

# 7 Wastes

## Problem

How to determine what types of waste are present?

## Difficulty

Easy to use

A **value-added task** meets 3 criteria:

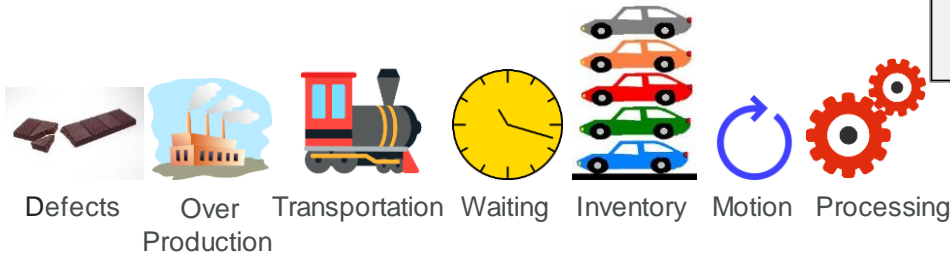
1. The customer cares
  2. Something changes
  3. The task is done right the first time
- Everything else is **waste**.

There are **7 classic types of waste**.  
(Non-utilized talent is a new 8th waste.)



1. **Defects** – Products (or services) that must be corrected
2. **Over Production** – Producing too much of a product.
3. **Transportation** – Moving items not required for process
4. **Waiting** – Waiting for the previous step to complete.
5. **Inventory** – Inventory or information not being used
6. **Motion** – Motion not required for process
7. **Processing** – Activities not required for process
8. **Non-Utilized Talent** – Employees not effectively used

1. Review process looking for the 7 types of waste (use acronym **DOTWIMP**)
  1. **Defects** (Rejects, Repair, Rework)
  2. **Over Production**
  3. **Transportation**
  4. **Waiting**
  5. **Inventory**
  6. **Motion**
  7. **Processing** (Excess or Unnecessary)
2. Once waste is identified, try to remove it



## FIGURES

- [https://commons.wikimedia.org/wiki/File:Cooking\\_chocolate,\\_broken\\_bar.jpg](https://commons.wikimedia.org/wiki/File:Cooking_chocolate,_broken_bar.jpg)
- [https://commons.wikimedia.org/wiki/File:Factory\\_1b.svg](https://commons.wikimedia.org/wiki/File:Factory_1b.svg)
- [https://commons.wikimedia.org/wiki/File:Fxemoji\\_u1F682.svg](https://commons.wikimedia.org/wiki/File:Fxemoji_u1F682.svg)
- [https://commons.wikimedia.org/wiki/File:GSSA\\_Golden\\_Clock.svg](https://commons.wikimedia.org/wiki/File:GSSA_Golden_Clock.svg)
- [https://commons.wikimedia.org/wiki/File:Vert\\_queue.JPG](https://commons.wikimedia.org/wiki/File:Vert_queue.JPG)
- [https://commons.wikimedia.org/wiki/File:Circular\\_arrow-blue\\_01.svg](https://commons.wikimedia.org/wiki/File:Circular_arrow-blue_01.svg)
- [https://commons.wikimedia.org/wiki/File:Red\\_Silhouette\\_-\\_Gears.svg](https://commons.wikimedia.org/wiki/File:Red_Silhouette_-_Gears.svg)

# 7 Wastes – Examples – Two Different Environments

	Manufacturing environment	Office environment
<b>Defects (Rejects, Repair, Rework)</b>	Over producing to allow for expected defects.	Order entry errors. Lost files or records. Adding extra checks or inspection steps into a process.
<b>Over Production</b>	Using more expensive high capacity equipment when low capacity equipment is good enough	Producing reports that no one reads or needs. Duplicating data in multiple places. Creating extra copies. Sending information using multiple medium (e.g., email, post, fax).
<b>Transportation</b>	Reorganizing warehouses. Moving products in and out of storage.	Unnecessary movement of paperwork or information.
<b>Waiting</b>	Waiting for late deliveries to arrive to stock a warehouse.	Waiting for approvals or signatures. Attendees late to meetings. Using slow computers and IT systems.
<b>Inventory</b>	Having stock damaged from it being stored for so long.	Excessive office supplies.
<b>Motion</b>	Switching tasks excessively, resulting in moving between locations.	Searching for files on computer. Poorly designed work stations resulting in more bending and reaching. Re-entering data.
<b>Processing (Excess or Unnecessary)</b>	Including too many layers of packaging.	Obtaining unnecessary approvals on an activity or output.

When including non-utilized talent, use the acronym “**DOWNTIME**”

- |                           |                        |
|---------------------------|------------------------|
| • D = Defects             | • T = Transportation   |
| • O = Overproduction      | • I = Excess Inventory |
| • W = Waiting             | • M = Motion           |
| • N = Non-Utilized Talent | • E = Extra Processing |

# 7 Wastes – Notes

## Slide 1

1. Using the three value-added task criteria is an easy way to identify waste.
2. Not all {Transportation, Inventory, Motion, Processing} activities are waste; they are waste only when they are not part of a value-added task.
3. There are 7 classic types of waste – the eighth (non-utilized talent) is new.

## Slide 2

1. It is easy to find examples of waste in different types of environments.

### FIGURES

- [https://commons.wikimedia.org/wiki/File:Cooking\\_chocolate,\\_broken\\_bar.jpg](https://commons.wikimedia.org/wiki/File:Cooking_chocolate,_broken_bar.jpg)
- [https://commons.wikimedia.org/wiki/File:Factory\\_1b.svg](https://commons.wikimedia.org/wiki/File:Factory_1b.svg)
- [https://commons.wikimedia.org/wiki/File:Fxemoji\\_u1F682.svg](https://commons.wikimedia.org/wiki/File:Fxemoji_u1F682.svg)
- [https://commons.wikimedia.org/wiki/File:GSSA\\_Golden\\_Clock.svg](https://commons.wikimedia.org/wiki/File:GSSA_Golden_Clock.svg)
- [https://commons.wikimedia.org/wiki/File:Vert\\_queue.JPG](https://commons.wikimedia.org/wiki/File:Vert_queue.JPG)
- [https://commons.wikimedia.org/wiki/File:Circular\\_arrow-blue\\_01.svg](https://commons.wikimedia.org/wiki/File:Circular_arrow-blue_01.svg)
- [https://commons.wikimedia.org/wiki/File:Red\\_Silhouette\\_-\\_Gears.svg](https://commons.wikimedia.org/wiki/File:Red_Silhouette_-_Gears.svg)