Getting Started in Process Improvement

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Class Format

- Discussion style class
- Includes hands-on activities
- Provides an overview of many different concepts

Ground Rules

- Consider all information provided during class to be confidential
- Respect the opinions of others
- Feel free to ask questions and discuss subjects of interest

Agenda

- **Improvement Programs**
  - Understanding Improvement Programs
    - What is an Improvement Program?   30
    - How are they structured?   30
  - Starting an Improvement Program
    - Why do you want to start a program?   30
    - Who should be involved?   30
    - How do you get buy-in from the org?   90

What is an Improvement Program?

An integrated method to organize efforts for change within an organization

Key Aspects

An ***integrated*** method to organize efforts for change within an organization

- Improvement programs must have a focus for activities.
- All individuals within the organization must have a common understanding about how the improvement programs work.

Key Aspects

An integrated *method* to organize efforts for change within an organization

- Improvement programs should follow a process or methodology.
- All stakeholders should be in agreement in the improvement methodology that will be used.

Key Aspects

An integrated method to *organize* efforts for change within an organization

- Improvement programs should be planned and tracked just as a development project is.

- Best practices, such as configuration management, should be used for artifacts within the Process Improvement Program.

Key Aspects

An integrated method to organize *efforts* for change within an organization

- An improvement program requires efforts from stakeholders within the organization.
- To be successful, there must be a commitment of resources to the improvement program. Typically, successful improvement programs have resources equivalent to 3-5% of the organization.

Key Aspects

An integrated method to organize efforts for change *within an organization*

- An organization must take ultimate responsibility for an improvement program. The responsibility cannot successfully be assigned to a third party.

- To be successful, the improvement program requires support from people at all levels of the organization.

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How are Improvement Programs Structured?

- Common Roles
  - Change Agents
  - Sponsor
  - Management
  - Individual Contributors

Change Agents

- Monitor the current state of the organization, and suggest changes
- Determine how the change should be implemented
- Train people in new ways of doing things
- Monitor organization to see how change is working

Sponsor

- Acts as liason between the change agents and management
- Communicates management goals to change agents
- Advises change agents on best methods to communicate with management
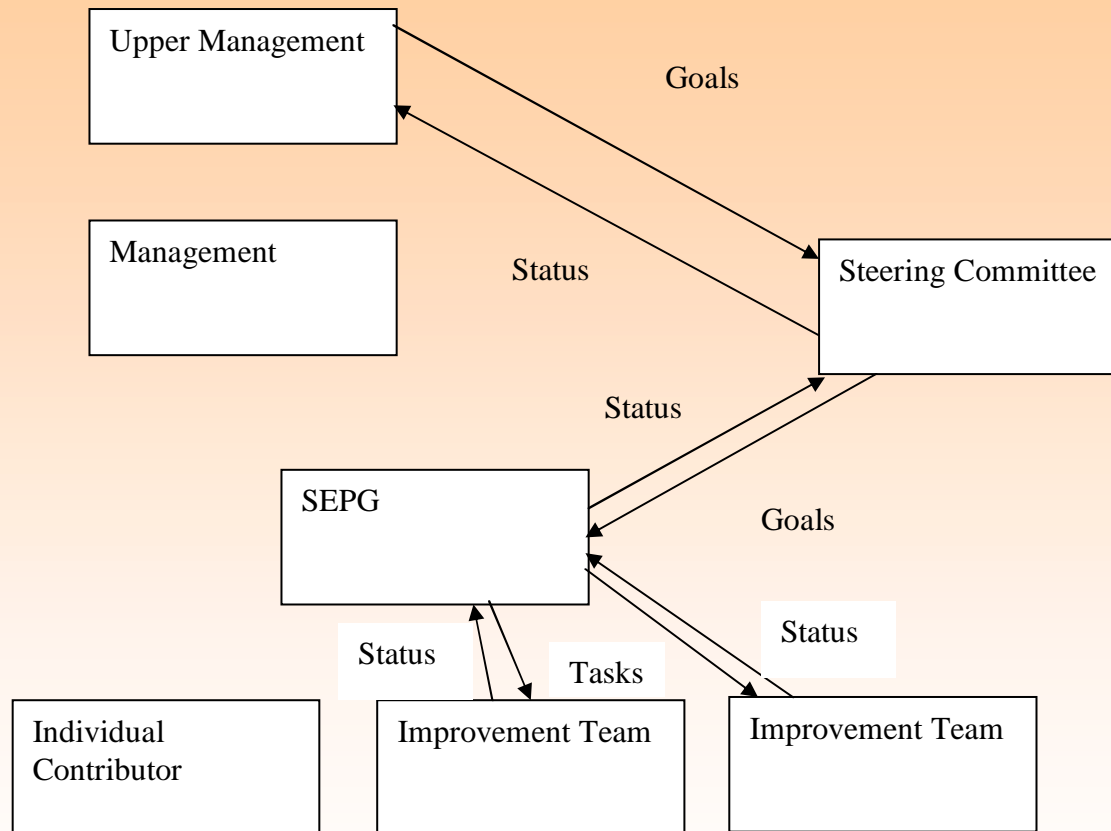
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Management

- Develop organizational goals
- Approve improvement projects
- Provide resources for the improvement program
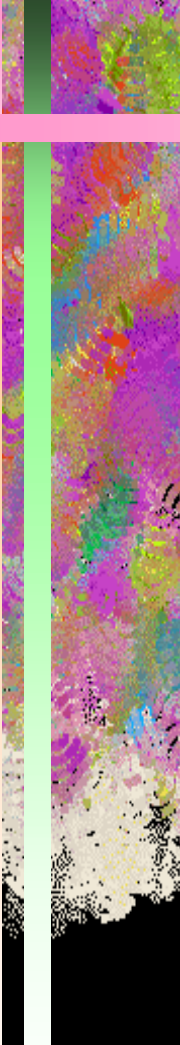- Provide support for the improvement projects when managing staff

Individual Contributors

- Participate in improvement projects
- Be receptive to trying new things
- Provide open feedback on experiences with the change

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Organization Diagram

Upper Management

Goals

Management

Status

Steering Committee

Status

SEPG

Goals

Status

Status

Tasks

Individual
Contributor

Improvement Team

Improvement Team

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Software Engineering Process Group (SEPG)

- Composed of change agents
- Typically, 5-7 people
- Represent a broad experience background
- Chartered with facilitating change within the organization

Software Steering Committee

- Composed of managers
- Typically, 5-7 people
- Monitor progress of the improvement program
- Provide resources for improvement
- Communicate progress to upper management

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Improvement Teams

- Focused on solving a specific problem
- Close connection with SEPG
- Represents people who have knowledge of the problem
- Develop improvement plans
- Report status to SEPG

Starting An Improvement Program

- Set personal objectives

- Determine scope

- Recruit a sponsor and confederates

- Plan the improvement program

- Prepare a presentation for management

- Make presentation

- Negotiate resources and goals

Set Personal Objectives

- Provides focus on how you'd like to see things change

- Provides motivation to continue working on the program

- Provides a method to measure progress in the program

Questions to Explore Personal Objectives

Why do you want to start an improvement program?

What problems are you trying to solve?

How would your ideal organization be different?

How will you know when the organization has become what you wanted?
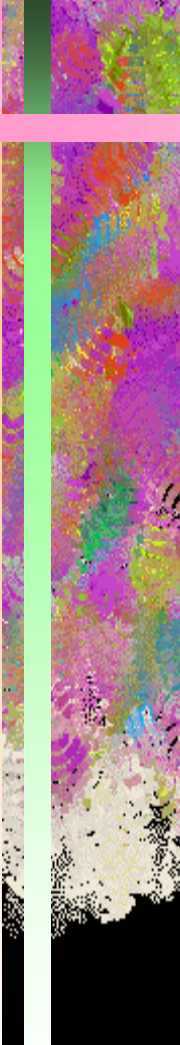
Developing Objectives

- Underline key phrases from the worksheet

- Look for themes that are repeated in different questions

- Ask yourself whether the statement represents a problem or a solution

Determine Scope

- Document the domain of people to consider for confederates and sponsor

- Validate objectives can be achieved within the proposed scope

- Determine the level of management buy-in necessary for this program

Examples of Scope

- Project vs. Division vs. Company
- Code Developers vs. Software vs. Engineering vs. Company

Advantages of a Smaller Scope

- Easier to meet with all stakeholders
- Changes usually happen faster since the target audience is smaller
- People included within the scope have more in common

Advantages of a Larger Scope

- Higher probability that all people involved in a change will already be part of the program
- Ability to effect more global changes
- Ensures more uniformity among groups

Recruit a Sponsor

- Provides insight into how management at your company works

- Provides an advocate at the management level

- Helps get resources for the improvement program

Characteristics of a Good Sponsor

- Influential
- High Credibility within all aspects of the organization
- Understands the problems in the organization
- Good communicator
- Interested in Change

Hints on Convincing the Sponsor

- Find out any special interests of his/hers, and determine how it might fit into the program
- Explain background about improvement programs and roles
- Share your vision of the future
- Show enthusiasm

Recruit Confederates

- Participate in developing a high level improvement plan

- Represent a group of people within the organization

- Help get support from individual contributors

- Usually, no more than 4-6 confederates in the beginning

Characteristics of a Confederate

- Well-respected
- Willing to share opinions
- Good cross-section of the community
- Shows a passion for improving things
- Able to contribute to the effort for at least a year

Time for Improvement Work

- At this stage, it is usually difficult to get a time commitment from the organization

- Like preparing a business plan, improvement efforts require an initial investment of time

- Time spent is not necessarily office time

Getting Started with the Team

- Develop Common Knowledge Base
- Develop Group Charter
- Develop Group Objectives
- Develop High Level Improvement Plan
- Prepare a Request to Management

Develop Common Knowledge Base

- Review and Discuss Material on Improvement Programs

- Read and Discuss Case Studies of Improvement Programs

- Discuss Approaches to Establishing an Improvement Program

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Develop Group Charter

- Determine your role within the organization
- Document how the SEPG interacts with other existing groups
- Determine the Scope of the group
- Document tasks within the scope of the group

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Develop Group Objectives

- Share individual objectives
- Discuss each person's objectives as a group
- Compare Objectives
  - What's similar?
  - What's different?

Develop Group Objectives (cont'd)

- Align Common Objectives
- Discuss Different Objectives
- Work together to develop objectives everyone can accept

Develop High Level Improvement Plan

- What?
- Why?
- How?
- Who?
- When?

What?

- What are you trying to achieve with the improvement program?
- Include group objectives
- Describe the program in terms all levels of the organization can relate to.

Why?

- Describe the background behind this effort

- Give examples of specific situations that convinced people to start this effort

- Examples should be obvious to people from all levels of the organization

How?

- Description of strategic approach to change
- Specific high level steps proposed to begin the improvement program

Who?

- Who do you need to implement your improvement program?
- How much time do you need from these people?
- What will they be doing?
- Include information for change agents, managers, and individual contributors

When?

- Propose a high-level time table for achieving results
- Remember change always takes longer than expected

Prepare a Request to Management

- Purpose:
  - Get resources for improvement
  - Develop understanding
  - Get support
  - Ask for oversight

Format

- Work with sponsor on ideal format
  - How should presentation look?
  - How long should it be?
  - When is the best time of day?
  - Who should attend?
  - Should there be a written proposal in addition?

Format (cont'd)

- If there should be a written proposal
  - How should it be formatted?
  - How long should it be?
  - When should it be delivered?
  - How should it be delivered?

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Prepare for presentation

- Request meeting well in advance
- Relate your objectives to organizational goals
- Research the audience
  - Are there any special interests?
  - Who typically makes decisions?
  - How are decisions made?
- Practice, Practice, Practice
- Ask for what you want

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Presentation Exercise

Possible Results of Presentation

- **No Agreement**
  - Drop it or Evaluate risks and continue underground

- **Some Agreement**
  - Arrange to discuss individual points of concern
  - If not all points agreeable, evaluate risks and continue

- **Total Agreement**
  - Congratulations!

What Makes a Successful Improvement Program?

- Participation at all levels
- Good Problem-solving Process
- Attention to the human aspects of technology transfer
- Feedback on all initiatives to understand the effectiveness of the improvement

What Next?

Set up Infrastructure

- Work with Management to set up Steering Committee

- Help Steering Committee set up charter

- Determine method for requesting resources for improvement

- Determine method for SEPG to report status

Steering Committee Training

- Learn Information needed to operate as a Steering Committee
- Set expectations
- Examples of areas of training
  - Improvement programs
  - Problem-solving Process
  - Improvement Plans
  - Metrics
  - Tracking Improvement Programs

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Communication with Individual Contributors

- Determine methods to regularly communicate information on the improvement program to individual contributors

- Determine training for individual contributors

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Questions?

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