



Self-Directed Process Improvement (SDPI) Workbook



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Revised: 12/08/2003



Introduction

Self-Directed Process Improvement (SDPI) is a common sense step-by-step way of studying work to find easier and better ways to get results. No special skills or training is necessary – just a little focused attention.

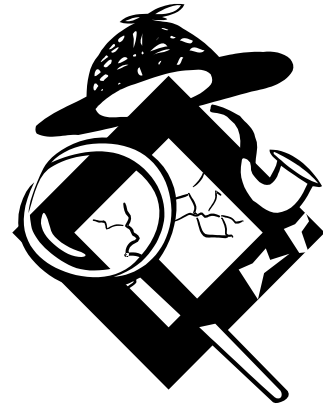
The technique is really very simple. It is a logical way of solving a problem. You will recognize it as just good common sense.

The steps in SDPI are:

1. Select the process to be improved
2. Look at the whole
3. Break down the process in detail
4. Question the job and then each detail
5. Develop new process
6. Apply the new process

Not too tough, nor time consuming.

Now let's see how each step is done. First we'll present a Table of Contents and then we'll begin at the beginning with step 1.



Self-Directed Process Improvement (SDPI)

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1 Select the Process to be Improved

Self-Directed Process Improvement can be applied to any work at DMV.

To be most valuable, consider these types of processes:

- A. Pick a **bottleneck** process. This is a process on which any improvement will help the whole process speed up.
- B. Select a process that is **used** a lot. Processes that require a lot of time every year have larger savings possibilities than infrequently used processes.
- C. Work on **simple** processes until you learn the technique.
- D. Pick a process that is **complex or hard** to do. Make it simple.
- E. Pick a process that is **S-L-O-W**. Speed it up.
- F. Select a process that tends to give **wrong results** too often. Make it harder to give wrong results and easier to give right results.
- G. Improve a process that is just **not fun** to do. Perhaps it is tedious or requires working conditions that are disagreeable. Fix it.

The only way you'll learn is by doing. Select a process from the list above, but most important, **SELECT** a process and get going. Doing nothing doesn't help. Even improving the wrong process will provide some value and teach you how to make improvements on the right processes.



2 Look at the Whole

Why look at the whole? So you don't waste time.

Before spending much time fixing a process, you should investigate to see if the process is needed!

Is the process needed?

Many processes are the result of a need that no longer exists. There is no reason to produce reports that are never used, for instance. If there is no customer need and no law, rule or policy that requires the process be completed, perhaps it can be eliminated. That would pretty much take care of the problem.

S tart by figuring out the answers to these two questions:

- A. What product does this process produce? (Product includes services that are delivered.)
- B. Who uses the product?

Now go talk to whomever it is that uses or represents the users of that product. Ask them these questions:

- A. What do you use this product for?
- B. What would happen if it were no longer produced?
- C. Could another existing product replace this product?
- D. Could some part of this product be eliminated (such as copies, signature, calculations, back up information, level of detail.... use your imagination!)

If the product can be eliminated, perhaps the process can, as well. Good job; fast work! However, don't forget about the hammer theory. A hammer is seldom used, but when it is needed, little else can do the job as well as the hammer. Eliminating it might make the tool case easier to carry, but cause problems later on. Before eliminating the product, make sure it is not needed in other areas or valuable even if seldom used!



If the product cannot be eliminated, can it be simplified? If so, we would at least now have clues that can be used during the process redesign efforts in later steps.

If the product must be as it is, don't fret. The process might still be able to be redesigned.

N ext –



Gather information on quantities

It is not always the best choice to spend time on a process that has little impact on the organization.

- How many units of the product are made?
- How many times is the process completed?
- How long does it take to do the process?
- Are there a lot of errors? What percent?
- Does this process tie up a lot of equipment time?
- Who and how many people work on this process?
- How much time do they spend on this process?
- Does this process require a lot of input, customer contact, or analysis to complete?

Complete a process costing analysis¹

Use the best numbers you can:

Number of person(s) hours to complete the process
X number of times per year the process is completed
X cost per person-hour (including benefits)
= LABOR COST

Here is an example:

2 person-hours are required each time the process is completed
X 40 times per year
X \$18 per person-hour (including benefits)
= \$1,440 per year

Probably not worth doing much about...

Here is another example:

10 person-minutes (.167 person-hours) are required each time the process is completed
X 100 times per day (25,000 times per year)
X \$18 per person-hour (including benefits)
= \$75,150 per year

Probably worth spending some time to improve!

If the process is needed, and it is worth improving, proceed to the next step.

¹ List of support is available at the IT Intranet web page



3 Break Down the Process in Detail

Now that you have looked at the forest and are sure the process is needed, it is time to look at the trees. Why break the process down in detail? In order to improve the process, it is necessary to understand everything that happens within that process. You must find out the following:

<i>WHAT</i>	is being done?
<i>WHERE</i>	is it done?
<i>WHEN</i>	is it done?
<i>WHO</i>	does it?
<i>HOW</i>	is it done?



If you are sick, your doctor needs to understand your symptoms, and then evaluate what the problem is. Your garage mechanic can't figure out why your car won't run unless he checks each possible cause separately.



Evaluating a process in detail is not hard, but it does require organization. There is a tool that can help: the Process Chart.

This tool is explained on the following pages.



Process Chart

A picture is said to be worth a thousand words, which can be very helpful when trying to understand something! A process chart is a picture of the process. It helps you capture all the operations, movement, inspection, delays and storage that are completed by an employee or done to something.

There are five **symbols** used in a process chart. One symbol is used for each step of the process. Each symbol helps create an immediate visual picture. Here are the symbols, which are all available in the AutoShapes of any Microsoft Office program.



OPERATION

When something is being changed or created or added. Examples: filling out a spreadsheet, writing a letter.



MOVE

When something is moved from one place to another. Examples: walking, carrying a file to an office, e-mailing a memo



DELAY

When something is held up awaiting further action. Examples: waiting for an e-mail response, document in in-box



STORAGE

When something is put away until a later time. Example: filing a letter, filing an electronic document



INSPECTION

When something is checked or verified but not changed. Example: supervisor approval, accounting review of an expense account

There are nine **steps** involved in making a process chart, as follows:

1. Choose the *subject* to be followed. The subject should be



A PERSON or
A FORM or DOCUMENT
(including electronic)



2. Identify the volume of times the process is completed. Fill in the period for the frequency, as well (e.g. day, month, quarter, year).
3. Fill in the page number for this flow process chart, fill in the date, and put your name on the form in the *Prepared by* block.
4. Write a brief *description* of each process step
5. Identify who you contacted to discover what process steps are actually occurring.



6. Mark the *symbol* that goes with each process step description.
7. Enter *time* and *distance*. Write the approximate duration for each task. Write distance for all physical moves. Keep consistent units for time and distance (such as minutes or hours, or feet or miles).
8. *Summarize* by adding up all the facts and entering them into the summary block. Indicate the units used.
9. Identify if this chart is a reflection of the current process (AS-IS) or a proposed future process (PROPOSED).

Below is the top portion of the Process Chart form, showing where each of the eight steps is located on the form.

PROCESS CHART				Page <u> </u> of <u> </u> 3	Date _____	Prepared by _____									
<input type="checkbox"/> AS-IS <input type="checkbox"/> PROPOSED		9	SUBJECT 1			FREQUENCY PER VOLUME 2									
SUMMARY		Units	No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED	POSSIBLE ACTION							
<input type="radio"/> Operation <input type="radio"/> Move <input type="radio"/> Delay <input type="radio"/> Storage <input type="checkbox"/> Inspection		8				5		ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
TOTALS						PROCESS STEPS									
Step	Symbol	Time	Dist.												
1	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>	6	7	4											
2	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														
3	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														
4	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														
5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														
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10	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														
11	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/>														

- Remember, the process chart is only used to follow one person, one form, or one document.
- Don't get bogged down with too much detail.
- Take the "happy path" Ask your self does this happen 80% of the time. If not put it on a parking lot and address it seperately.
- A blank process chart is on the next page for your use.



PROCESS CHART

Page _____ of _____

Date _____

Prepared by _____

<input type="checkbox"/> AS-IS <input type="checkbox"/> PROPOSED				SUBJECT		FREQUENCY PER _____ VOLUME _____										
SUMMARY	Units	No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED					POSSIBLE ACTION					
<input type="checkbox"/> Operation																
<input type="checkbox"/> Move																
<input type="checkbox"/> Delay																
<input type="checkbox"/> Storage																
<input type="checkbox"/> Inspection																
TOTALS																
Step	Symbol	Time	Dist.	PROCESS STEPS					ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
6	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
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10	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
11	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
12	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
13	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
14	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
15	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
16	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
17	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
18	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
19	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
20	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															

Revised 11/8/2002

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Below is an example process chart completed at an accounting office for a CPA file:

PROCESS CHART				Page 1 of 1	Date 11/8/200	Prepared by Ron Sarazin								
<input checked="" type="checkbox"/> AS-IS <input type="checkbox"/> PROPOSED				SUBJECT 2 Process Client File		FREQUENCY PER year VOLUME 3,450								
SUMMARY	Units	No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED	POSSIBLE ACTION							
○ Operation	4		29		1 - 11	April Phillips	ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
⇒ Move	4		7	20										
□ Delay	1		720											
▽ Storage	1		1											
□ Inspection	1		6											
TOTALS	11		757	20										
Step	Symbol	Time	Dist.	PROCESS STEPS										
1	○ ⇒ □ ▽ □			Receive write up work from client										
2	● ⇒ □ ▽ □	1		Pull client file										
3	○ ⇒ □ ▽ □	3	8	Carry file to work station										
4	● ⇒ □ ▽ □	3		Open client Quick Books file										
5	● ⇒ □ ▽ □	18		Enter checkbook transactions										
6	○ ⇒ □ ▽ □	720		Wait for petty cash transactions										
7	● ⇒ □ ▽ □	7		Enter petty cash transactions										
8	○ ⇒ □ ▽ □	2	6	Carry to Supervisor for review										
9	○ ⇒ □ ▽ ■	6		Supervisor review										
10	○ ⇒ □ ▽ □	2	6	Carry to filing cabinet										
11	○ ⇒ □ ▽ ▽ □	1		File supporting documents										

This example does not yet include the analysis, however. It simply represents the process as it currently is. Complete the process chart before proceeding to the next step.

Next we'll learn how to question the job and evaluate each detail.



4 Question the Process

In order to develop better processes, nothing should be taken for granted. Instead, everything should be questioned. Start by looking at the overall process. You already asked if the process was necessary and decided it is. Now dig a little deeper. Apply the questions listed below and, if any of the questions strike a chord, dig into the specific steps of the process. However, it probably will not be helpful to ask each and every question below of each and every step on your Process Chart at this time. You will have a chance to look at each step in detail in the next section.

Ask the question “WHY?”

<i>Knowing This</i>	<i>Ask This!</i>
1. WHAT is done	WHY is it done at all? What else could be done to accomplish the same result?
2. WHERE it is done	WHY is it done there? Where else could it be done?
3. WHEN it is done	WHY is it done then? At what other time could it be done?
4. WHO does it	WHY does this person do it? Who else could do it?
5. HOW it is done	WHY is it done this way? In what other ways could it be done?

Here are a few things that might influence changes:

- Does law, rule or policy require this process or process step?
 - Your options for changes may be limited.
 - You may need to involve the program/policy area or core group.
- Is there an existing standard process or procedure already in place?
 - Changes may need to be consistent with the standard.
- Could this work be done better in collaboration with another unit?
 - Be sure to involve people from the other unit in this evaluation.

Make sure that the present methods are okay, or discover other methods to be tried. Remember - take nothing for granted!





*WORK WITH FACTS –
NOT OPINIONS*

Opinions only produce arguments – Facts produce conclusions. A fact does not disappear when you ask “why?”



*WORK ON CAUSES –
NOT EFFECTS*

A pail under a leak in the roof will never fix the leak.



*WORK WITH REASONS –
NOT EXCUSES*

An excuse leads to dead ends and no action.

A blank form to record the answers to the questions for your process is on the next page for your use. Complete the form before proceeding to the next step.



<i>SUBJECT:</i>	<i>Date:</i>	<i>Prepared by:</i>
<i>Knowing This</i>	<i>Answer (“WHY”)</i>	
1. WHAT is done		
2. WHERE it is done		
3. WHEN it is done		
4. WHO does it		
5. HOW it is done		

Revised 12/23/2002

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5 Develop the New Process

At the end of the questioning in step four, you looked at the process in general and answered why, as related to what, when, where, who and how information. Now you will did deeper. In this step you will:

- Evaluate what to change
- Decide on possible actions
- Create a Proposed process chart
- Calculate benefits and cost

It is best to assume that there are always ways to improve any process. It may surprise you to find out how often this is true!

Don't say:

It can't be changed!

Instead say:

You never know until you try!

When something has been done in a particular way for some time, it is a pretty good sign that there is now probably a better way to do it.

Applying the Question
"WHY"
to these five prompters:



What Eliminate
Where Combine / change place
When Change Sequence
Who Change Assignments
How Improve / Automate / Telecommunicate

Tends to result
in
the following actions:



Evaluate what to change

Look at the following possibilities:

- Can this process step be eliminated?
- Can this process step be combined with other steps?
- Can the sequence of the process steps be changed to improve the flow?
- Can the location (place) of where the process step is completed be changed?
- Would it be better if the process step is assigned to someone else?
- Is it possible to improve how this process step is done?
- Can this process step be automated?
- Would the use of telecommunications improve this process step in some way (e.g. use Intranet, e-mail, fax)?

Decide on possible actions

Below is our example with possible actions filled in.

PROCESS CHART				Page <u>1</u> of <u>1</u>	Date 11/8/200	Prepared by Ron Sarazin													
<input checked="" type="checkbox"/> AS-IS <input type="checkbox"/> PROPOSED				SUBJECT 2 Process Client File		FREQUENCY PER <u>year</u> VOLUME <u>3,450</u>													
SUMMARY	Units	No.	Time Min	Dist. Ft	STEPS	PERSONS & DEPT. CONTACTED	POSSIBLE ACTION												
<input type="checkbox"/> Operation	4		29		1 - 11	April Phillips													
<input type="checkbox"/> Move	4		7	20															
<input type="checkbox"/> Delay	1		720																
<input type="checkbox"/> Storage	1		1																
<input type="checkbox"/> Inspection	1		6																
TOTALS				11		757	20												
Step	Symbol	Time	Dist.	PROCESS STEPS							ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE	
1	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>			Receive write up work from client															
2	<input checked="" type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	1		Pull client file															
3	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	3	8	Carry file to work station															
4	<input checked="" type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	3		Open client Quick Books file															
5	<input checked="" type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	18		Enter checkbook transactions															
6	<input type="checkbox"/> → <input checked="" type="checkbox"/> ▽ <input type="checkbox"/>	720		Wait for petty cash transactions															
7	<input checked="" type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	7		Enter petty cash transactions															
8	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	2	6	Carry to Supervisor for review															
9	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input checked="" type="checkbox"/>	6		Supervisor review															
10	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input type="checkbox"/>	2	6	Carry to filing cabinet															
11	<input type="checkbox"/> → <input type="checkbox"/> ▽ <input checked="" type="checkbox"/>	1		File supporting documents															



It is important to capture the thinking behind the possible actions. A simple table with an entry for each step should be created. Include information that describes why you are proposing each modification. Below is an example:

STEP	POSSIBLE ACTION AND REASON
1	Receive write-ups from clients either via email or the Internet rather than through the mail in order to minimize delays and to facilitate later automation of movement of information.
2	Keep client files on-line. This allows them to be electronically moved and processed.
3	By keeping the client files on-line, no physical transportation of the files is needed.
4	Also by keeping the client files on-line, an automatic link to Quick Books could be created, combining the computerized step 2 with this step.
5	No change.
6	Receive the petty cash transactions via email or the Internet, reducing the wait time.
7	No change
8	With computerization, controls can be built into the process, eliminating the need for the Supervisor review, thus also eliminating any transportation of the files.
9	Eliminated
10	Since the client files are on-line, no physical transportation of the files is needed.
11	The on-line files can be filed electronically.

A few things to consider:

- Before eliminating a step, make sure it is not required by law, rule or policy.
- Find out if there is a standard for this process already in place. If there is, compare this process to that standard before evaluating possible actions.
- You might find that the entire process should be redesigned. If so, evaluating what to do with steps in the existing process might not be valuable.

A blank POSSIBLE ACTION AND REASON form is on the next page for your use.



SUBJECT:		Date:	Prepared by:
STEP	POSSIBLE ACTION AND REASON		
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

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Create a Proposed process chart

Based on the possible actions, a new process chart should be created and used for testing the proposed idea. Below is our example:

PROCESS CHART				Page <u>1</u> of <u>1</u>	Date 11/8/200	Prepared by Ron Sarazin											
<input type="checkbox"/> AS-IS <input checked="" type="checkbox"/> PROPOSED				SUBJECT 2 Process Client File		FREQUENCY PER <u>year</u> VOLUME <u>3,450</u>											
SUMMARY		No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED				POSSIBLE ACTION							
○ Operation		3	26		1 - 11	April Phillips				ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
⇒ Move		1	1														
◻ Delay		1	65														
▽ Storage		1	1														
□ Inspection																	
TOTALS		6	73														
Step	Symbol	Time	Dist.	PROCESS STEPS													
1	○ ⇒ ◻ ▽ □			Electronically receive write up work from client													
2	● ⇒ ◻ ▽ □	1		Electronically pull client file and open Quick Books													
3	● ⇒ ◻ ▽ □	18		Enter checkbook transactions													
4	○ ⇒ ◻ ▽ □	65		Electronically receive petty cash transactions													
5	● ⇒ ◻ ▽ □	7		Enter petty cash transactions													
6	○ ⇒ ◻ ▽ □	1		Electronically file supporting documents													

This new chart is made up so that:

1. All concerned will know how the new job is to be done.
2. It creates a record for reference when other changes are planned in the future.
3. It helps to explain and “sell” the new process to all concerned.

Another blank process chart is on the next page for your use.

Once the proposed chart is completed, next figure out the benefits and costs.



PROCESS CHART

Page _____ of _____

Date _____

Prepared by _____

<input type="checkbox"/> AS-IS <input type="checkbox"/> PROPOSED				SUBJECT _____				FREQUENCY PER _____ VOLUME _____										
SUMMARY		Units	No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED				POSSIBLE ACTION							
<input type="checkbox"/> Operation											ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
⇒ Move																		
D Delay																		
▽ Storage																		
<input type="checkbox"/> Inspection																		
TOTALS																		
Step	Symbol	Time	Dist.	PROCESS STEPS														
1	○ ⇒ D ▽ □																	
2	○ ⇒ D ▽ □																	
3	○ ⇒ D ▽ □																	
4	○ ⇒ D ▽ □																	
5	○ ⇒ D ▽ □																	
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Revised 11/8/2002

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Calculate benefits and cost

One way to judge the value of a new process is to calculate how much it will save and much it will cost. Of course, saving money is only one justification to change a process. Increasing speed of delivery, increasing capacity, improving safety, decreasing floor space and increasing accuracy are a few other reasons.

Address these questions:

- Will the new process work?
- Will it save money? How much?
- Will it provide other non-monitory benefits? What?
- Will it affect other processes? How?
- Will it create quality results? What are the benefits?

Many of the improvements will result in actual dollar savings that can be calculated and shown. If possible, show the value of the proposed improvements. Use the summary data of your As-Is and Proposed Charts, along with estimates of other benefits and costs, to complete this table:

Improvement Results							
	Delay		Operation	Move	Storage	Inspection	Total
As Is							
Proposed							
Savings							
\$ Savings							
Other Benefits							
Cost							

Revised 12/23/2002

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In our example, we reduced 15 minutes (.25 hours) of labor from each time the process is completed and 655 minutes of delay time, for a total reduction in 670 minutes (11.1 hours). The following table results:

This process occurs approximately 3,450 times per year and labor cost is approximately \$25 per hour, including all benefits.

$$\begin{aligned}
 &.25 \text{ hours saved per cycle} \\
 &\quad \times 3,450 \text{ times per year} \\
 &\quad \times \$25 \text{ per hour} \\
 &= \$21,562.50 \text{ per year.}
 \end{aligned}$$

Further, client satisfaction can be increased by the reduced turn around time of a little over 11 hours.



The cost of the improvements probably would include about \$50 per year for email, a change to business cards, employee training, and client education.

For our example, an Improvement Results table might appear as follows:

Improvement Results							
	Delay		Operation	Move	Storage	Inspection	Total
As Is	720		29	7	1	6	43
Proposed	65		26	1	1	0	28
Savings	655		3	6	0	6	15
\$ Savings	\$21,562.50						
Other Benefits	Improved client satisfaction through reduced turn around time of 655 minutes (just over 11 hours)						
Cost	Money from our company: about \$50 per year for email and \$100 for new business cards. Labor redirected within our company: about 8 hours for employee training.						

Based on these savings and cost, is the project beneficial? In this case, probably. Now how to implement the improvement needs to be considered.



6 Apply the New Process

Prepare to take action

Think about whether all of the possible actions that have been identified can be immediately put into place. It may be that the recommended changes need to be implemented over a period of time. Before attempting to gain approval for implementation, consider phasing in the recommendations.



A good way to think of phasing for process improvement is in two distinct timeframes.

1. What can be completed *within the next six months*?

These improvements will primarily be simple, cheap, can be completed with existing resources, and not require extensive approvals. In this case, you should be able to proceed directly to implementation.

2. What can be completed *beyond six months*?

These improvements could be more complex, require more planning and resources, and perhaps involve a couple of layers of management for approval. In this case, you will likely need to follow your normal chain of command process to proceed.

In order to help with the planning and presentation of your recommendations, you should make a version of the process chart reflecting each of the two time frame options above. Below is a possible recommendation for an improvement that can be completed within the next six months.

For this example, it might be unreasonable to expect the Supervisor to stop reviewing the documents and eliminate paper filing without first fully testing the system.



PROCESS CHART

Page 1 of 1

Date 11/8/200 Prepared by Ron Sarazin

<input type="checkbox"/> AS-IS <input checked="" type="checkbox"/> PROPOSED 6 mo				SUBJECT <u>2</u>		FREQUENCY PER <u>year</u>									
				Process Client File		VOLUME <u>3,450</u>									
SUMMARY	Units	No.	Time	Dist.	STEPS	PERSONS & DEPT. CONTACTED	POSSIBLE ACTION								
○ Operation	3		27		1 - 11	April Phillips									
⇒ Move	3		4	12											
□ Delay	1		65												
▽ Storage	1		1												
□ Inspection	1		6												
TOTALS		9	103	12											
Step	Symbol	Time	Dist.	PROCESS STEPS				ELIMINATE	COMBINE	SEQUENCE	PLACE	PERSON	IMPROVE	AUTOMATE	TELECOMMUNICATE
1	○ ⇒ □ ▽ □			Electronically receive write up work from client											
2	● ⇒ □ ▽ □	1		Electronically pull client file and open Quick Books											
3	● ⇒ □ ▽ □	18		Enter checkbook transactions											
4	○ ⇒ ● ▽ □	65		Electronically receive petty cash transactions											
5	● ⇒ □ ▽ □	8		Print for Supervisor review											
6	○ ⇒ □ ▽ □	2	6	Carry to Supervisor for review											
7	○ ⇒ □ ▽ ■	6		Supervisor review											
8	○ ⇒ □ ▽ □	2	6	Carry to filing cabinet											
9	○ ⇒ □ ▽ ▽ □	1		File supporting documents											

Not all of the savings have been realized; therefore a revised benefits and costs should be generated for each of the timeframe recommendations.

Once phasing is figured out, specific tasks for implementation should be listed so approval can be granted with full knowledge of what it will take to get the desired results.

Recommendations that cannot be implemented within the six-month timeframe should be submitted for evaluation and further development. The following forms should be completed and submitted:

- a. As-Is Process Chart with the Possible Actions portion filled in
- b. Possible Action and Reason worksheet
- c. Proposed Process Chart
- d. Six-month Proposed Process Chart (if appropriate)
- e. Improvement Results Chart

Recommendations that can be implemented right away should be planned and worked on. A simple task list should be prepared, as shown on the next page, to help guide action.



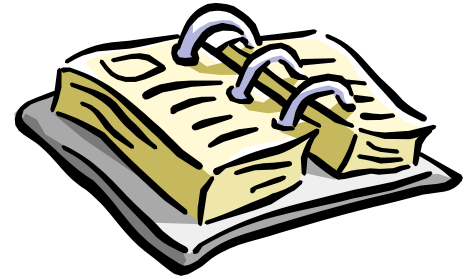
<i>SUBJECT:</i>		<i>Date:</i>		<i>Prepared by:</i>	
<i>No.</i>	<i>Task</i>	<i>Begin</i>	<i>End</i>	<i>Assigned to</i>	<i>Status</i>
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The final steps are to gain approval, put the work on your calendar, and get the job done! However, there are a few considerations that can make implementation much more successful.



Implementation considerations

Most process improvements require that employees learn new ways of doing their job. Even though the new way may use less effort, some employees may not like it because it requires change.

It is normal for people to resist change, just as they resent criticism and usually are suspicious of what they don't understand.

The people working the process can make or break the recommendations. They must be sold on the new process, and they can't be sold by forcing the new process on them.

When preparing for the change:

- Explain how the change will affect them
- Explain the benefits
- Provide support and training as needed
- Address concerns

Most process improvements also impact other units / work areas in some way. Care should be taken to communicate and coordinate changes with those other units / work areas to ensure that unintended consequences do not occur.

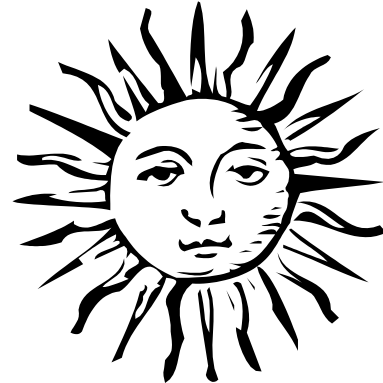
Law, rule or policy may affect some process improvements. If you plan to make changes that might affect policy, have you discussed these changes with the policy or program area? Sometimes this can be as simple as a phone call to the program area for clarification; at other times the program area may need to do research.

Finally, as you implement your changes, keep all interested parties aware of your progress, especially if the implementation will take a while to complete. Over communicate so there are no surprises. When people feel that you care enough to keep them up to speed on your progress, they will care enough to help you.



7 Evaluate Results

So, the changes have been made. Perhaps the sun is shining, the roses are blooming, and all is well in the universe. Perhaps not. Some improvements don't actually turn out to make a positive difference, while others turn out to provide more benefit than expected. Now is the time to measure and communicate results. There is a lot of learning that can be gained by taking a few minutes to evaluate what actually has taken place.



One way to measure the results is to create a new Process Chart showing how the process is now completed. This is a *new* As-Is Process Chart. The benefits that actually resulted (or did not result) can then be calculated by comparing the new As-Is Process Chart with the original As-Is Process Chart. Recommendations left to be implemented can also be identified by comparing the new As-Is Process Chart with the original Proposed Process Chart.

Another good measure can be gained by talking with the employees completing the process and the customers receiving the product. Are they happier than they were before the changes were made? Are there problems with the new process? Are there new ideas for additional improvement?

After implementation:

- Evaluate to see what results you actually obtained. Complete a new As-Is chart to reflect the improved process.
- See if the idea can be applied someplace else
- Follow-up and be receptive to new improvements that might develop
- Communicate successes



Summary

Remember the steps:

1. Select the process to be improved
2. Look at the whole
 - a. Is this process needed?
 - b. Gather information on quantities
 - c. Complete a process costing analysis
3. Break down the process in detail
 - a. Make a process chart
4. Question the process
 - a. Ask the question “why?”
5. Develop the new process
 - a. Evaluate what to change
 - b. Decide on possible actions
 - c. Create a Proposed process chart
 - d. Calculate benefits and cost
6. Apply the new process
 - a. Prepare to take action
 - b. Implement
7. Evaluate results

That is all there is to it! Not too hard. It simply takes an organized way to look at what the work presently is and how it could be. Don't let the tough ones “stump” you. Keep at it!



Supporting Tools

There are three tools that you might find helpful to amplify the impact of Self-Directed Process Improvement. They are:

- ❑ Timesheets
- ❑ Collective Notebook
- ❑ Service Gap Experience Chart

Each of these tools is introduced below.

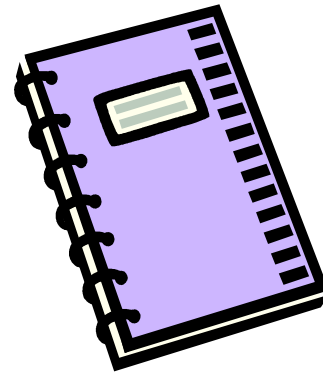
Timesheets

Tracking your time is an excellent way to determine where to focus your improvement efforts. Generally, any two-week period of time that does not have unusual activity will give an excellent view. For many people, a shorter time, or even estimates of time allocation, will do. Some employees may already be tracking their time and not need this form. However, on the next page is a form that may be useful in capturing and reporting your time. Look for areas where it appears a large amount of time is being spent, yet relatively little value is created. Focus on these time-killers as opportunities for improvement.



Collective Notebook

The Collective Notebook Method is a creative problem-solving tool. It is useful for identifying a large number of solutions for a given problem, such as how to improve a broken process. Collective Notebook as developed by John Haeefele of the Proctor and Gamble Company.



Here is the process:

1. Give each participant a notebook (index card, paper, or any other form to capture information spontaneously) with the problem statement written on the first page.
2. Ask participants to record ideas in the notebook over the period of several days, a week, or even a month.
3. Before turning the notebook back in, have the participants identify their best idea, ideas needing research, and new ideas not related directly to the problem.
4. Compile the ideas from the notebooks into categories.
5. Hold group meetings to discuss the ideas.



Service Gap Experience Chart

The Service Gap Experience Chart provides a way to evaluate the experience of the customer and zero in on improvements that need to be made. It is best filled out in partnership with the customer or someone that can accurately represent what the customer experiences. The customer could be the end customer or a unit downstream from you. To the right is a copy of the chart layout.

EXPERIENCED	EXPECTED	GAP

In the left-hand column, the actual customer experience is recorded. In the middle column, the expectation of the customer is recorded, and in the right-hand column, identification of what improvement needs to be made is recorded.

EXPERIENCED	EXPECTED	GAP
<i>Phone answered on the sixth ring</i>	<i>Phone answered on the third ring</i>	<i>Faster Response</i>
<i>Unable to answer question; referral</i>	<i>One stop to answer</i>	<i>Referral</i>

For example, if a customer tries to contact you by phone and finds that it is not answered until the sixth ring, the first line of the Service Gap Experience Chart shown to the right might apply. In talking with the customer, they

might tell you that they really expected the phone to be answered by the third ring, indicating a need for faster response.

Another example is shown in the second line. Perhaps the customer found that the person that answered the phone could not answer their question and recommended a referral to someone else. However, the customer might have been led to believe that their questions should be able to be answered on the one call without referral – a “one stop” solution. If that is the case, the referral becomes the gap that should be reviewed for possible improvement.

Typically, the Service Gap Analysis chart is completed either when a complaint is logged, or when a service process is analyzed. In either case, a number of customers are interviewed to determine what their experience is and what their related expectations were. Where there is a difference, there is an opportunity for improvement.

