in every organization.
What Are Just-in-Time Scenarios?

- An approach to training originally developed in support of agile organizations

- Proven to help both traditional & agile organizations

- Packaged to give people just what they need right when they need it
  - Each scenario addresses one and only one specific topic

- Material easily accessible on-line when they need it
  - Small accessible fragments
  - Hyperlinks from strategic locations
  - Includes rationale for stretch areas, as appropriate

- Tailored to each organization’s “culture”/”hot-buttons”
- Easy to update when your organization’s “hot-buttons”/maturity changes
Two Broad Types of Scenarios

- **Mechanics/Tool**
  - Often tool oriented
  - How do I do something very specific that I have to do, but because I don’t do it everyday it is easily forgotten-- and frustrating when I need to do it because I can’t remember where I learned it
  - Examples:
    - How do I conduct an informal peer review?
    - How do I enter a task in the task tool?
    - How do I identify a risk

- **Decision/Stretch**
  - Areas not as straight forward
  - Some level of subjectivity involved
  - How do I know if I have tested enough?
  - When do I need to have a formal peer review?
  - When should I write down minutes and action items from a meeting?
Example: Peer Review

1. When do I need to call a Formal Peer Review?– click here

2. How do I conduct an informal Peer Review?– click here

Just-In-Time Scenarios are like having a personal coach ready to help you just when you need it?
Example: Measurement & Analysis

How are measures used in the organization?—click here

✓ 1. How Are Measures Used in the Organization?

Just-In-Time Scenarios are like having a personal coach ready to help you just when you need it?
When Do I need to call a Formal Peer Review?

✓ The vast majority of our work is handled through informal peer reviews because we work primarily on existing products
✓ Formal peer reviews may be required for major new development
✓ The need for a formal peer review is determined by the Project Lead working with the Division Manager considering the following criteria:
  • Complexity/Size of new design
  • Risk
  • Criticality of change to customer
How Are Informal Peer Reviews Conducted & What Evidence is Required?

Informal Peer Reviews are expected to occur throughout development including:
• When code is checked into a library (lead review)
• When a teammate asks for help (code or document)
• …
• The evidence of our peer reviews can be found in…
How Are Measures Used in the Organization?

✔ The objective of our measurement program is to help the project lead manage the project.

✔ The project lead uses the following measures to manage the project and reports these measures to Senior Management using the Senior Management brief template:

  - Requirements
  - Cost/financials
  - Schedule
  - Staffing
  - Resources
Sample Structure To Easily Locate Scenarios & Address CMMI GP 2.5

**Project Management**
- ✓ Project Planning
- ✓ Project Monitoring
- ✓ Risk Management

**Engineering**
- ✓ Requirements
- ✓ Design
- ✓ Test

**Support**
- ✓ Peer Reviews
- ✓ Quality Assurance
- ✓ Config Management

Structure inside each:
- Tools/Mechanics
- Decisions
- Stretch

Only add scenarios on "as need" basis

A Lean/Value-Added Training Plan Demonstrates Support for GP 2.5 Each Process Area
Why Focus on “Stretch” Points?

✓ People know how to behave the way they are behaving today

• When new people come in they learn from those around them

Not saying ignore existing desired behavior-- **highlight** -- but don’t have to focus on it, whereas…

Focused on **stretch points** and related **rationale** because change takes time, and people respond best when they understand why

Caution: Because CMMI says so, never valid reason why…

Usually limited resources
Example Stretch: Minutes & Action Items

Do I need to write down minutes & action items?— click here

✓ 1. Do I need to write down minutes & action items?

Just-In-Time Scenarios are like having a personal coach ready to help you just when you need it?
Approach to Minutes and Actions

Do I need to write down minutes and action items from meetings?

- Agile teams commonly use daily stand-ups

- To force meeting minutes and formal actions could undo the value of these streamlined meetings

However, as Agile organizations grow it is easy for issues to fall through cracks

Next slide…
Approach to Minutes and Actions (cont)

CMMI doesn’t require meeting minutes and documented action items

However, it does expect you to **analyze and manage issues**

Recommend: Use agile team task list and a criteria for when documented action items required

*Example: Using criteria to aid agility & performance*

• **Criteria**
  
  *If action can be resolved within 24 hours doesn’t need to be written, but resolution must be followed up at next daily standup meeting*

*Otherwise manage action through team task list*
Questions and Discussion

Questions

What 20% Could best help your organization?

Discussion