Raytheon

A Program of Training for CMMI®-based Process Improvement

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® Capability Maturity Model, Capability Maturity Model Integration, Capability Maturity Modeling, CMM, and CMMI are registered in the U.S. Patent & Trademark Office by Carnegie Mellon University.

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The focus of this presentation

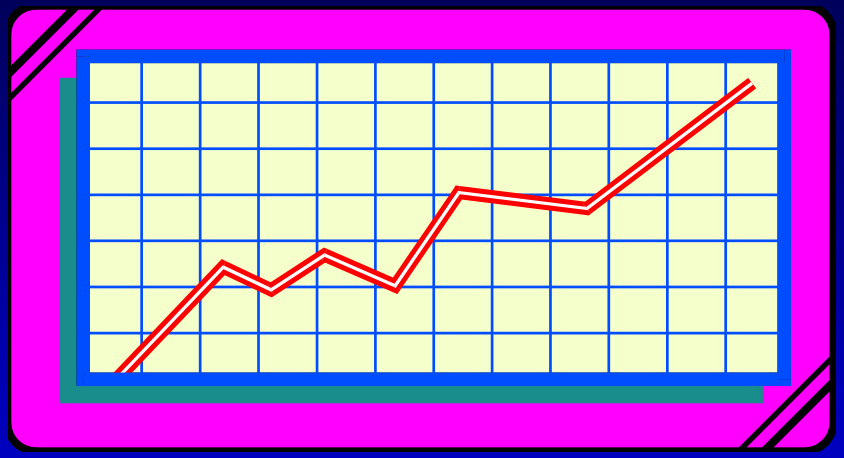
- The Training Capability Raytheon has established for people involved in CMMI-based process improvement.

- The Students
  - Managers of organizations doing CMMI-based process improvement.
  - Members of Process Groups
  - Members of the organizations

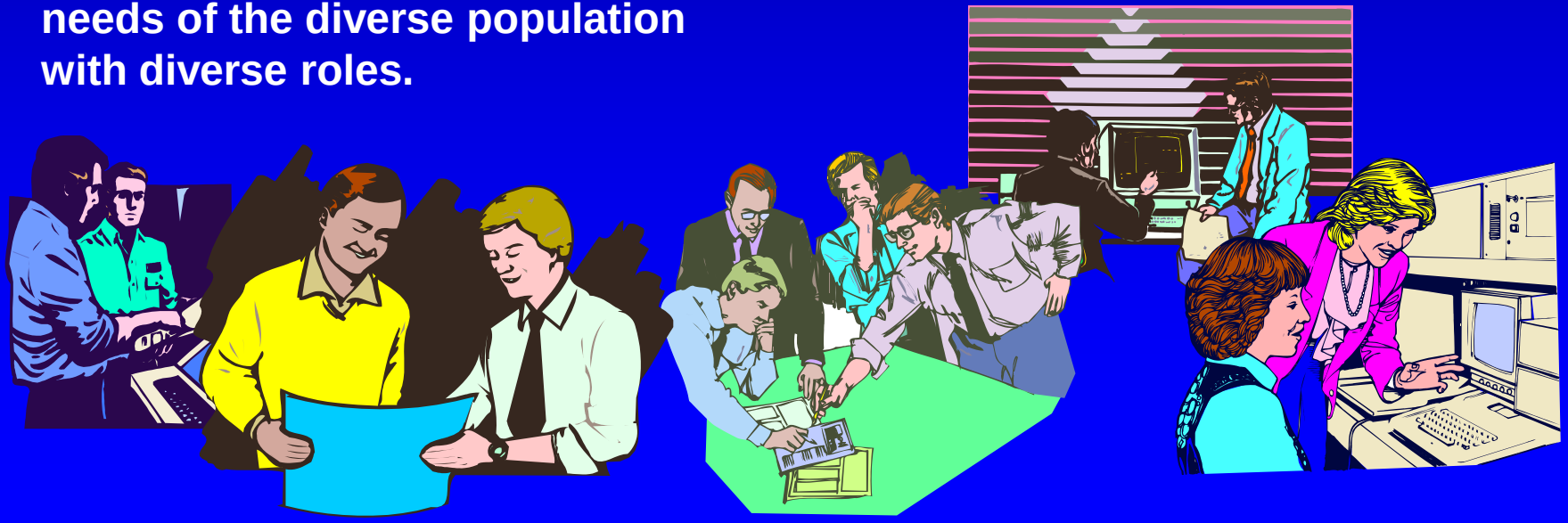
- The Families of Subjects
  - Process Improvement
  - The CMMI Product Suite
  - Transitioning to CMMI
  - CMMI Appraisals

What is a Program of Training

- First the Purpose:
  - Develop the skills and knowledge of people so they can perform their roles effectively and efficiently.
  - Train the people performing or supporting the process as needed



- A Training Suite needs to be provided to address the varying needs of the diverse population with diverse roles.



Learning Options

- Classroom
- Workshops
- Computer-aided instruction/ e-learning
- Guided self study
- Facilitated videos
- “Chalk” talks
- Brown-bag lunch seminars
- Mentoring
- Structured on-the-job training

The 50,000 ft view in the company

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Integrated Product Development System *provides an integrated set of best practices for the entire product development life cycle using a program tailoring process.*

Raytheon 6 Sigma *guides us to use CMMI and IPDS as tools to deliver value to customers and integrate industry best practices.*

CMMI *provides guidance for creating, measuring, managing, and improving processes.*

CMMI is our process improvement roadmap

Raytheon Six Sigma Is Our Process Improvement Method

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Principles of Raytheon Six Sigma

- Specify value in the eyes of the customer
- Identify value stream; eliminate waste and variation
- Make value flow at pull of the customer
- Involve, align & empower employees
- Continuously improve knowledge in pursuit of perfection

R6σ Experts are graduates of a 200 hour program

R6σ Specialists are graduates of a 16 hour program

R6σ is our process for process improvement

Software Engineering Institute Resources

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- Transition Partner
  - Authorization for instructing Intro to CMMI
  - Authorization for Lead Appraisers
  - Intro to CMMI instruction provided by Raytheon instructors
  - Appraisal Team training provided by Raytheon instructors
- Intermediate Concepts of CMMI
- CMMI Awareness
- Transition Materials
- Mentoring by Authorized Lead Appraisers

Other External Resources

- NDIA
  - CMMI Transition Workshop
- Software Productivity Consortium membership
  - Training
    - Defining Process Architectures
    - Transitioning to the CMMI
    - CMMI Implementation Strategies
  - Materials
    - Practical Interpretations of the CMMI - Guidebook
  - Mentoring by Authorized Lead Appraisers
- Other companies providing Appraisal Services
  - Participation in Raytheon training programs as students and presenters
  - Mentoring of the organization as they proceed on the journey
- Conferences and Workshops

Internal Resources

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- Awareness Training
- Model Training
- Transitioning
- Focus sessions on particular topics
  - Process Architecture
  - Measurement
  - Lessons Learned

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- Appraisal Training
  - Appraisal Teams
  - Organization
- CMMI Expert Team
- Enterprise Process Group Workshop
- Project Managers Workshop

Enterprise Program Ties Businesses together

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W. Swanson
CEO

G. Shelton
VP Corp. Engineering

RECP provides the "raw materials"

Raytheon Engineering Common Program (RECP)

- CMMI (Including Training Capability)
- IPDS
- Engineering Technology Networks & Councils
- Company-wide Engineering Symposia

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Businesses identify training requirements in their Improvement Plans

Business 1
1 or more sites

Business 2
1 or more sites

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Business n
1 or more sites

In Summary

- One course will not satisfy all needs.
- A program of training is needed to satisfy the diverse needs of a diverse organization.
- Take advantage of the many resources available and then supplement to fill remaining gaps.

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Questions

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