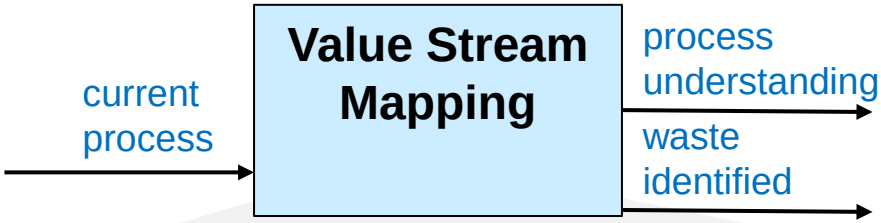
Value Stream Mapping (VSM)

Problem
How to add value for your customers?

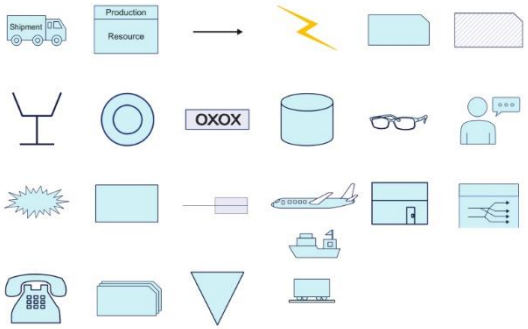
Difficulty
Work with an SME

- A **Value Stream Map** (**VSM**) graphically shows, for a single product or service, the material flows and the information flows that signal and control the material flows.
- A VSM uses standard icons to represent processes, materials, and information.
- The VSM shows how customer value is added at each step.
- Typically both a **Current State Map** (the current process) and a **Future State Map** (what the process could be) are created.



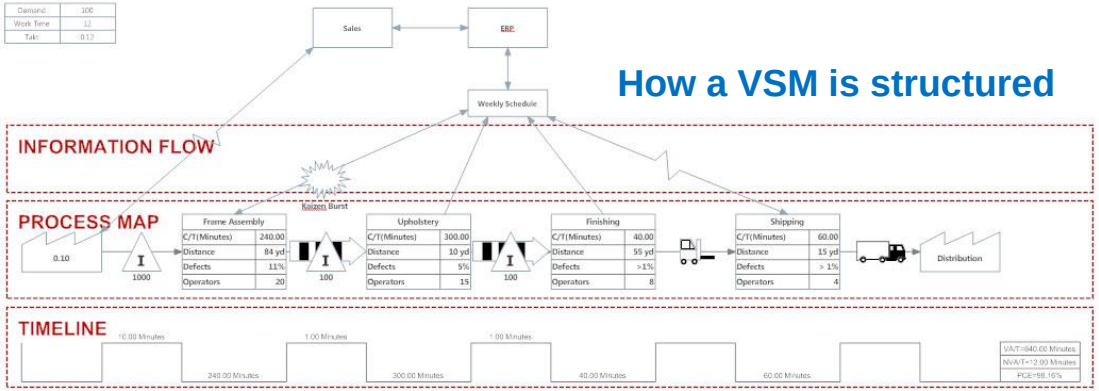
1. Assess your product's or service's steps.
   For each step, determine:
   - The work and wait **times**
   - The **labor needs** (including overtime)
   - The **error rates**
   - The system **downtime**
   - The **inventory level** (excess or shortfall)
   - The production or process **delays**
2. Create a graphic using standard icons.
3. Assess the current state VSM to identify waste.

Some standard VSM icons



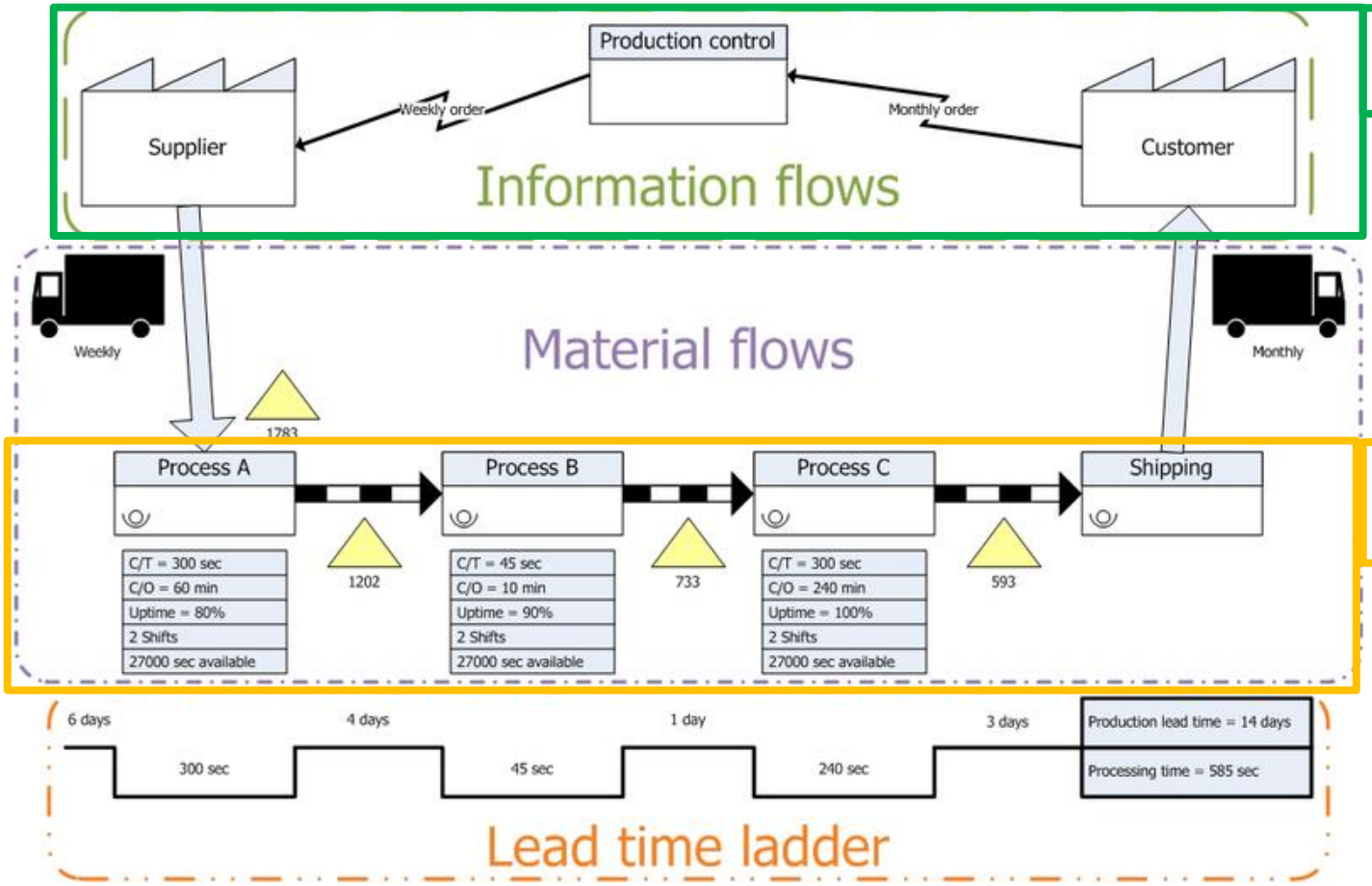
https://www.edrawmax.com/article/value-stream-mapping-symbols.html

How a VSM is structured



https://www.smartdraw.com/value-stream-map/

Value Stream Mapping – Example – Generic Factory



This shows how the **orders flow.**

This shows **deliveries** to and from the factory.

This shows **information about the processes.**

This shows the **timeline** – how long each processing step takes and how long the product waits for the next processing step.

https://en.wikipedia.org/wiki/File:ValueStreamMapParts.png

Value Stream Mapping – Notes

Slide 1

1. A VSM is used to show, analyze, and improve the steps needed to deliver a product or service.
2. A VSM is useful for identifying waste and inefficiencies.
3. A VSM is an effective tool for communication and collaboration.
4. For
   - Manufacturing ➔ follow parts, material, and information
   - Engineering ➔ follow Information and knowledge

Slide 2

1. While the diagram appears busy, it has a few distinct parts and can be easily understood information within each part.