

Workshop: Value Stream Mapping

Reducing lead time and lowering inventory levels

Target group

High and middle level management, including both the technical and organizational side (technologists, foremen, leaders, production management), as well as production planning and logistics (customer service, material orders, warehouse management, internal logistics).

Get the practical insight into solving problems and responding to challenges including:

- Overproduction and surplus inventory.
- Long lead time of production orders.
- Controlling production based on forecast that leads to pushing materials through the production system.
- Lack of feedback between production areas that results in some departments functioning as they were “isolated islands”.
- Economies of scale as the preferred approach (manufacture as much as possible because it means the lowest costs possible).
- Difficulty in describing the manufacturing process in a way that will be understood to everyone.

Overview

The Value Stream Mapping method stems from a concept developed by Toyota under the name “Material and Information Flow Mapping”. It is used to present the current state of the production process and to design future states, called the “ideal” states, created in order to implement a Lean Manufacturing system. Thanks to maps, the process starts being perceived “with the client’s eyes” since the projects of flows include all activities that constitute the value provided to the client. It is particularly crucial due to the fact that in practice, a lot of effort and implementation improvements, unless they are planned properly, may not produce the expected results (e.g. accelerating the operation of a manufacturing machine that is not a “bottleneck”).

Benefits for the company

- **Visualization** of material and information flow on one sheet.
- **Indication** of areas that should be the starting point for improvement.
- **Designing** the vision of the future state.
- **Lowered** inventory level.
- **Reduced** product lead time.

Benefits for the participant

- **Developing** the ability to identify flows in a plant.
- **Independent** drawing up of a value stream map.
- **Ability** to perceive production and planning processes holistically.
- **Familiarity** with tools for improving the value stream.
- **Drawing up** a schedule of implementation of the designed flow.

AGENDA – DAY ONE

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Module 1	9:00 – 10:30 (10:30 – 10:45 coffee break)	<ul style="list-style-type: none"> Presenting the company to the workshop participants – the company representative Introduction The first course of a simulation game
Module 2	10:45 – 12:15	<ul style="list-style-type: none"> Definition of the Value Stream map Becoming acquainted with the icons used for a Current State map – game. Creating a Current State map for a simulation game
12:15 – 13:00 Lunch		
Module 3	13:00 – 14:30 (14:30 – 14:45 coffee break)	<ul style="list-style-type: none"> Visit at the production hall, becoming familiar with the production process of the company hosting the workshop Presenting the areas which will be mapped during the workshop Getting acquainted with the tools used to analyze and improve the current state map <ul style="list-style-type: none"> takt time – T/T operator balance
Module 4	14:45 – 16:30	<ul style="list-style-type: none"> Analyzing and improving the current state – continuation: <ul style="list-style-type: none"> one-piece flow pull system supermarket, Kanban, FIFO queue Creating the map – the future state for the simulation game

HARMONOGRAM – DAY TWO

Module 1	9:00 – 10:30 (10:30 – 10:45 coffee break)	<ul style="list-style-type: none"> The second course of a simulation game in accordance with the future state map Discussing the second course of the game – analyzing the obtained results
Module 2	10:45 – 12:15	<ul style="list-style-type: none"> Visit at the production hall - collecting information necessary to create the current state map for two selected product families manufactured in the plant hosting the workshop – work in two groups
12:15 – 13:00 Lunch		
Module 3	13:00 – 14:30 (14:30 – 14:45 coffee break)	<ul style="list-style-type: none"> Creating a current state map for selected product families – materials flow Adding data regarding information flow to the current state map (information collected from the company employees) Analysis of the maps
Module 4	14:45 – 16:30	<ul style="list-style-type: none"> Suggestions for improvements of the created maps – future state maps Presentation of the maps and suggested improvements Session: what I liked about the company hosting the workshop and what I think might be improved Workshop summary