Operational excellence

Value Stream Mapping (VSM)

Two days to map the value stream of a product family at your site, from customer order to shipment. Participants record the physical and information flows, the inventories and the times on the shop floor, draw the current state, measure the lead time and the value-added share, then build the future state and the action plan to reach it.

Duration : 2 days

Objectives

1. Choose a product family and the scope of the mapping
2. Collect flow data on the shop floor: cycle times, work in progress, changeover times, availability
3. Draw the current-state map, information flow included
4. Calculate the lead time and the value-added ratio of the flow
5. Design the future state: takt time, continuous flow, supermarkets, pacemaker process
6. Build the action plan that leads from the current state to the future state

Programme

Day 1 — morning

• What a VSM is for: seeing the whole flow, not an isolated workstation

• Product family: product / operation matrix and choosing the scope

• Mapping symbols and conventions

• Preparing the shop-floor survey: data to collect, sharing roles

Day 1 — afternoon

• Shop-floor survey of the flow, walking upstream from shipping to receiving

• Measuring work in progress, cycle times, changeover times, headcount

• Information flow: orders, forecasts, production orders, scheduling

• Drawing the current state in pencil, on a large sheet

Day 2 — morning

• Lead time, value-added time and a critical reading of the current state

• Principles of the future state: produce to takt, continuous flow where possible, pull elsewhere

• Supermarkets, FIFO, a single pacemaker, production levelling

• Exercise: the future state of a textbook case

Day 2 — afternoon (workshop)

• Workshop: the future state of your product family

• Improvement loops and workshops to launch: 5S, SMED, TPM, kanban, standardisation

• Action plan: owners, deadlines, indicators

• Knowledge test and presentation of the two maps to management

Teaching methods

• Data collected on the shop floor, in your plant or warehouse

• Map drawn by hand, as a team, before any tidying up

• Textbook case for the future state, then application to your own flow

• Cross-functional team: production, logistics, planning, methods

• Presentation of the current state and future state to site management

Assessment and documents

Knowledge test, end-of-course evaluation at D+1, numbered training certificate verifiable online and training report. The current-state and future-state maps, with the associated action plan, are handed to the company.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

The plan that comes out of the VSM leads to workshops taught in other courses of the domain: « Pull Flow, Kanban and Work in Progress », « SMED: Changeover Time Reduction » or « Kaizen: Leading a Rapid Improvement Workshop ».

Practical information

Duration	2 days
Audience	Industrial and logistics management, production supervisors, methods, supply chain, continuous improvement managers
Prerequisites	Lean basics are useful; see « Lean Manufacturing: Fundamentals and the 7 Wastes ».
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Which product family should we map?

The one whose lead time, inventories or customer service raise the most questions, with enough volume to be representative. We choose it with you before the session, from your sales and routing data.

Is VSM suitable for process industries?

Yes. In agri-food, chemicals or packaging, the map reveals inventories between steps, waiting for laboratory release, production campaigns and recipe changes. The symbols are adapted.

Do we need mapping software?

No. The map is drawn by hand on the shop floor and in the classroom; it can be tidied up afterwards with the tool of your choice.

What is the difference with the process mapping of a quality system?

Process mapping in an ISO system describes the processes, their owners and their interactions. VSM measures a product flow, with its inventories, times and lead time, in order to redesign it.