ACCELERATED IMPROVEMENT

A CONCENTRATED APPROACH FOR CONTINUOUS IMPROVEMENT



OFFICE OF QUALITY IMPROVEMENT

Accelerated Improvement

This guide to improving work processes describes a proven approach that compresses the overall time spent on planning and designing changes, which meets the need in higher education to realize high impact results with minimal resources. You will find helpful information needed to conduct an Accelerated Improvement project. It is recommended that groups review and discuss this material before starting a project.

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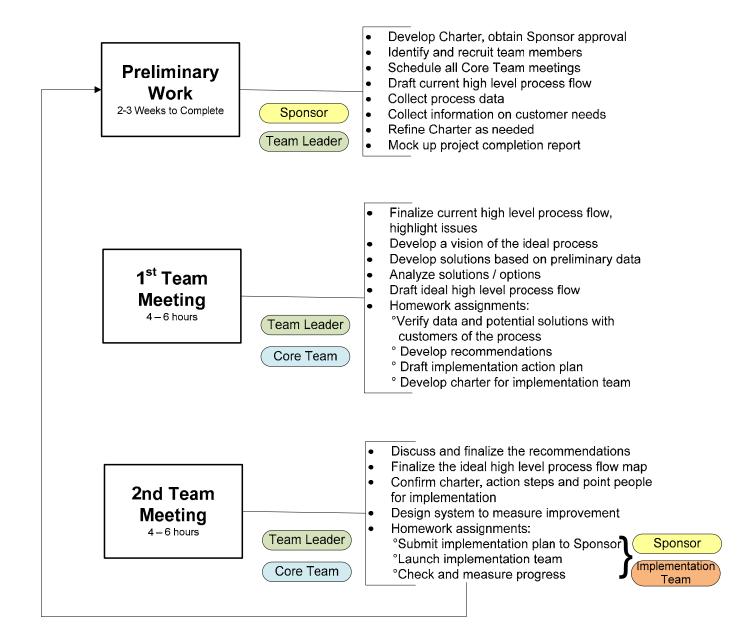
For additional information contact:

Office of Quality Improvement

Room 199 Bascom Hall, 500 Lincoln Drive Madison, WI 53706-1380 608-262-6843 FAX: 608-262-9330 quality@oqi.wisc.edu http://www.wisc.edu/improve

The Office of Quality Improvement would like to acknowledge Drs. Ian Hau and Ford Calhoun, whose concepts and methods informed the creation of the Accelerated Improvement model.

Accelerated Improvement Model



Introduction

Is work piling up or taking too long? Are mistakes being made that cause a lot of re-work? Is confusion about who is responsible for what causing lots of stress? Do there seem to be many "right ways" to do the work? It's easy enough to identify these tell-tale signs of a process that needs improving. But how do you change a troublesome process into one that is effective and efficient?

Accelerated Improvement is a structured approach that enables a group to quickly improve or create a process. Research shows that compressing the time spent analyzing and planning changes to a process maximizes the probability that improvements will actually be implemented.

Accelerated Improvement was developed specifically to meet the need in higher education for quick realization of high impact results with minimal resources. The approach is based on research by Dr. Ian Hau and Dr. Ford Calhoun of SmithKline Pharmaceuticals (now GlaxoSmithKline), which showed that short project duration and high impact results tend to go together. When their *Fast Cycle Change* model was applied to knowledge-based processes in their organization, they found that projects took about one-third as long to complete but delivered three times the impact and required only one-tenth as many resources (*Fast Cycle Change in Knowledge-Based Organizations: Building Fundamental Capability for Implementing Strategic Transformation*, SmithKline Pharmaceuticals Report No. 161, June, 1977).

Key Elements

In Accelerated Improvement, a key concept is compressing the overall time for the <u>project itself</u>. To accomplish this:

- 1. Appoint a team of 6-8 people involved in and most familiar with the process, and who will be responsible for implementing changes.
- 2. Clearly articulate the desired outcomes of the effort
- 3. Concentrate team meeting time into two very structured 4-6 hour meetings, about two weeks apart.
- 4. Conduct as much of the project work as possible outside the formal meetings (data collection, flowcharting, planning, etc.)
- 5. Design implementation into projects from the beginning
- 6. Focus on realizing impacts quickly and then iterate the improvement cycle frequently and rapidly

Accelerated Improvement Approach

Preliminary Work (2-3 weeks to complete)

Once a potential improvement is identified and the project is approved, the Accelerated Improvement process formally begins. Proper project initiation is the most important, yet often neglected, aspect of an Accelerated Improvement project. The **Sponsor** and **Team Leader** (together with the **Facilitator**, if one is involved) are responsible for gathering the information and commitment necessary to prepare for the first team meeting and to get the project team off to a good start.

The preliminary work usually includes the following tasks:

- 1. Develop a project charter to document the needs and expectations the sponsor has for the project and the team. (see charter template, page 9)
- 2. Identify and recruit appropriate team members.
- 3. Schedule and plan two team meetings, each 4-6 hours in length, about two weeks apart.
- 4. Draft current high level process flow describing the major 5-10 steps of the process.
- 5. Collect data about the process and information about the needs of those who use the process.
- 6. Mock up the project completion report as if the team has successfully completed the project.

1st Team Meeting (4-6 hours)

The first meeting begins with orienting the team to the Accelerated Improvement approach and to the results of the preliminary work. By the end of the meeting, the team will have developed a preliminary set of options for improving the process. There are typically a number of tasks that need to be completed between the two meetings, and these tasks will be given out as "homework assignments."

Specific agenda items for the first meeting (see sample agenda, page 10) include:

- 1. Provide a brief overview of the Accelerated Improvement process and key concepts (*Team Leader and/or Facilitator*)
- 2. Review mock up the team's final report to help clarify the end point of what the project team aims to achieve (*Team Leader and/or Facilitator*)
- 3. Confirm the project plan and timeline (Team Members)
- 4. Finalize the current high level process flow, highlighting the issues
- 5. Develop a vision of the ideal process
- 6. Develop potential solutions, based on the preliminary data
- 7. Analyze solutions / options
- 8. Draft an ideal high level process flow

- 9. Assign tasks to complete prior to the next meeting
 - Verify data and potential solutions with users of the process
 - Develop recommendations
 - Draft an implementation action plan
 - Develop a new charter for the implementation effort

2nd Team Meeting (4-6 hours)

Agenda items for the second meeting (see sample agenda, page 11) include:

- 1. Discuss and finalize the recommendations
- 2. Finalize the ideal high level process flow map, working out any interfaces among the recommendations
- 3. Confirm the charter, action steps and point people for implementing the recommendations
- 4. Design measures to monitor issues with the process itself as well as with the output of the process
- 5. Agree on owners accountable for the measures and for taking corrective action
- 6. Assign follow-up tasks:
 - Submit the team's report (built from the minutes of the two meetings) to the Sponsor for review
 - Launch the implementation team and schedule all meetings during the implementation phase
 - Check and measure progress

Implementation

Upon approval by the Sponsor, a team is formed to execute the implementation plan. The implementation team may or may not have the same membership as the process improvement team.

It typically takes about four to six weeks to make the changes necessary for actual work to be done using the new process design. Testing, training and measuring progress will be important components of the implementation. Briefly, the implementation plan will include the following steps (see implementation plan template, page 15):

- 1. Test the re-designed process through several iterations.
- 2. Compare the performance of the new process with the old.
- 3. Define a continuous improvement mechanism to ensure that performance is sustained or further improved.
- 4. Present data on the performance of the new process to the Sponsor.
- 5. Transfer responsibility for maintaining and continuously improving the process to the process owner, and disband the implementation team.

Team Roles and Responsibilities

Sponsor (Key Decision-Maker for the Process)

- Sets expectation for change by clearly defining the results to be achieved and the timeframe in which to achieve them
- Empowers the project team to achieve objectives by providing direction and resources
- Provides and communicates top management commitment, visibility and support
- Approves any policy and/or business process change that cannot be resolved by the project team

Team Leader (The Process "Owner")

- Oversees and coordinates all project activities responsible for success
- Provides momentum for project completion makes things happen
- Leads planning and preparation for meetings
- Monitors the project schedule, budget and quality and resolves conflicts affecting progress of the project
- Challenges and questions process and policy decisions
- Advises the Sponsor on project status
- Accountable for maintaining and continuously improving the performance of the process once the project is complete

Team Member (Has Hands-on Knowledge of the Process)

- Actively participates in team meetings
- Performs assigned tasks outside of meetings in the time frame assigned
- Participates in gathering data, identifying concerns, generating ideas, and documenting results
- Assists with developing solutions/recommendations and an implementation plan
- Provides regular updates on progress to Team Leader
- Works with Team Leader on issue resolution
- Recommends policy or process changes based on current and future business requirements

Continuous Improvement Resources

- 1. Facilitator Tool Kit, Office of Quality Improvement, www.quality.wisc.edu.
- 2. The Memory Jogger II (Brassard & Ritter, 1994), www.goalgpc.com.
- 3. http://www.skymark.com/resources/tools/management_tools.asp.

Appendix

Tools and Templates

TEMPLATE: Project Charter

University of Wisconsin – Madison

Insert Name of Sponsoring Unit Here Process Improvement Charter

Document Last Updated mm/dd/yyyy

Project Name	Insert Project Name here (include name of process to be improved)
Sponsor (decision-maker)	Insert name here
Project Lead	Insert name here
Core Team	Insert names here
Subject Matter Experts (Key players who can provide advice and facts)	Insert names here
Project Purpose (What do we want to accomplish, and why? What benefits will result?)	
Process Boundaries / Project Scope (What is team charged with looking at? What is NOT included?)	
Background Materials and Data	
Indicators of Success (What's important to the customers of the process? How will we know we've made progress?)	
Overview of Project Plan (Key steps, products to produce, and timeline)	Insert text here
Other Support Required (Expertise, authority, information, technology)	Insert text here
Sign-off	
Sponsor	Date:
(name, role)	

TEMPLATE: Agenda for Team Meeting #1

Meeting Aims

- Confirm, refine mock up completion report and project plan
- Finalize current high level process flow
- Draft the ideal process
- Develop and prioritize solutions/ideas to close the gap between current and ideal process
- Assign team members to analyze solutions, including customer reactions to "ideal"

Agenda

Time Agenda Item

Introductions & overview

Leader

- Overview of the Accelerated Improvement process and key concepts
- Review project scope, goals and timeline
- Confirm/identify "customer needs" why is the change needed?

Check "current" flowchart

- Is this the way the process generally works now?
- Are these the problems or obstacles with the current process?

BREAK

Develop "ideal" flowchart

How well does the proposed ideal process address the problems?

Develop recommendations

- Brainstorm: What solutions would improve the process so it is closer to the ideal?
- Select and prioritize solutions

Next steps

- Assign group members to analyze solutions, get customer/user feedback, and document recommended steps for making changes
- Summarize and remind team of next meeting

Materials:

- Mock up project completion report
- Flowcharting "how to" information
- Square Post-its[™]
- Markers
- Overheads of current high level process flow

TEMPLATE: Agenda for Team Meeting #2

Meeting Aims

- Agree upon solutions to close gap between current and ideal process and finalize recommendations
- Develop an integrated map of the new process
- Design measures to monitor progress and assign responsibility
- Develop implementation plan, including timeline, responsibility and communications

Agenda

<u>Time</u> <u>Agenda Item</u>

Recap previous meeting and progress to date

Leader

Discuss and finalize recommendations

- Summarize customer/user feedback and other analysis
- Integrate recommendations into a new process map
- Identify and select measures

BREAK

Draft implementation plan

- Identify major phases and corresponding implementation steps
- Establish timeline
- Assign responsibilities
- Develop communication plan

Wrap up

- Prepare for sponsor presentation
- Plan implementation meetings

Next steps

Review the implementation plan with Sponsor

Materials to send ahead to members:

- Agenda for Meeting #2
- Customer feedback on proposed solutions
- Notes from Meeting #1
- Analysis of solutions
- Current and ideal flowcharts
- Any new data
- Sample Project Plan Step Chart (Figure 1)
- Sample "Institutional Measures of Success" (See page 23)

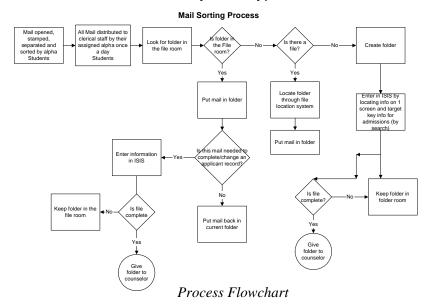
TOOL: Flowcharting

Commonly-used Symbols

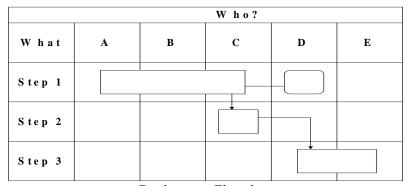


Common Flowchart Types and Uses

→ PROCESS FLOWCHART: The steps of the process are identified from beginning to end and are arranged in the order in which they are completed. This type of chart identifies major activities and decision points along with the important inputs and outputs of the process. It is the most commonly-used type of flowchart.



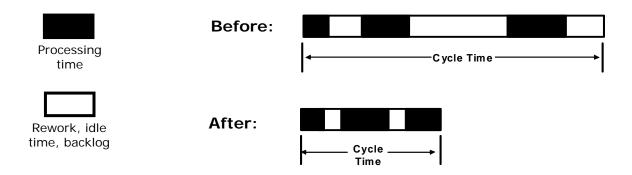
✓ **DEPLOYMENT FLOWCHART:** A deployment flowchart shows the key players across the top as column headers (A-E). Key players can be functional units or individuals. In the column underneath each key player are shown the steps that person carries out or for which they are responsible. The process flows from left to right.



Deployment Flowchart

TOOL: Cycle Time Analysis

Cycle time is the total elapsed time from the beginning to the end of a process, from the time a request for a product or service is initiated through the point at which the product/service is received by the client/customer. As the figure below illustrates, cycle time includes not only the actual processing time, but also the rework, idle time and backlog that often add significantly to cycle time. Reducing these non-value added components of cycle time can improve quality, improve service to the stakeholder, and decrease resources used.



A cycle time analysis examines the elapsed time for individual steps in your process. A chart listing the process steps down the left side and the time components (total time, processing time, set-up time, waiting time, moving time, inspecting/counting/checking, rework) across the top displays the breakdown of average time per process step.

Template: Dashboard Status Report

In order for a project or group effort to be successful, it is helpful to have the support and commitment of top leadership. This happens most easily when project goals are clearly defined and are matched to important organization strategies. Identifying measures of progress and reporting on them regularly is a strategic way to keep sponsors and other key decision-makers informed, interested and involved in your project.

The following dashboard report is an effective way to communicate project progress.

Insert Project Name Here Date: mm/dd/yyyy

Dashboard & Status Report											
Project Task	Next Steps/Who	Notes	Percent Complete*	Status**	Updated						
Charter			100%	Green							
Stretch goal			0%	Yellow							
Voice of the Customer Analysis			0%	Yellow							
Critical to Quality Conversation			0%	Yellow							
Document Current Process			0%	Yellow							
Next Milestone			0%	Yellow							
Next Milestone			0%	Yellow							
Next Milestone			0%	Yellow							
Monitoring & Reporting Results			0%	Yellow							

^{*} For percent complete, use only 0, 25, 50 or 100%

^{**}Status: Green means the task is on schedule / Yellow means it has not yet started or there is concern / Red means there is a problem/issue

Template: Project Implementation Plan

Developing a visual representation of a project's major tasks and timeline can help the project stay on track. Following is one frequently-used format for portraying project phases and steps.

ABC Process Improvement Implementation Plan

				•																T					$\overline{}$
ID	Task Name	Responsible	Start	Finish	Duration		Jun 2011				Jul 2011				Au		Aug 2011								
		Responsible			2 4 4 4 6 7		6/5	6/12	6/19	6/26	7/3	7/10	7/17	7/24	7/31	8/7	8/1	4 8/2	8/28	9/4					
1	Project Planning & Monitoring		6/6/2011	9/30/2011	17w	1	7																		
2	Create/update Project Charter	Sponsor, Team Leader	6/6/2011	6/10/2011	1w															П					
3	Type & distribute minutes		6/15/2011	9/14/2011	13w 1d																				
4	Manage Team documents		6/6/2011	9/5/2011	13w 1d																				
5	Update project Dashboard Report	Team Leader	7/1/2011	9/30/2011	13w 1d																				
6																									
7	Other		7/1/2011	8/26/2011	8w 1d					V									V						
8	Task 1		7/1/2011	7/1/2011	1d																				
9	Task 2		7/6/2011	8/26/2011	7w 3d																				
10	Task 3		7/15/2011	7/25/2011	1w 2d																				
11																				П					
12	Training		6/15/2011	8/31/2011	11w 1d			_																	
13	Create training plan		6/15/2011	7/15/2011	4w 3d																				
14	Obtain commitment for training resources		7/1/2011	7/25/2011	3w 2d															П					
15	Evaluate training effectiveness		8/1/2011	8/31/2011	4w 3d																				
16																									
17	Testing		8/1/2011	8/26/2011	4w										V				7						
18	Identify test scenarios		8/1/2011	8/5/2011	1w																				
19	Execute test plan and document results		8/15/2011	8/19/2011	1w																				
20	Adjust solution design as necessary and document changes		8/22/2011	8/26/2011	1w																				
21																									