



October 21, 2015

Workbook

Co-sponsored by



Activity: Value-Added, Essential Non-Value-Added or Non-Value-Added

Are the below value-added, essential non-value-added or non-value-added activities?
Please circle your answer.

	Process Activity	Value-Added (VA)	Essential Non-Value-Added	Non-Value-Added (NVA)
1.	Maintenance of office equipment	VA	ENVA	NVA
2.	Two-year supply of a form in the filing cabinet	VA	ENVA	NVA
3.	Taking customer orders	VA	ENVA	NVA
4.	Re-typing the information	VA	ENVA	NVA
5.	Hunting for correct paper for the copy machine	VA	ENVA	NVA
6.	Printing time sheet, then scanning and emailing	VA	ENVA	NVA
7.	Printing the required number of certificates for class participants	VA	ENVA	NVA
8.	Maintaining human resource records	VA	ENVA	NVA
9.	Filing a copy of the completed form in two offices	VA	ENVA	NVA
10.	Filling out reports that no one looks at	VA	ENVA	NVA
11.	Ordering business supplies	VA	ENVA	NVA
12.	Calling to get missing information	VA	ENVA	NVA
13.	Collecting customer feedback	VA	ENVA	NVA
14.	Printing paperwork too soon	VA	ENVA	NVA
15.	Face time with clients/customers	VA	ENVA	NVA
16.	Double checking a colleague's work	VA	ENVA	NVA
17.	Electronically collecting meal orders for an event	VA	ENVA	NVA
18.	Preparing compliance reports	VA	ENVA	NVA
19.	Safety inspection of work environment	VA	ENVA	NVA
20.	Backing up computer files for data storage	VA	ENVA	NVA

Identifying and Removing Process Waste

Defects

The effort involved in inspecting for and fixing defects, errors and mistakes.

Examples:

- Data errors typos lost records
- Delivering information or materials to the wrong location
- Missing or incomplete information on forms

Typical Causes:

- Missing and incorrect information
- Unclear or complex process
- Unclear roles and responsibilities
- Confusing instructions
- Voice of the customer absent
- Poor or inappropriate equipment, materials or supplies

Solutions:

- Apply problem solving tools
- Verify customer requirements
- Create standard work
- Error proof
- Apply 'plain language'
- Automate forms – put in hard stops, required fields
- Require all information up front
- Track & share accuracy measures



Overproduction

Producing more products or services than the customer needs.

Examples:

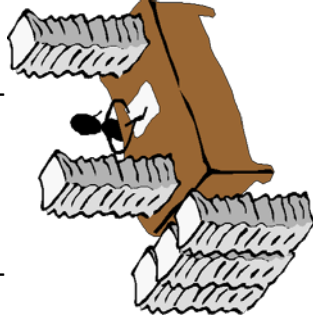
- More staff working or attending meetings than is needed
- Doing work not required
- Sending unnecessary emails
- Batching work / bottlenecks

Typical Causes:

- Unclear customer requirements
- Uneven work flow
- Poor work flow process
- Poor resource allocation
- Different staff skills, productivity, or work difficulty

Solutions:

- Verify customer requirements and align processes
- Structure 'Effective Meetings'
- Revise process schedule to even out workload
- Assign more staff or shift roles and responsibilities at peak times



Waiting

Idle time created when material, information, people or equipment is not ready.

Examples:

- Approval queues
- Waiting for decisions or services
- Waiting for customer information, supplies or copies

Typical Causes:

- Missing or incorrect information
- Unclear or confusing process
- Unclear roles / responsibilities
- 'System' downtime
- Signature requirements
- Not leveraging technology
- Lack of workers or service providers

Solutions:

- Require all information upfront
- Combine tasks or functions to eliminate handoffs and waits
- Use concurrent processes
- Apply 5s
- Co-locate work to minimize wait due to transport/motion
- Eliminate non-value-added steps



Non-Utilized Staff Talent

Not adequately leveraging peoples' skills, creativity and talents.

Examples:

- Staff hired to do "x" but spend time doing "y"
- Lack of innovation
- Not involving staff in solving problems and ensuring continuous improvement

Typical Causes:

- Lack of awareness of continuous improvement
- Unclear or confusing process
- Not delegating work
- Unclear or inappropriate job descriptions or duties

Solutions:

- Set clear performance expectations
- Coach and train employees
- Provide tools and resources
- Ask staff, "What can I do to support your work and remove barriers to improvement?"
- Engage staff in continuous improvement project
- See where the work is done, ask questions and learn



Identifying and Removing Process Waste

Transportation

Moving products, equipment, materials, information or people from one place to another

Examples:

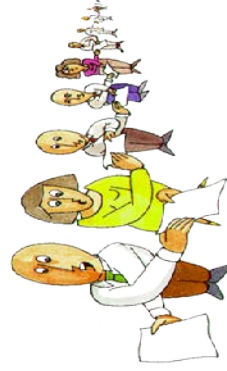
- Routing documents
- Paperwork hand-offs
- Carrying or retrieving files
- Site inspections
- Transporting people

Typical Causes:

- Transportation not viewed as waste
- Distance and physical structure
- Staff turnover/relocation
- New or replaced equipment
- Poor planning and communication

Solutions:

- Leverage technology (allow staff to telecommute)
- Only order what you will use
- Collect data to understand transportation problems (spaghetti diagram)
- Analyze data to determine root causes before defining solutions



Inventory/Storage

Unnecessary storage of information and materials or more information and materials than needed.

Examples:

- Storing the same document in many places
- Backlog (work in process)
- Obsolete databases/files/folders
- Unread or undeleted emails
- Supplies you do not use

Typical Causes:

- Batching work
- Technology systems that take time to access
- Not leveraging technology
- Over ordering

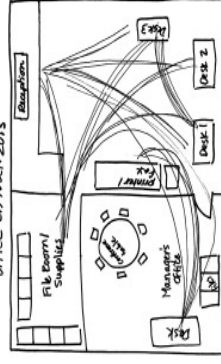


Solutions:

- Revise process steps and schedule to even out workload
- Assign more staff or shift roles and responsibilities
- Don't over order
- Investigate variations in the time it takes employees to perform the same task

Motion

Unnecessary movement of staff and tools that takes time and uses energy.



Examples:

- Trips to the copier
- Looking through cabinets for supplies
- Walking to find people
- Extra computer clicks

Typical Causes:

- Manual process – not leveraging technology
- Non-ergonomic work area
- Poor visual management
- Linear (consecutive) process
- Distance and physical structure
- Information silos

Solutions:

- Leverage technology
- Use concurrent processes
- Apply 5s
- Co-locate work
- Clarify process requirements for up and down stream
- Move people closet together and enhance communication

Extra Processing

Process steps that do not add value to the product or service, including doing work beyond a customer's specifications.



Examples:

- Signatures, numerous approvals
- Preparing an elaborate report when a data table will do
- Forms with unused fields
- Re-entering or checking data

Typical Causes:

- Past practices; culture does not question the status quo
- Standard work is not aligned with the voice of the customer
- Lack of trust/ control issues
- Poor communication

Solutions:

- Identify customer requirements and align work with requirements
- Delete or automate signature requirements
- Know which process steps add value and eliminate non-value-added steps
- Automate where appropriate

Process Mapping


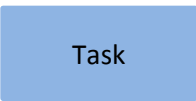


Process Maps are used to:

- Capture current & new process information
- Identify flow of transaction
- Identify responsibility of different business functions
- Identify value-added and non-value-added activities
- Train staff in new processes

3 Steps to Create a Process Map

1. Identify functional areas or people involved in activity
2. Detail the steps
3. Connect with arrows

Process Mapping Shapes

	Indicate beginning and end of the process
	Any task or activity where work is performed. Usually written as a noun and a verb
	Places where information is check against established standard and a decision is made on what to do next. Typically a 'yes' or 'no' question.
	Used between tasks to demonstrate the flow of activity

Process Mapping Questions:

- Who starts the process?
- How does the process start?
- And then what?
- What happens next?
- If I am the customer, I do...?

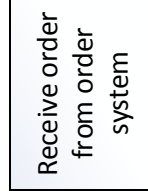
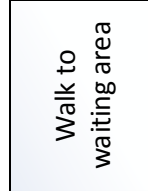
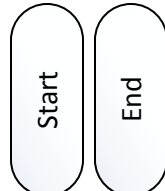
Process Mapping Tips:

- ✓ One voice
- ✓ Stay at a consistent level
- ✓ Detail the tasks, decisions and delays in each area
- ✓ Start by identifying the functional area (person) that starts the process

Process Mapping Exercise: Getting Coffee

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Customer	
Cashier	
Barista	



Using the steps provided, map the process for getting coffee.

Select appropriate symbol and draw it into the corresponding swim lane.

When you have moved each symbol into place, number the steps, including the decision point, and draw arrows to indicate the flow of the process.

Simulation Worksheet

Individual Exercise

In the current state process:

1. Who is your customer?

2. What types of waste can you identify?

Group Exercise

3. The current state process had 37 steps. How many steps did your future state process have?

4. What types of waste did you remove from the process?

5. What were the essential non-value add activities, if any?

Apply Lean in Your Work

1. Identify a process that is ripe for improvement:

2. Who would need to be involved in the mapping session?

3. What are some of the types of waste you have observed in the process?

4. What might you measure to show improvement or progress?

5. What actions do you commit to take to ensure this process is addressed when you return to the office?

6. Identify a partner at your table who you will ask to follow up with you in two weeks to check on your progress.

Partner Name: _____ *Phone/Email:* _____

7. How might you influence leadership to create a Lean culture in your unit?

Notes

Notes
