

FLOW SYSTEM

PARTICIPANT WORKBOOK

Distributed Leadership

Workbook 1: Organizational Design



getflowtrained.com/organizational-design/

Mapping Your Value Stream

Organizational design looks at how people and groups are structured in relation to the requisite tools and resources to achieve organizational goals. Organizational design provides for a flexible and resilient organization, allowing for organizations to change their structures to meet threats from competitors and to meet demands from growth.



Value is activity that adds value to a product or service by being processed. Value flows horizontally and vertically throughout an organization. Leaders must optimize for the flow of value. The flow of value includes any unarticulated needs of the customer.

One role of leadership is to eliminate/reduce silos and constraints to allow for effective collaboration and communication across teams and departments.

The following process will familiarize you with the basic steps for mapping your value stream. We suggest choosing a real problem or area to focus on when learning this approach.

The following process steps and illustrations are inspired by Martin and Osterling (2014).

The word “takt” comes from the German word for a “precise interval of time”. Takt Time is the measure of how much time you have for each complete product or service being processed (production time / customer demand = max time per item).

You cannot establish a balanced flow unless you understand the customer demand. The way this is calculated varies depending on the context. In figure 3.12.29 we use a standard calculation for manufacturing. You will first need to establish what your measurement of demand is.

Another example is a legal office that may need to process 50 contracts a week to meet the company’s needs. The legal team allocate 25 hours per week attending to contracts. The takt time for a contract is therefore 0.5hrs, or 30 minutes per contract. Quite the ambitious target.

This first step helps us see if the demand is feasible, even before we map the whole process of value creation. You might even wish to pause here until this reality has been considered.

Step 1 - Calculate Takt Time (Demand)

Customer Demand:

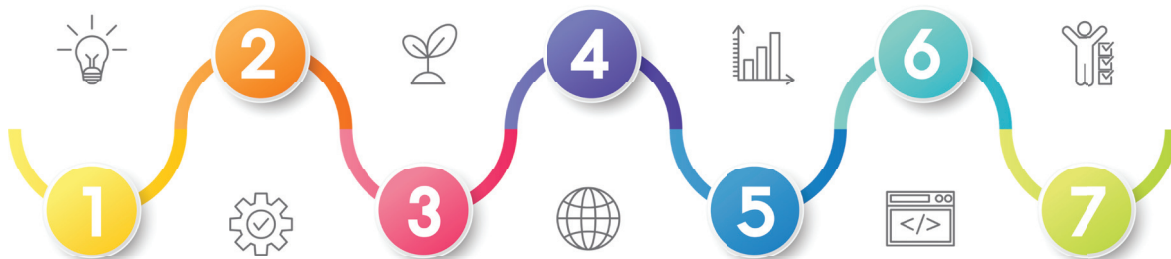
250 Items in 1 week
 ~ 50 Items per day
 40 hours per week
 8 hours per day
 2400 minutes/wk
 480 minutes/day/shift
 Takt Time = time/demand

2400 mins/250 items = 9.6 min/item

FIGURE 3.12.29: Step 1 - Calculate the Customer Demand (Takt Time)

Once demand is established, and the target to meet demand is understood, we suggest you start by walking the process of value creation. This is living the idea of Genchi Genbutsu from The Toyota Way. Gather those knowledgeable around you and do a quick sanity check on the process you intend to review. Define clear boundaries for the mapping exercise. It's unlikely to be the whole company! Once you understand the scope of the mapping move to step 3.

Step 2 - Walk The Process



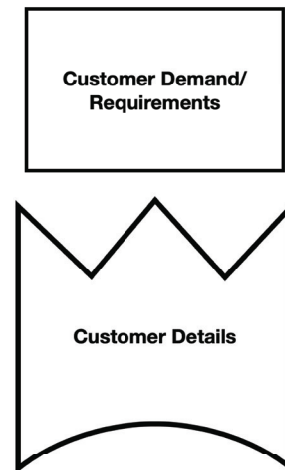
Quickly walk the process with the group or team to grasp the general flow. Define the start and stop point of the process, the boundaries for this mapping activity. Don't try to map the entire organization!

FIGURE 3.12.30: Step 2 - Walk the Process

We are now ready to map the process and the first step is to visualize the customer, also making note of their demand calculated in step 1.



Step 3 - Add The Customer



In the top right hand corner of the map we add the customer. Add a box detailing the customer demand for this map and the takt time calculated earlier. Ultimately we need to map how we do what we do and if we can achieve this demand.

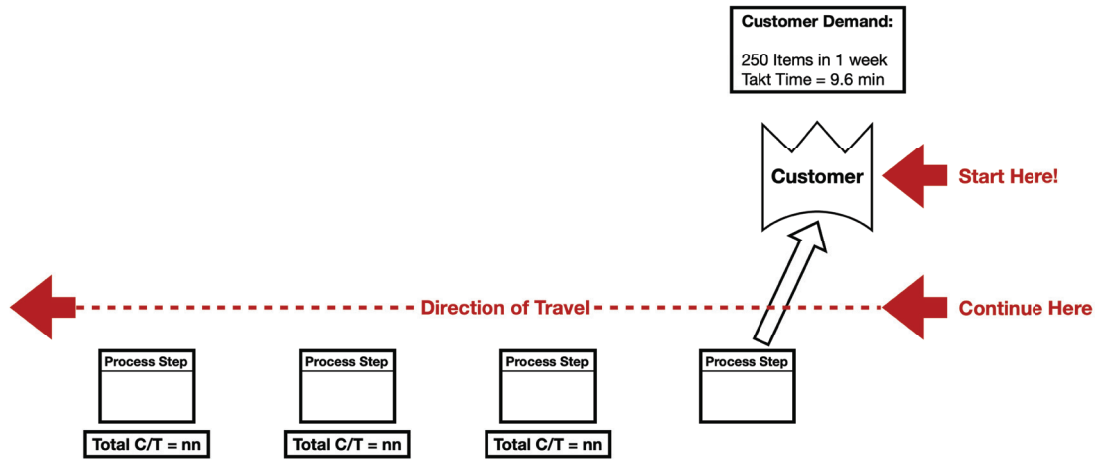
FIGURE 3.12.31: Step 3 – Add the Customer

We map the value stream in reverse. This is called linear contextualization. Linear Contextualization allows us to consider changes to the process as part of mapping the process as we question the real reasons why we do, what we do, the way we do it.

Start by adding a box that was the very last thing done before the customer received the value. Remember, each process step/box should contain some basic information. A description of the function depicted, a description perceived to the barriers to flow, the number of people involved, and some measures and related calculations.

A caveat here. In manufacturing, where this technique was developed, we consider Cycle Time (CT) to be “the time taken to complete one complete item”, but in knowledge work or non-manufacturing examples we also take this to mean “one step in the process”. Often a process step does not create a complete item of value, yet it is necessary and can be value-added or non-value-added..

Step 4 - Start at The End

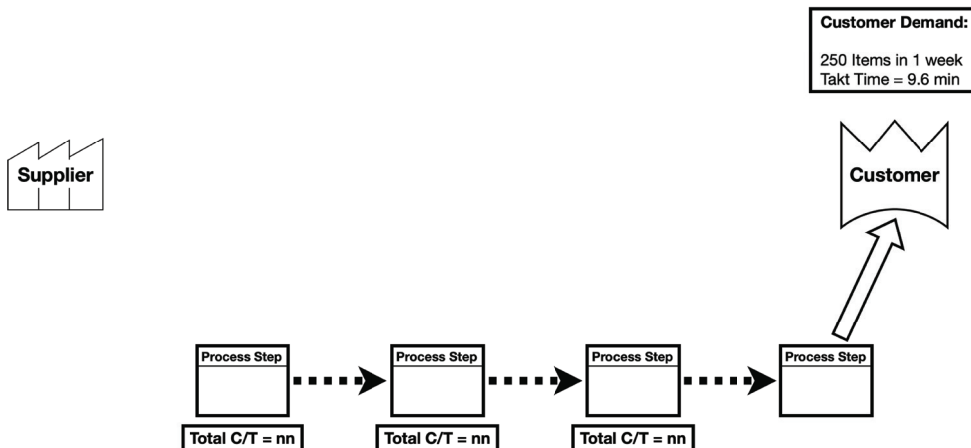


We map the value stream in reverse. This is called linear contextualization. Linear Contextualization allows us to consider changes to the process as part of mapping the process as we question the real reasons why we do what we do.

FIGURE 3.12.32: Step 4 – Start at the End

Remember, material is whatever you are working on. The object/item or piece of work. Focus on the flow of materials as you build out your map. Continue adding process steps/boxes as you work backwards away from the customer, detailing what happens at each step. If you start to branch creating multiple paths, ensure you indicated the direction of flow between paths and process steps.

Step 5 - Focus on Material Flow



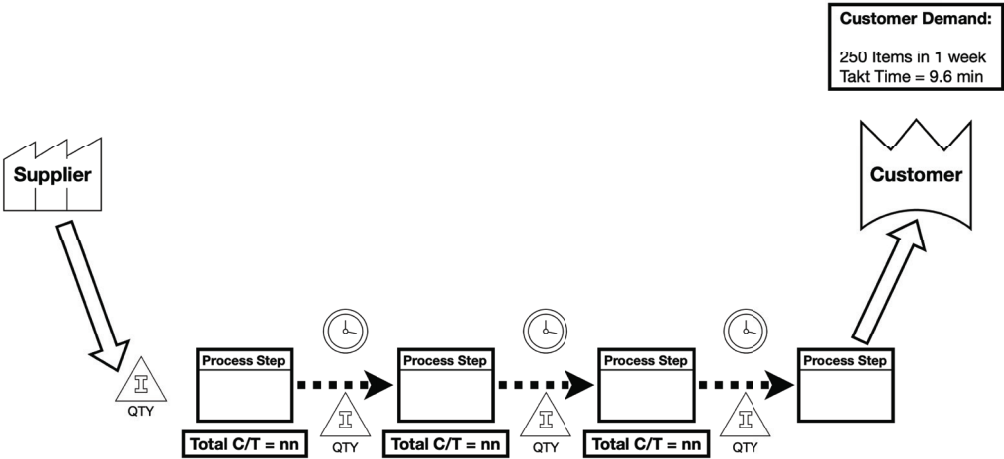
Focus on the flow of materials/work first. This includes the process/work boxes and data boxes containing relevant timing.

FIGURE 3.12.33: Step 5 – Focus on Material Flow

Obtain or measure the time between each step, material/work waiting to be processed. This is non-value-added time. This is often the greatest impact to process cycle efficiency (PCE). If the work involves creating a count of something, ensure you note those values as well. Number of items made, backlog items completed, contracts processed etc.



Step 6 - Add Inventory/Wait Times

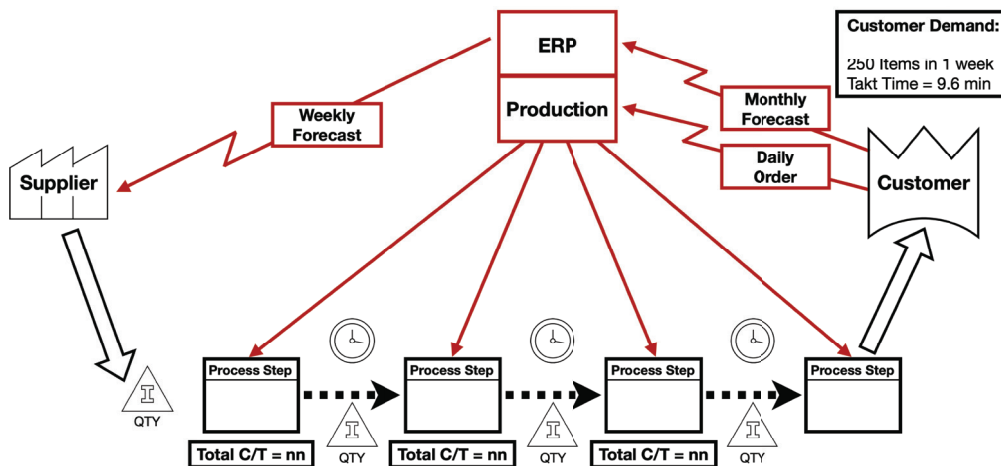


For inventory, we simply count the number of pieces in between the processes and note them under the triangle. We also add the time taken in each step to produce each item (CT), and notate the time spent waiting between each process.

FIGURE 3.12.34: Step 6 – Add Inventory and Wait Times

Next you need to visualize the flow of information between each step. This is only the information necessary to this workflow and is known as control information. We recommend notating whether the information is valuable and necessary to the workflow or if it is optional. If waiting occurs between a process step and information being sent or received, this should also be noted. Ensure you indicate the directional flow of the information. If it flows bi-directionally add two arrows.

Step 7 - Add The Information Flow



This is a key step in differentiating this from a simple process map, in addition from working in reverse we add the flow of information. Straight lines are analog/manual information flows, lightning bolts are electronic information flows.

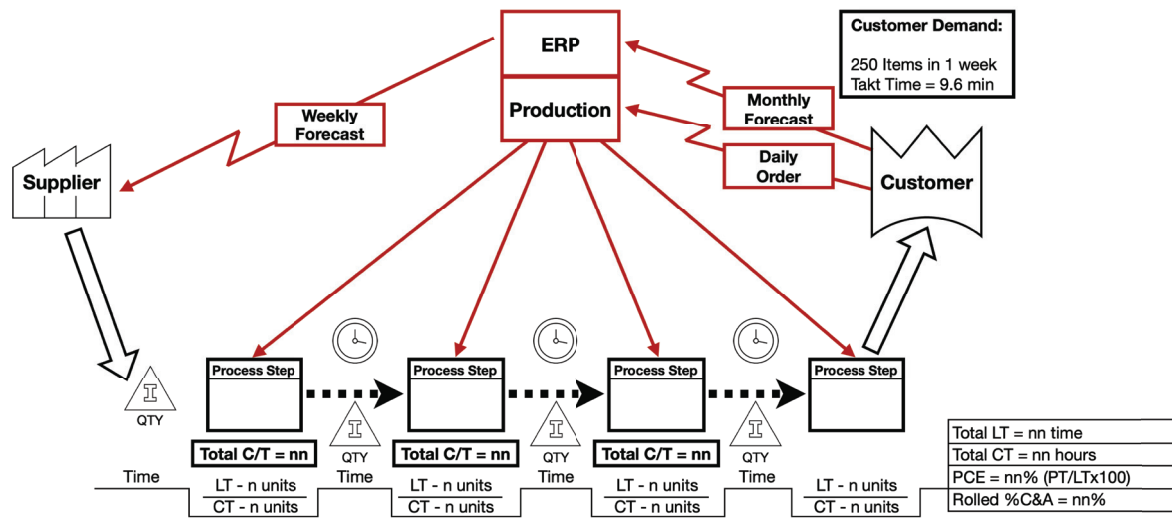
FIGURE 3.12.35: Step 7 – Add the Information Flow

As your map takes shape and starts to tell a story, you need to add the overall metrics to it. You should have noted the cycle time for each process step to create one item of value. If the process step is required to work in batches, you will also have a measure for lead time, the total time for the number of items produced at that step in a batch.

You should have noted the waiting time between each step in the overall process.

You can now try calculating the overall process cycle efficiency (PCE) for the end-to-end value stream map. This is the efficiency of a process, or series of processes, and is calculated as a percentage by dividing the total value-added time (VA) by the total customer lead time (CLT) x 100.

Step 8 - Add The Timeline & Metrics



Value added time under each step, non value added time (typically waiting as recorded in step 6) between each section.

FIGURE 3.12.36: Step 8 – Add the Timeline and Metrics

Summary

To be able to effectively design a value delivery organization you first need to understand why the value is not flowing as effectively as it should be. You need to know how you do what you do before you can make any improvements. You need to understand the way you currently do the work by making visible the constraints in the organization. The task is then to design an organization for the optimized flow of value.

Remember, positive or negative growth, costs, time to market, customer/staff attrition are not problems, they're outcomes! They reflect how you do what you do. If you desire different outcomes you need to change how you do work, the way you do what you do. Until you recognize the problem that you need to solve there is little point implementing solutions.

What Do You Think The Problem Is?



What's the problem you think you are are trying to solve?



These are not problems, they are outcomes!

**Positive or Negative Growth, Costs, Time to Market, Customer/Staff Attrition are not problems, they're outcomes!
They reflect how you do what you do. You need to change how you do work if you want different outcomes.**

FIGURE 3.12.37: Understanding the Real Problem