Leading and Supporting Improvement Projects

Minnesota Office of Continuous Improvement

Agenda

1. Welcome
2. How people react to change
3. Project context
4. 5 Elements of project success
5. Launching your project
6. Implementing changes
7. Monitoring results
8. Sustaining improvements
Learning Objectives

• Understand how people react to change
• Learn the 5 elements for successfully managing the people-side and technical-side of an improvement project
• Learn criteria for selecting an improvement project
• Know the roles, steps and tools for conducting an improvement project
• Build skills through simulation exercises

Welcome

Please share your:
• Name
• Organization
What is an Improvement Project?

A targeted and managed initiative to enhance performance.
- Improving quality
- Reducing costs
- Improving speed

Targeted and Managed Improvements
(2-10% of resources)

Required Work

The Improvement Continuum

Incremental
(local improvement)
- Improving what exists

Systematic
(evolutionary)
- Distinctly different/better

Revolutionary
(breakthrough)
- Radically new & different/better
How do People React to Change?

- How do People React to Change?
- Video

**Source:** Bill Bridges’ Individual Transition Model

Are you managing the people-side of change?
Individual Change

Source: Bill Bridges' Individual Transition Model

Leadership Typically Starts the Change Process Sooner

http://mn.gov/CI
Leading and Supporting Improvement Projects

Individual Change Management

**Awareness**
- Why is the change needed?

**Desire**
- Why should I participate in and support the change?

**Knowledge**
- What do I need to do differently?

**Ability**
- Do I have the resources to change?

**Reinforcement**
- How will the change be sustained?

Think "ADKAR"

Source: Prosci

Improvement Areas

- Product and Service Strategy
- IT Systems
- Organizational Structure
- Knowledge and Skills
- Mindsets and Values

85% of our ability to improve performance resides within our process steps - how we do the work

http://mn.gov/CI
It’s about the Process

“A bad process will beat a good person every time”
- W. Edwards Deming

How Do We Straighten the Pipes?

The work of government is noble.

The people of government are amazing.

The systems of government are a mess.

Ken Miller
Extreme Government Makeover, 2011
### Some Best Practice Approaches

<table>
<thead>
<tr>
<th>CI Approach</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six Sigma</td>
<td>An approach for reducing process errors and variation using improvement experts, a structured method (DMAIC)*, performance measures, and tools.</td>
</tr>
<tr>
<td></td>
<td>* Define, Measure, Analyze, Improve, Control</td>
</tr>
<tr>
<td>Lean (TPS)</td>
<td>A mindset, method (PDCA/PDSA),* and set of tools for improving work areas and processes by eliminating waste. Some common Lean tools: 5S, Kaizen, standard work, error proofing, visual management, and 5 Whys.</td>
</tr>
<tr>
<td></td>
<td>* Plan, Do, Study/Check, Act</td>
</tr>
<tr>
<td>Process Preparation (2P)</td>
<td>2P - An approach for engaging the creativity and lean knowledge of subject matter experts to design or dramatically redesign a process. Typical applications: developing specifications for new computer software and developing a process for a new service.</td>
</tr>
<tr>
<td>WorkOut</td>
<td>A management tool for quickly identifying and prioritizing improvement opportunities within a process (value stream) by engaging people who do the work.</td>
</tr>
</tbody>
</table>

### Improvement Project Types

Your situation and project objective will define your project type.

- WorkOut
- 5S
- Problem Solving
- Kaizen Event
- Complex Improvement
- Design/Redesign
**Improvement Methods and Tools**

<table>
<thead>
<tr>
<th>Plan</th>
<th>Do</th>
<th>Study</th>
<th>Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define</td>
<td>Measure</td>
<td>Analyze</td>
<td>Improve</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td><strong>Tools</strong></td>
<td><strong>Tools</strong></td>
<td><strong>Tools</strong></td>
</tr>
<tr>
<td>• Project Charter</td>
<td>• Swim Lane Map</td>
<td>• Brainstorming</td>
<td>• Brainstorming</td>
</tr>
<tr>
<td>• Team Norms</td>
<td>• Value Stream Map</td>
<td>• Cause and Effect Analysis (Fishbone)</td>
<td>• Idea Box</td>
</tr>
<tr>
<td>• SIPOC Diagram</td>
<td>• Spaghetti Map</td>
<td>• 5 Whys</td>
<td>• Ranking and Voting</td>
</tr>
<tr>
<td>• Voice of the Customer Techniques</td>
<td>• Process Analysis</td>
<td>• Affinity Diagram</td>
<td>• 2 x 2 Table</td>
</tr>
<tr>
<td>• Stakeholder Map</td>
<td>• Control Chart Statistics</td>
<td>• Surveying Diagrams</td>
<td>• Decision Matrix</td>
</tr>
<tr>
<td>• Benchmarking</td>
<td>• Cost/Benefit Analysis</td>
<td>• Surveys</td>
<td>• Cost/Benefit Analysis</td>
</tr>
<tr>
<td>• Tollgate questions</td>
<td>• Performance measures</td>
<td>• Tollgate questions</td>
<td>• Implementation Plan</td>
</tr>
</tbody>
</table>

**CI Project Roles**

- **Sponsor** (Project Owner) → Make decisions, provide resources, ensure project success
- **Team Leader** (Project Manager) → Lead Team and coordinate implementation of changes
- **Facilitator** (CI Coach) → Facilitate improvement process & help team achieve project goal(s)
- **Team Member** (SMEs+) → Achieve project goal(s) and prepare deliverables
1. Small Group Exercise

1. Form small groups
2. Introduce yourselves
3. Label posters with your question
4. List team responses
5. Identify your top three
6. Select a team name
7. Select someone to report out
8. Small Group reports (2 minutes/group)
5 Elements of Project Success

1. Create or ratify project scope and goals
2. Provide frequent, 2-way communication
3. Show commitment in your words and actions
4. Allocate resources (people, time, materials, $)
5. Approve changes/recommendations
6. Manage resistance and remove barriers
7. Ensure implementation
8. Reward and recognize employees

*Sponsor is a verb – not a title*
Communication

Employee Communication Needs

<table>
<thead>
<tr>
<th>If there is No...</th>
<th>Message Received...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clear &amp; compelling case for the change (what and why)</td>
<td>“It’s not urgent”</td>
</tr>
<tr>
<td>2. Resources (staff, time, $)</td>
<td>“It’s not real”</td>
</tr>
<tr>
<td>3. Benefits of change (WIIFM)</td>
<td>“It’s not worth it”</td>
</tr>
<tr>
<td>4. Structured process and clear, achievable action plan</td>
<td>“It’s not going anywhere”</td>
</tr>
<tr>
<td>5. Staff knowledge, skills and abilities in place</td>
<td>“It’s not possible”</td>
</tr>
<tr>
<td>6. Reinforcement/consequences</td>
<td>“It’s not going to last”</td>
</tr>
</tbody>
</table>

Provide 2-Way Communication

- Communicate 7 times and 7 ways
- Provide a contact for people with questions, comments, or concerns
- Send the right message
- To the right audience
- At the right time
- From the right sender
- Through the right channel

Communicate before, during and after the project
Communication Plan

<table>
<thead>
<tr>
<th>Audience</th>
<th>Message Purpose and Content</th>
<th>Delivery Format</th>
<th>Sender</th>
<th>Date</th>
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<tbody>
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Employee Engagement

- People support what they help to create – early involvement builds buy in
- Morale and productivity increase when staff are able to improve their work
- Staff are closer to the customer, so typically know what is and is not working
- Tap into the wisdom of crowds – leverage staff talent
Engage the Right People

Selecting Team Members:
- Process participants – SMEs, Information suppliers, process customers
- Technical support – IT, facilities, Internal control
- 1 outside set of eyes – Not essential but good idea
- Balance CAVE dwellers

Resources

Do employees have:
- Clear performance expectations?
- Knowledge and skills?
- Ability / Time?
- Willingness?
- Equipment, materials, and tools?
- Encouragement?
Structured Approach

- Your situation will determine what approach and set of tools are most appropriate
- Manage both the technical and people-side of change
- Involve a CI coach, facilitator, project manager, or OD practitioner to determine the best approach
- Have a clear and realistic action plan
- Monitor and manage performance
- Adjust and sustain improvements

Project Phases

<table>
<thead>
<tr>
<th>Plan</th>
<th>Do</th>
<th>Study</th>
<th>Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define</td>
<td>Measure</td>
<td>Analyze</td>
<td>Improve</td>
</tr>
<tr>
<td>What results do we want?</td>
<td>Where should we focus?</td>
<td>What are the root causes of problems?</td>
<td>What solutions should we implement? Did the solutions achieve our desired results?</td>
</tr>
</tbody>
</table>
### Project Steps

<table>
<thead>
<tr>
<th>Plan</th>
<th>Define</th>
<th>1. Identify, prioritize and select improvement projects</th>
<th>2. Set project scope and goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Anayze</td>
<td>3. Understand the current situation</td>
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<tr>
<td>Analyze</td>
<td></td>
<td>4. Analyze the current situation (define root causes)</td>
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<tr>
<td>Do</td>
<td>Improve</td>
<td>5. Define a vision of success</td>
<td>6. Generate, evaluate and select improvements</td>
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<td>7. Implement changes and make adjustments</td>
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<tr>
<td></td>
<td>Study</td>
<td>8. Measure performance</td>
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</table>

### 1. Select Improvement Project

- Environmental scan - review performance data
- Go to the “Gemba”
- Benchmark other organizations
- Research promising practices
- Ask performance improvement questions
- Solicit input from stakeholders
  - Conduct a WorkOut
  - Surveys, focus groups, interviews, and suggestion boxes - only if you will act on the information and share results!
Leading and Supporting Improvement Projects

Project Selection Criteria

**Alignment**
- Strategic importance

**Impact**
- Project will benefit a large number of stakeholders/customers
- Process involves a lot of internal resources to administer
- Process is important and has high visibility to stakeholders/customers

**Need**
- Public perception/pressure regarding the need for improvement
- Process is not working well (complaints, rework, defects, unhappy staff)
- It is a core business process that affects many other processes

**Ability**
- Staff have the time and resources (equipment, materials, training, facilitation support) to participate in the project and implement changes
- Data is available to understand the current state and track performance

**Willingness**
- Manager is committed to making needed changes
- Employees willing to serve on a team and implement project changes
- Employees are dissatisfied with the current state (i.e., pain level is high)

2. Set Project Scope and Goal

- What is IN scope (first step & last step)?
- What is OUT of scope?
- What are the project parameters or givens?
- Elements of a good (SMART) project goal:
  1. Defines the topic/process
  2. Provides the direction of improvement (increase or decrease)
  3. Specifies improvement area (time, defects, % complete and accurate, cost, satisfaction)
  4. Includes current and targeted performance levels
  5. Is clear and easy to communicate
  6. Is approved by the project sponsor
  7. Aligns with the organization’s strategic priorities

Example: Reduce the time it takes to pack a meal box from 3 minutes to 1.5 minutes by <date>. 

http://mn.gov/CI
# Project Scenario Exercises

## A3 Project Charter

### Date: [Date]

### Sponsor: [Sponsor]

### Date: [Date]

### Sponsor: [Sponsor]

### Vision of Success

### Project Milestones & Schedule

<table>
<thead>
<tr>
<th>Project Milestones</th>
<th>Owner</th>
<th>Proposed Date</th>
<th>Actual Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Set project scope and goals (prepare Project Charter, engage team, collect data)</td>
<td>Sponsor/Team Leader, Facilitator</td>
<td></td>
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</tr>
<tr>
<td>2. Understand the current situation</td>
<td>Facilitator/Team</td>
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<tr>
<td>3. Analyze the current situation (root causes)</td>
<td>Facilitator/Team</td>
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<tr>
<td>4. Define a vision of success</td>
<td>Facilitator/Team</td>
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<tr>
<td>5. Generate, evaluate and select improvements</td>
<td>Team/ Sponsor</td>
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<tr>
<td>6. Implement changes and make adjustments</td>
<td>Team Leader/ Staff</td>
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<tr>
<td>7. Measure performance</td>
<td>Sponsor/Team Leader</td>
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<tr>
<td>8. Document standard work and lessons learned</td>
<td>Team</td>
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<tr>
<td>9. Sustain improvement</td>
<td>Team Leader/ Process Owner</td>
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</table>

### Resources

- Time commitment for 4-day Kaizen, excluding time to implement changes: Sponsor (6-10 hrs.), Team Leader (4-6 hrs.), Team Members (3-5 hrs.), Facilitator (60-90 hrs.)
- External Resources:
  - Equipment:
  - Materials:
Hold Project Kickoff

Purpose: Get everyone on the same page.

• Components:
  1. Subject area (project title)
  2. Why the project is needed – including risk of not changing (sticking with status quo)
  3. Anticipated customer and staff impacts (positive and negative)
  4. Team/staff expectations and responsibilities, including time commitment
  5. Contact person for questions, comments and concerns
  6. Answer staff questions
  7. Consider signing a “Project Commitment”
  8. Provide training or team building (e.g., CI/Lean)

Change begins with understanding why

3. Understand the Current Situation

• Prepare a SIPOC diagram
• Conduct a stakeholder analysis and define customer requirements
• Map the current state process
• Collect customer, program, and process data

For a deeper dive into defining and collecting metrics take the Process Improvement Measurement course
Define Customers Requirements

- **End Users**: people who use your products to achieve a desired outcome(s).
- **Brokers**: agents of the producer or users who transfer or assist someone to use your products and services.
- **Fixers**: agents who repair, correct, modify or adjust products for the benefit of the user.

In government, taxpayers are analogous to Investors. They are an important stakeholder, but not the primary driver of service design and delivery. End user customers are the most important customer and who we should have in mind when we design and deliver a service/product.

*Ken Miller, "We Don't Make Widgets”*

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4. Analyze the Current Situation

- **Identify process strengths and weaknesses**
  - What steps are value-added?
  - Where are the 8 Wastes?
  - How close is the process to an “Ideal” process?

- **Define root causes**
  - 5 Whys
  - Fishbone Diagram
  - Affinity and Relations Diagrams

To learn how to apply root cause analysis tools take the [Problem Solving course](http://mn.gov/CI)
5. Define a Vision of Success

- What does success look like for our customer?
- What does success look like for other stakeholders?

Brainstorming Rules:
- Defer judgment
- Strive for quantity
- Seek unusual & wild ideas
- Combine & build on ideas

- Set a quota for the number of ideas to ensure divergent thinking
Improvement Strategies

Handoffs and batching are common barriers to process flow

- Eliminate non-value added tasks
- Combine tasks or functions
- Concurrent processing
- Co-locate work
- Shift roles and responsibilities
- Eliminate or reduce batching
- Automate
- Solve Problems

Evaluate & Select Improvements

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>DIFFICULTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>high impact + low difficulty</td>
<td>high impact + high difficulty</td>
</tr>
<tr>
<td>low impact + low difficulty</td>
<td>low impact + high difficulty</td>
</tr>
</tbody>
</table>

Quick Hits!
7. Implement Changes

1. Pilot test improvements
2. Make needed adjustments (rapid tests of change)
3. Develop an action plan for full-scale deployment of changes
   - Include in your action plan how and when you will monitor performance
   - Have a strategy for identifying and resolving issues, including resistance
4. Implement changes ... and make adjustments

Change Readiness Ruler

- Pick one of your solutions
- Rate your comfort level with the change
- Share results with your team
- Discuss possible reasons for lower ratings, and what actions might improve readiness for the change
## Action Plan

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
<th>Status*</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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</table>

* **Green** = on schedule, **Yellow** = slightly behind schedule, **Red** = significantly behind schedule

## Track and Resolve Issues
Recognize and Manage Resistance

Lack of awareness is the most common reason for resistance

Remove Barriers

- Go to the Gemba:
  - Observe
  - Ask Questions
  - Learn
  - Show respect
- Ask “How is it going?” and “What can I do to help?”
- Engage in conversations to remove barriers
8. Measure Performance

- Productivity (cost/outcome or output)
- Customer Satisfaction
- Employee Satisfaction/Engagement
- Service Timeliness/Speed (lead time)
- % processes documented and streamlined
- Improvement in core business outcomes
- Cost savings and resources reallocated

Monitor Performance

- 30, 60, & 90-day status meetings with sponsor
- Assess results and capture learning:
  - Was the plan followed? (Yes or No) and Why?
  - Were desired results achieved? (Yes or No) and Why?

PROCESS PROFILE

<table>
<thead>
<tr>
<th>Title:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department/Office:</td>
<td>Owner:</td>
</tr>
<tr>
<td>Process Purpose/ Description:</td>
<td></td>
</tr>
<tr>
<td>Ideal Process / Desired Future State</td>
<td></td>
</tr>
<tr>
<td>Scope: (first and last step in process)</td>
<td></td>
</tr>
<tr>
<td>References: (applicable federal, state and district requirements/policies/procedures)</td>
<td></td>
</tr>
<tr>
<td>Customers: (from SIPOC Diagram)</td>
<td></td>
</tr>
<tr>
<td>• Customer Requirements</td>
<td></td>
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<tr>
<td>Suppliers: (from SIPOC Diagram)</td>
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<tr>
<td>• Supplier Requirements</td>
<td></td>
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<tr>
<td>Tool/Equipment Requirements</td>
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<td>Templates and Forms (inputs &amp; outputs)</td>
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<tr>
<td>Process Map/Steps</td>
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<td>Roles and Responsibilities (RACI Diagram)</td>
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<td>Glossary</td>
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<td>Training</td>
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<td>Performance Measures: (2-3 success indicators)</td>
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</tbody>
</table>

Capture Lessons Learned

- Review Project Charter and goals
- What did we accomplish?
- Where did we struggle?
- What questions do we still need to answer?
- What did we learn?
- What actions should we take to capture our learning and leverage our ability to improve our services for customers and staff?
10. Sustain Improvement

- Close action plan and transfer responsibility for sustainment to process owner
- Make sure people do not slip back to the “old way of doing things”
- When results are not achieved or sustained:
  - Performance potential is not realized
  - Momentum is lost
  - Credibility diminished
  - Cynicism and frustration increases
  - Status quo prevails
- Expect to improve a process multiple times (3-5 times) to remove wastes and get closer to the “Ideal”

Reinforce Desired Behaviors

<table>
<thead>
<tr>
<th>Consequences</th>
<th>Short-term</th>
<th>Long-term</th>
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<tbody>
<tr>
<td></td>
<td>Formal and informal recognition</td>
<td>Performance measures</td>
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<td>Performance reviews</td>
<td>Job descriptions</td>
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<td></td>
<td>Coach &amp; mentor</td>
<td>Promotion</td>
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<td></td>
<td>Celebrations</td>
<td>Celebrations</td>
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<td></td>
<td>Crucial conversations</td>
<td>Change job</td>
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<td>Probation</td>
<td>Demotion</td>
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<td>Corrective action plan</td>
<td>Fire</td>
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<td>Transfer</td>
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</tbody>
</table>
Change is a process...

Current State → Transition State → Future State

Not an event.

Emphasis on Action – not Perfection

"Action is the foundational key to all success."

Pablo Picasso
Keep in Mind...

Quality is everyone’s responsibility.
- W. Edwards Deming

Improvement begins with I.
- Arnold H. Glasgow

Learn More!

- Books
  - Ken Miller’s *We Don’t Make Widgets*
  - John P. Kotter’s *Leading Change*
  - Ken Miller’s *Extreme Government Makeover*

- Join the State of MN CI User Group and Yammer Network: yammer.com/minnesota continuousimprovementcommunity

- Take additional training
For More Information

• Minnesota Office of Continuous Improvement (previously Enterprise Lean)
  – Dept. of Administration, State of Minnesota
  – MN.gov/Lean | Lean@state.mn.us

• Cristine Leavitt | CI Consultant
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• Cathy Beil | Improvement Data Coordinator
  – Office: 651.201.2564 | Cathryn.C.Beil@state.mn.us

Thank You!