INTERNAL PROCESS THINKING

People that can answer these questions have successfully internalized process thinking.

- What process are you a part of?
- Can you describe it in 25 words or less?
- What is its purpose?
- How does your process create value for customers?
- How do you personally contribute to this value?
- How do others working with you also contribute value?
- What do the people immediately before and after you in the flow of the process do?
- By what measure does the organization judge the performance of your process?
- What is the current level of that measure?
- How do you know when you personally are doing well?
- What other processes interface with yours?
- What do these processes need from yours, and what does yours need from them?
- What efforts to improve your process are now underway?

WHAT YOU CAN DO BACK AT THE OFFICE

You can reduce the product or service defects and delivery delays that are causing customer complaints and wasted money.

Focus on one mission-critical process problem to solve. It must be something that the staff can affect directly.

<u>Reduce delay:</u> Flowchart or value stream your process. Analyze where most of the delay exists and eliminate it.

<u>Reduce defects:</u> Count your errors, mistakes and misses and plot them on a line graph or control chart. Categorize your misses and display them using a pareto chart. Analyze the root causes of these mistakes and how to prevent them using a fishbone diagram and countermeasures matrix. Reduce rework.

Reduce the delays caused by large batch sizes: The last item in the batch has to be finished before it can go on to the next step. Reduce batch size to one if possible.

<u>Reduce variation</u>: All processes produce varying results to reduce variation. Measure your performance in cycle time, length, width, weight, volume or money. Use histograms and control charts to understand variations. Analyze the root cause of variations and reduce it.

DEVELOPING A PROCESS MAP

EXERCISE: Follow these steps to develop a process map (flowchart).

- 1. Name the process (important=noun + verb)
- 2. Identify the start and stop points
- 3. Identify the output of the process (labeled with an unqualified noun)
- 4. Identify the customers of the process (of the output)
- 5. Identify the suppliers of the process
- 6. Identify the inputs of the process

START: Go to the output and ask," How do we get here?"

Before you even start making the flowchart, you can take a simple piece of paper and write down what you think the steps in the process are. Adjust it. These steps will be transferred to post-its.

Next, start at the beginning with placing the post-its on a large piece of paper. Each post-it represents a step in the process. Start placing post-its in the upper left corner of the piece of paper. Then start placing them one after another moving across the page to the right towards the output. You connect the post-its with arrows that are all right-angles, no curves.

After you put in the first step of what you think the process is, ask, "What happens next?" And continue to do that until you reach the end of the process. It doesn't have to be detailed at first; make it high-level, maybe 5-7 steps. (What is high-level? Ask yourself, "Which high-level steps do we think poses the most impact on efficiency?")

After you are finished, present it to others and ask them whether this reflects the actual process? Make adjustments.

More advanced flowcharting would make the steps different shapes such as using a diamond shape to represent a decision. Other options are to divide the process into different "swim lanes" indicating who is responsible for performing those steps.

What can you do with this flowchart? First of all, it gives an accurate picture of what the work is. Nobody is guessing; everyone is on the same page. And it is a great tool for training someone new.

But if you wanted to improve the process, what would you do next? You would take measurements: How many steps? Are there handoffs? Also, you can time the whole process from beginning to end. And ask if this process is taking too long.

At that point, you might want to fill out a Wastologist's Worksheet to highlight where the process might be improved.

To practice, pick something easy. For example, imagine the process is "Getting to Work." Start from the time you wake up until you arrive in the place where you are starting to work. See how many times you are late for work. Determine the root cause and improve your process!

Wasteologist Worksheet

Observer:	Date:

Type of Waste	Examples	Location
Overproduce Producing what is unnecessary, when it is unnecessary, in an unnecessary amount	Making copies of a form which isn't used. Providing copies of reports that aren't read. Processing piles of documents that then sit at the next work station.	(Who's desk? What office? From what unit to what unit?)
Waiting For information, approval, repair, people, equipment	Waiting for a meeting which is starting late. Waiting for information (from someone out sick, out of the office, etc) Waiting for office equipment to be fixed.	
Inventory Supplies, equipment, paperwork retained for any length of time or underutilized staff.	Supplies, equipment, furniture not currently being used. Piles of invoices no being processed. Product orders waiting for release.	
Motion Movement that is too slow/fast or unnecessary	Walking from desk to photocopier. Shuffling papers to find needed items on one's desk. Reaching for items that should be immediately at hand.	
Defects-Rework Fixing errors, misfiling, dealing with complaints, mistakes due to poor info	Fixing errors made in documents. Misfiling documents. Dealing with complaints about service. Mistakes caused by incorrect information Or miscommunication.	
Transportation Moving supplies in and out of storage area, picking up, setting down	Moving individual files from one location to another. Moving supplies into and out of a storage area.	
Process Itself Unnecessary tasks traditionally accepted as necessary	Multiple approval signatures from people whose approval is superfluous. Producing paper copy when computer file is sufficient. Multiple recording and logging of data. Writing by hand, when direct input into computer could eliminate this step.	

adapted from Taiichi Ohno