

# **Standard Operating Procedures**

**Waste Tour** 

SOP0012 v3

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## **Standard Operating Procedure**

#### Waste Tour

## Background

Today's business leaders deal with several competing priorities. Often you find yourself putting out one fire only to jump to the next fire fight. Finding the necessary time to focus on improving your work processes and do problem solving can be difficult.

Breaking the cycle requires that you step back and do an honest assessment of your operations. Ask yourself, "What do the customers need and what is preventing that from happening"?

For Lean practitioners that means understanding value and waste. Learn to see your value streams and start making the necessary changes to meet those customer needs.

#### Waste Tour:

The Waste Tour was developed to aid teams and individuals who are looking to identify waste in their work processes. The tool will help to identify examples of the 8 categories of waste in your work area and business processes.

The 8 categories of waste include:

1. Travel/Transport – people, information, or materials travelling from one place to another either within a facility or between factories. The transport itself adds no value to the product.



Transport waste is most often caused by poor layout and process design.

Transport may also cause the waste of waiting as people wait for materials to arrive.

2. Inventory – excessive and unprocessed inventory. Inventory requires storage facilities, there are financial carrying costs, inventory needs to be transported, inventory needs to be documented and counted, inventory requires storage containers and equipment to hold the inventory.

Inventory waste is most often a result of workflow imbalances and the waste of over production.

3. Motion – Any unnecessary movement of people, equipment, or machinery that cause people to work inefficiently. Searching for Tools and Equipment, Excessive movement of people and material, Walking without working, Lifting, Reaching, Stretching, Bending, Re-grasping, Twisting are all examples of the waste of motion.

Motion waste is most often cause by poor layout and poor workstation design.

4. Waiting – whenever a person, equipment, or material is waiting value is not being created, but costs are rising. Waiting for materials, information, machine cycle, approvals, or instruction results in waiting. Having customers waiting on the phone or trucks waiting in the yard to load or unload are examples of the waste of waiting.

Waiting waste is a sign of an imbalance between process steps.



5. Over Production – refers to producing a product or completing a task prior to the demand for the product. Producing more than is needed, sooner than it is needed or faster than it is needed creates a buildup of inventory between process steps. Making extra parts for stock or stores is a common practice to keep people busy when demand fluctuates.

The waste of Over Production is often a sign of an imbalance between process steps and is often the root cause of many of the other wastes in your work area, as over producing utilizes extra space, equipment, and labour.

6. Over Processing – any step in the process of manufacturing a product or providing a service that is unnecessary. It can include added features that the customer has not requested. It can include using the wrong tools to complete a task. Examples include an inefficient method, the wrong tool for the job, reentering data, designed products with elements that exceed the customer specification.

The waste of Over Processing can be cause by unclear customer specifications resulting in product design issues, which can continue into production with poorly designed processes and tools.

7. Defects – refers to a product, service, or process not providing the expected outcome on a consistent basis. Defects create scrap and rework resulting in extra cost and often delays in delivering to the customer. To reduce or prevent defects reaching the customer businesses usually institute rigorous inspection processes, which adds cost and doesn't always find the defects. Additionally, without sound



root cause elimination practices, the defect is likely to reoccur resulting in the need for ongoing inspection and added cost.

The waste of Defects often results from a lack of process standardization and process oversight. Error proofing the process is a preferred method of reducing and eliminating defects.

8. Peoples Skills & Knowledge - the waste of human potential. This occurs when your staff's ingenuity, skills, and knowledge are not fully utilized. Many organizations limit the involvement of staff in planning, organizing, workflow design, and controlling of the processes. These activities fall to management. This often reduces the effectiveness of the process and acts as a disincentive for staff working within the process. Examples include insufficient cross-training which reduces flexibility and unnecessary approval steps which causes delays and staff frustration. The people who best know your processes are the ones who work with it everyday.

The waste of Peoples Skills & Knowledge results in missed opportunity for staff flexibility and company growth.

The Waste Tour is an effective tool when conducting a "Manage by Walking Around" (MBWA) tour of your facilities and processes. Waste tours are also highly effective for routine process improvement reviews.

### **Standard Operating Procedure:**

1. Waste Tours can be conducted as an individual or a team activity.



- 2. Participants should walk through their processes and document several examples of each of the types of waste they observe on the Waste Tour Worksheet v1.
- 3. The "walk through" can be a combination of the physical workplace or the computer workplace for information management.
- 4. Each participant should create their own separate list of wastes.
- 5. Participants should compare their lists and create a combined list of wastes.
- 6. The list of wastes should be developed into a master list of improvement opportunities. This is done by developing action-oriented statements to identify the specific problem to be solved. Example Improve, stop, adjust, etc.
- 7. The master list of opportunities should be prioritized to identify:
  - a. Low Hanging Fruit opportunities that can be addressed without a lot of planning or resources. JUST DO IT.
  - Medium term opportunities that will require some planning and resources and will result in some changes to procedures and/or policies.
     These may require some investment of financial resources.
  - c. Long term opportunities that will require a detailed plan, human and financial resources, and time to complete. These opportunities often require a business case to proceed.
- 8. The prioritized opportunities should be added to your existing Action Plan Register where they can be assigned a responsible person to lead and have a timeline to implement identified. (See <u>Action Plan Register</u> and <u>Standard Operating Procedures Action Plan Register</u> on SSI's Free-Tools page for further information)



9. Waste Tours should be conducted on a routine basis to ensure that progress is be made and to help avoid problems from re-occurring.

#### **Outcomes:**

The Waste Tour can assist your staff with developing a focus on creating customer value and identifying impediments to creating that value. The tool can foster employee engagement, it can be a catalyst to drive continuous improvement, and it will provide an ongoing list of opportunities to help improve your business performance.

## Sample Waste Tour Checklist

Please see the following pages.

Download the Form at: <a href="https://ssiconsulting.ca/free-tools/">https://ssiconsulting.ca/free-tools/</a>



## Waste Tour Checklist

Reviewer: Jimm	ny Geepers	Date: 2020-04-01
	Examples of Waste	Examples in your work area
Travel / Transport	<b>SHOP:</b> Double or triple handling, extra trips to get stuff, moving inventory in & out, poor layouts, long distances, poor housekeeping	Skids over 7'8" tall have to be broken down manually to get through door-way between sections in warehouse.
	<b>OFFICE:</b> Movement of paperwork, excessive email attachments, multiple hand-offs for approvals,	
Inventory	<b>SHOP:</b> Things piling up or backlogging, raw materials, work in process, finish goods, warehouse stock, yard stock	Inventory items needed routinely are often stuck behind new stock that has just arrived.
	<b>OFFICE:</b> In-box (physical or electronic), batch processing of transactions and reports, processing invoices once per week, filing backlog, too many supplies, multiple supply closets	
Motion	<b>SHOP:</b> Walking without working, searching for tools, materials, or information, reaching, re-grasping, bending, twisting, excess motion due to poor housekeeping	We only have one pallet jack and its never where we need it!
	<b>OFFICE</b> : Movement of people, walking to and from the copier, central filing, fax machine, or other offices	
Waiting	<b>SHOP:</b> Watching machines run or cycle, waiting for parts, waiting for instructions, waiting for approvals or decisions, waiting for information, trucks in the yard waiting to load or unload, jobs waiting for change orders	If someone else is using the pallet jack, we have to wait for it or the forklift.
	<b>OFFICE:</b> Customers waiting on the phone for service, information waiting to be serviced in an inbox, systems downtime or slow response time, waiting for approvals or decisions, waiting for information	
Over Production	SHOP: More, sooner, or faster than needed, making extra parts for stock or stores, supplying sooner than is needed and its in the way. This is often a root cause of many types of waste  OFFICE: More, sooner, or faster than needed, paperwork early than needed, purchasing items before they are needed, processing paperwork before it is needed, planning too far into the future	
Over Processing	SHOP: Repair or rework steps, extra setup steps, over-specification of a process, expediting, labour reporting	
	<b>OFFICE:</b> Re-entering data, extra copies, unnecessary or excessive reports, cost accounting, expediting, labour reporting, travel expense reports, month-end closing	
Defects	SHOP: Poor quality, defective or scrap material, incorrect schedule or information, incorrect or missing paperwork at shipping/receiving	
	<b>OFFICE</b> : Data entry errors, employee turnover, issuing credits due to invoicing errors, wrong information, missing information	
Skills	<b>SHOP &amp; OFFICE:</b> Not recognizing process expertise, think of people as only a source of labour, limiting employee responsibility & authority to basic tasks, inadequate tools, insufficient cross-training, management command and control	