



October 20th, 2022
10:00 AM and 4:00 PM CET

VALUE STREAM MAPPING

By Manish Shanbhag, EIPM

Webinar

Introduction



- Inefficiency
- Waste
- Knots formed automatically
- Loss of Value



AGENDA

- **WHAT IS VALUE STREAM MAPPING (VSM) ?**
- **WHAT ARE THE KEY COMPONENTS OF A VALUE STREAM ?**
- **DESIGNING A VALUE STREAM**
- **APPLICATION IN PROCUREMENT**

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What is Value Stream Mapping (VSM) ?

Value Stream Mapping, abbreviated VSM, is a technique used to define and optimize the various steps involved in delivering a product or a service.

ILLUSTRATE

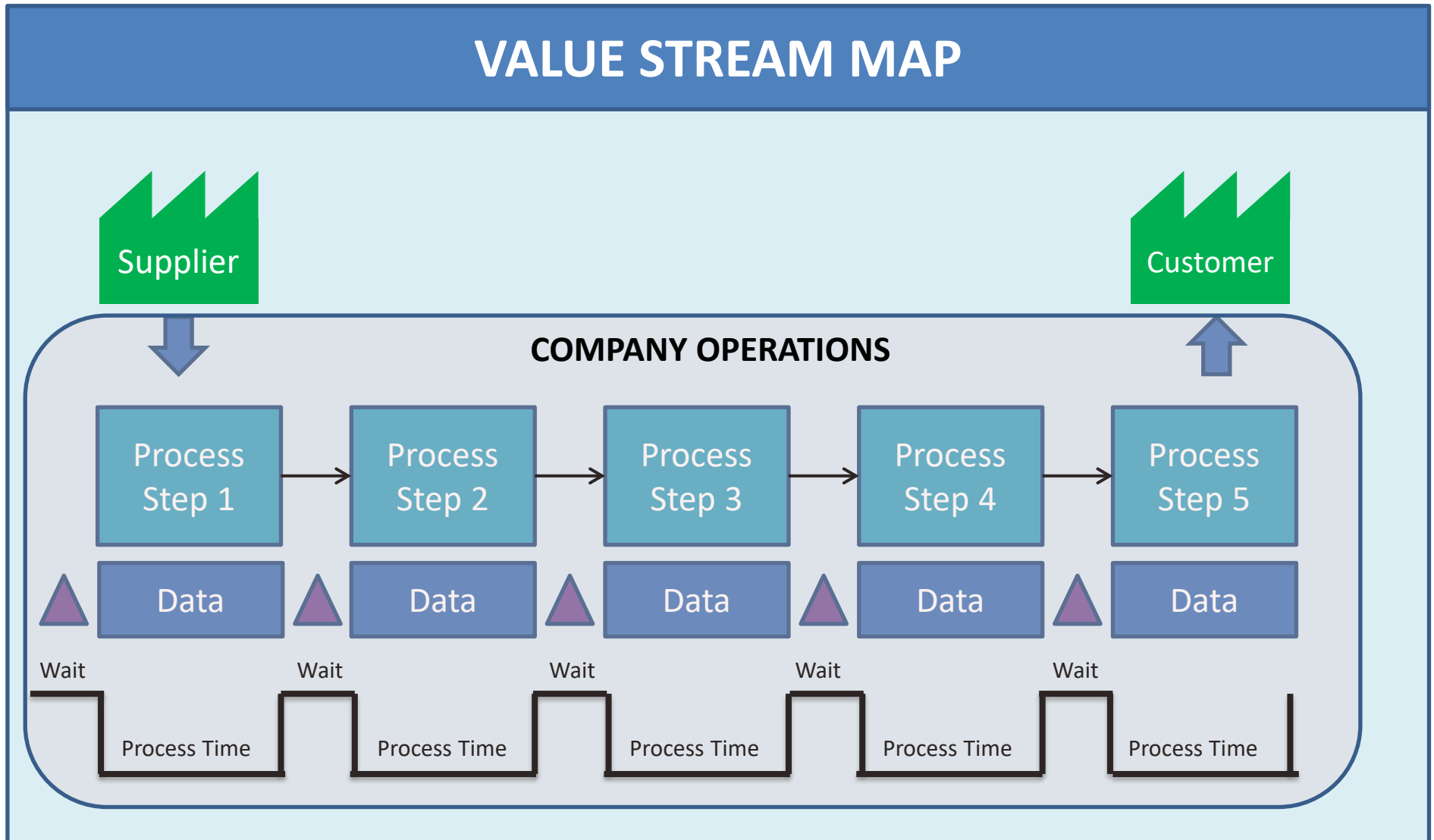
ANALYSE

IMPROVE

- **Visual aid to look at all the Steps in a process.**
- **Support tool for Lean Implementation**
- **Highlight inefficiencies / Waste / ‘Knots’ / loss of Value**
- **Form the Basis of an improvement plan**
- **PRIMARY OBJECTIVES**
 - REMOVAL OF WASTE
 - CUSTOMER NEEDS

- **Manufacturing and Supply Chain**
- **Logistics**
- **Software development**
- **Product development**

Value Stream mapping

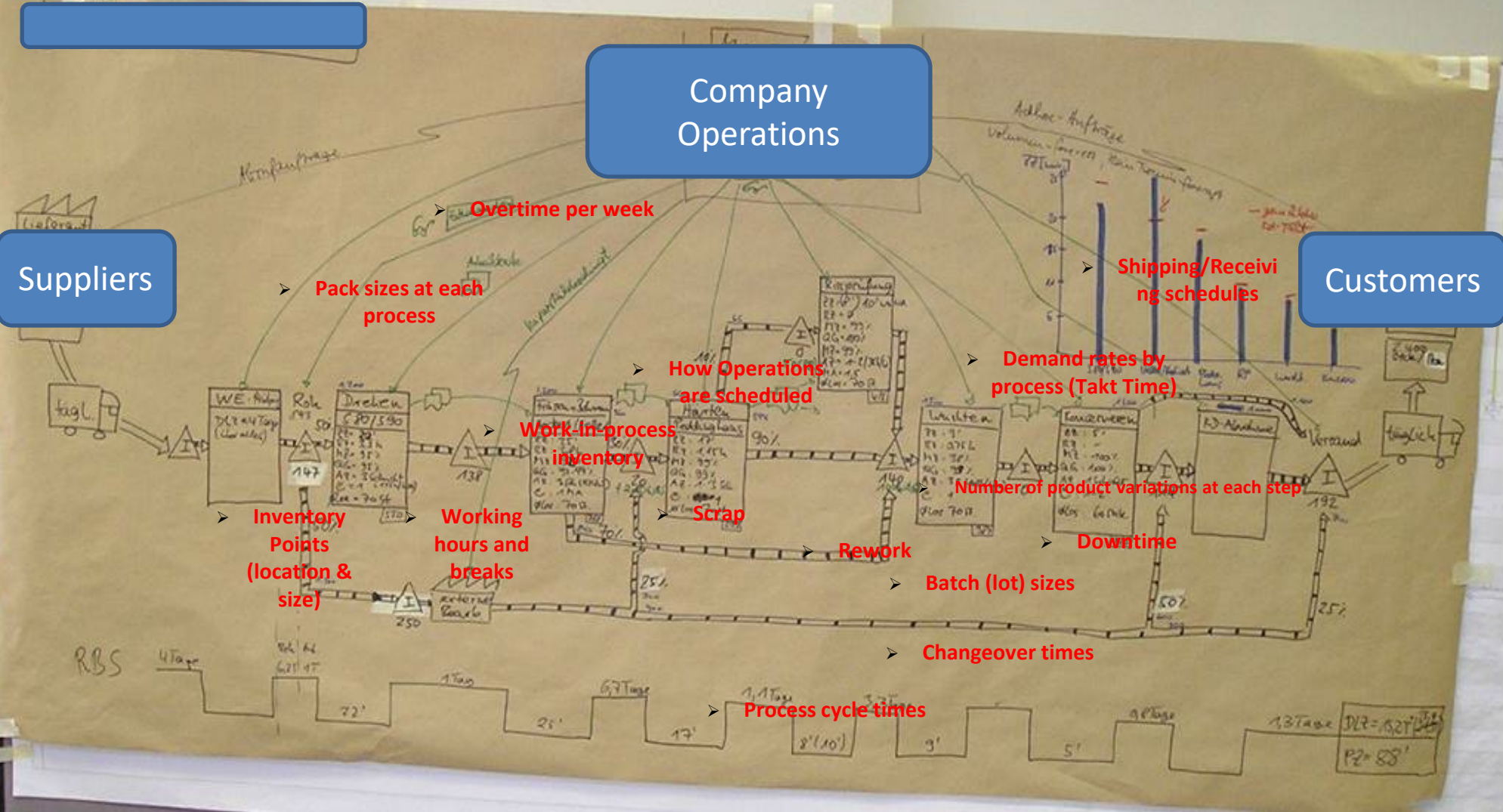


Different components of a Value Stream

Company Operations

Suppliers

Customers



Source : Demand Chain Solutions

Comparison between VSM and Process Mapping

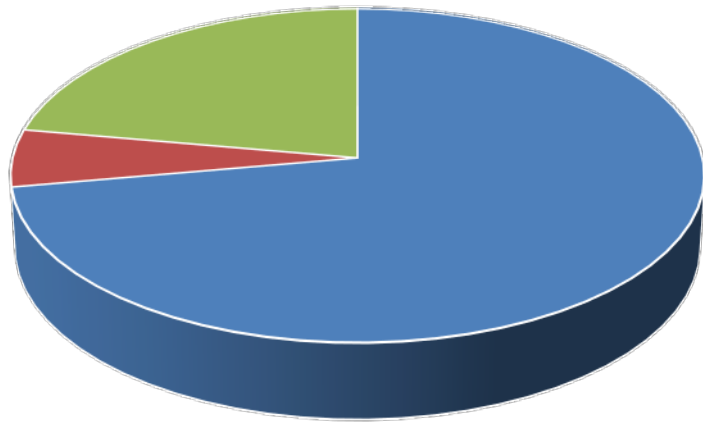
	VSM	Process Mapping
Primary Purpose	Strategic - Waste elimination	Tactical – Waste elimination
Timeframe	6 months to 1 year	2 to 6 months
Level of detail	Macro	Micro
Functions	Cross Functional	One department
Team	Company Leadership	Hands-On
Focus	Customer Value driven	Internal efficiency
Approach	Evaluate Functions in a process	Evaulate tasks in a function

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Key components : VA, NVA and ENVA

TOTAL VALUE



- Value added
- Non Value added
- Essential Non Value Added

- Wait time
- Travel time
- Excess resources / Idle resources
- Overproduction
- Compliance parameters
- ...
- ...

- 1.Value-added (VA):** The actual conversion or processing of Inputs to Outputs. The Customer pays for this.
- 2.Non-value added (NVA):** actions that should be eliminated, Waste. The Customer doesn't pay for this.
- 3.Essential Non-value added (ENVA):** actions that are wasteful but necessary under current operating procedures.. i.e. they are necessary to sustain the business but do not contribute to customer requirements

Value Stream mapping: Types of Wastes (from Lean)

8 Wastes

The 8 Wastes are eight types of process obstacles that get in the way of providing value to the customer.



Defects

Efforts caused by rework, scrap, and incorrect information.



Overproduction

Production that is more than needed or before it is needed.



Waiting

Wasted time waiting for the next step in a process.



Non-Utilized Talent

Underutilizing people's talents, skills & knowledge.



Transportation

Unnecessary movements of products & materials.



Inventory

Excess products and materials not being processed.



Motion

Unnecessary movements by people (e.g., walking).



Extra-Processing

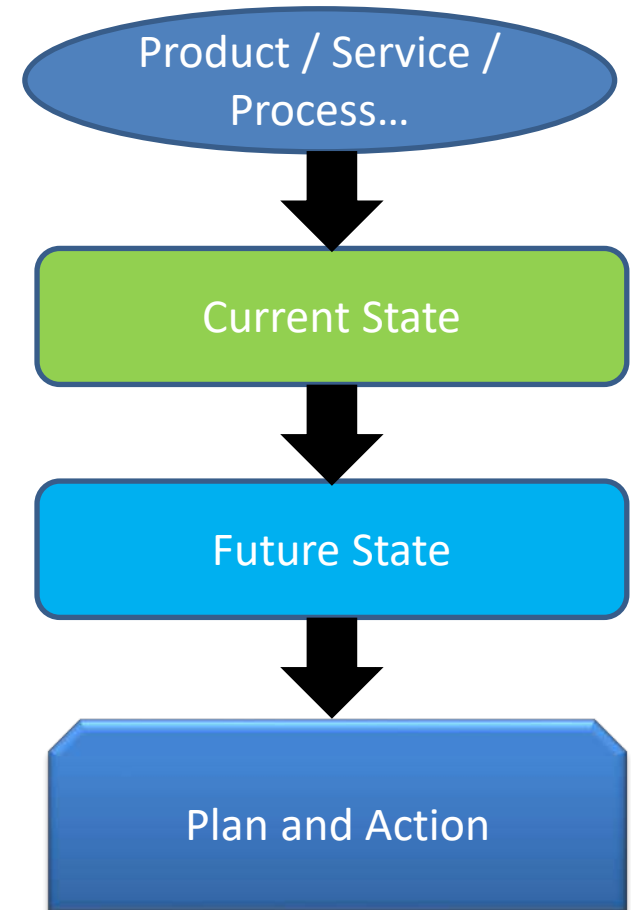
More work or higher quality than is required by the customer.

AGENDA

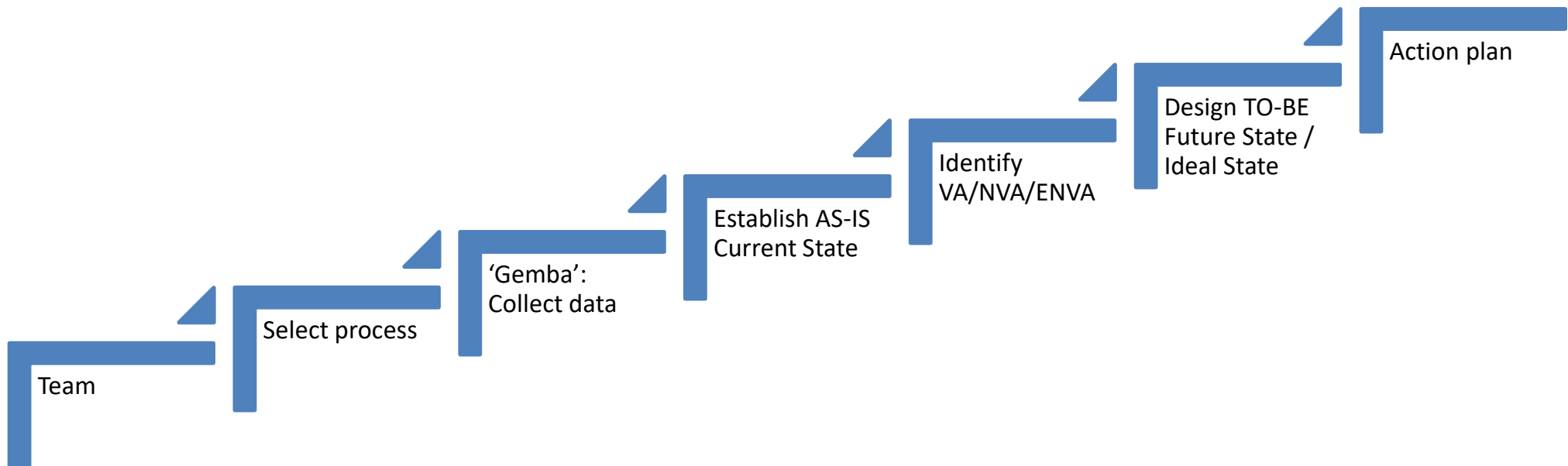
- WHAT IS VALUE STREAM MAPPING (VSM) ?
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Designing a Value Stream

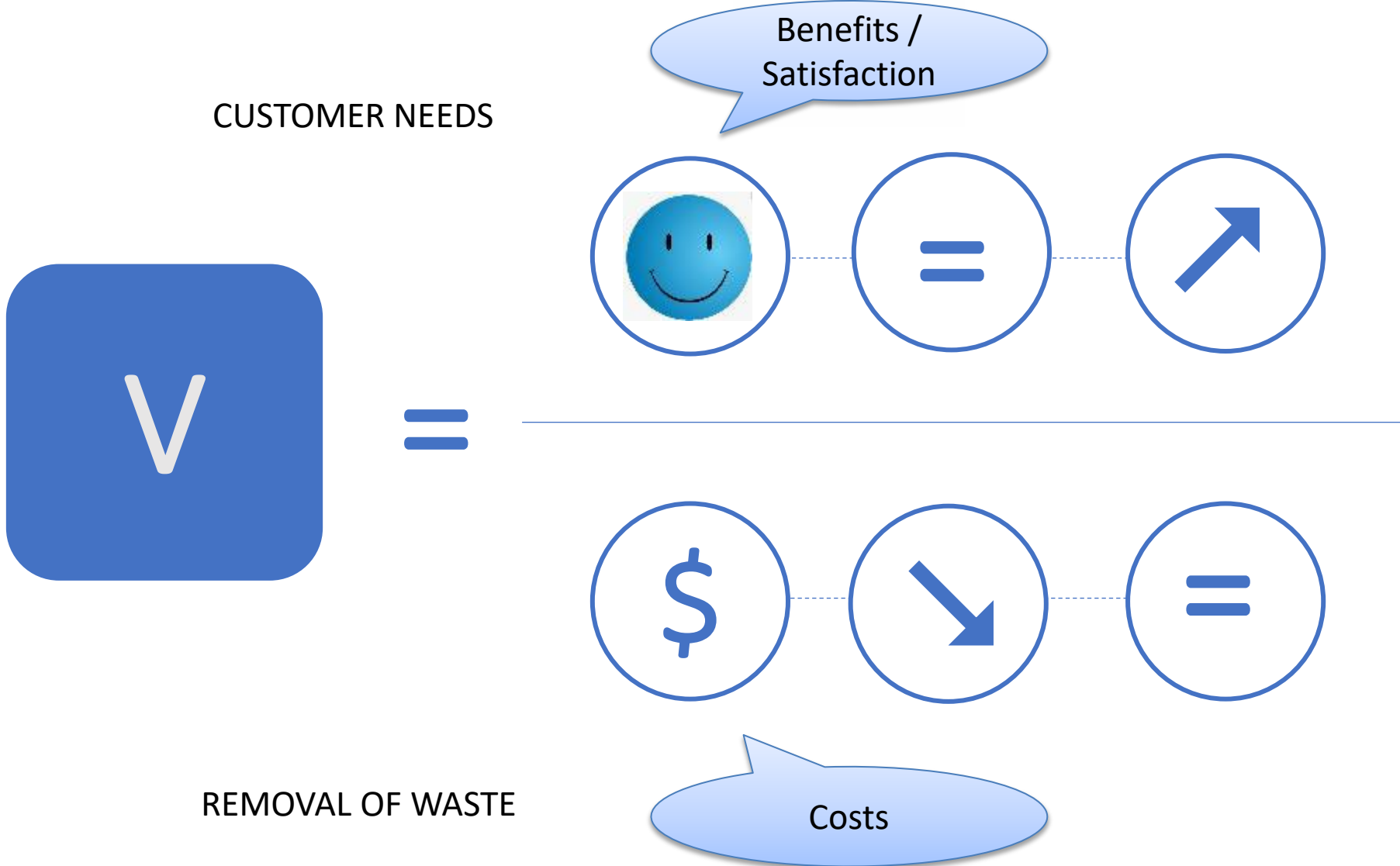
- Select product / service / process.
- Set-Up a Team. Sponsor Or Leader.
- Draw Current State map. Understand how the process currently operates.
- Identify VA and NVA and ENVA.
- Draw the Future State map. Design a lean flow.
- Look for elimination of waste and areas of improvement to meet **Customer's needs**.
- Develop action plan and implement it.



Another approach to VSM Process Steps



Defining Value for Procurement



Questions while designing (non-exhaustive)

The Current State

- What is the Current State ?
- Why was it designed this way ?
- Who designed it ?
- When was the Current State designed ?
- Where was it relevant ?
- How did things work ?

The Future State

- What does the customer really need?
- How often will we check our performance to customer needs?
- Which steps create value, and which are waste?
- How can we flow-work with fewer interruptions?
- How do we control work between interruptions? How will work be prioritized?
- Is there an opportunity to balance the workload and/or different activities?
- What process improvements will be necessary?

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Examples of Value Streams in Procurement

- Purchase Request to Purchase Order
- Procure-to-pay
- A Costing manager studying a RFP and proposing a solution to the customer
- Procurement working Upstream on Category Strategies

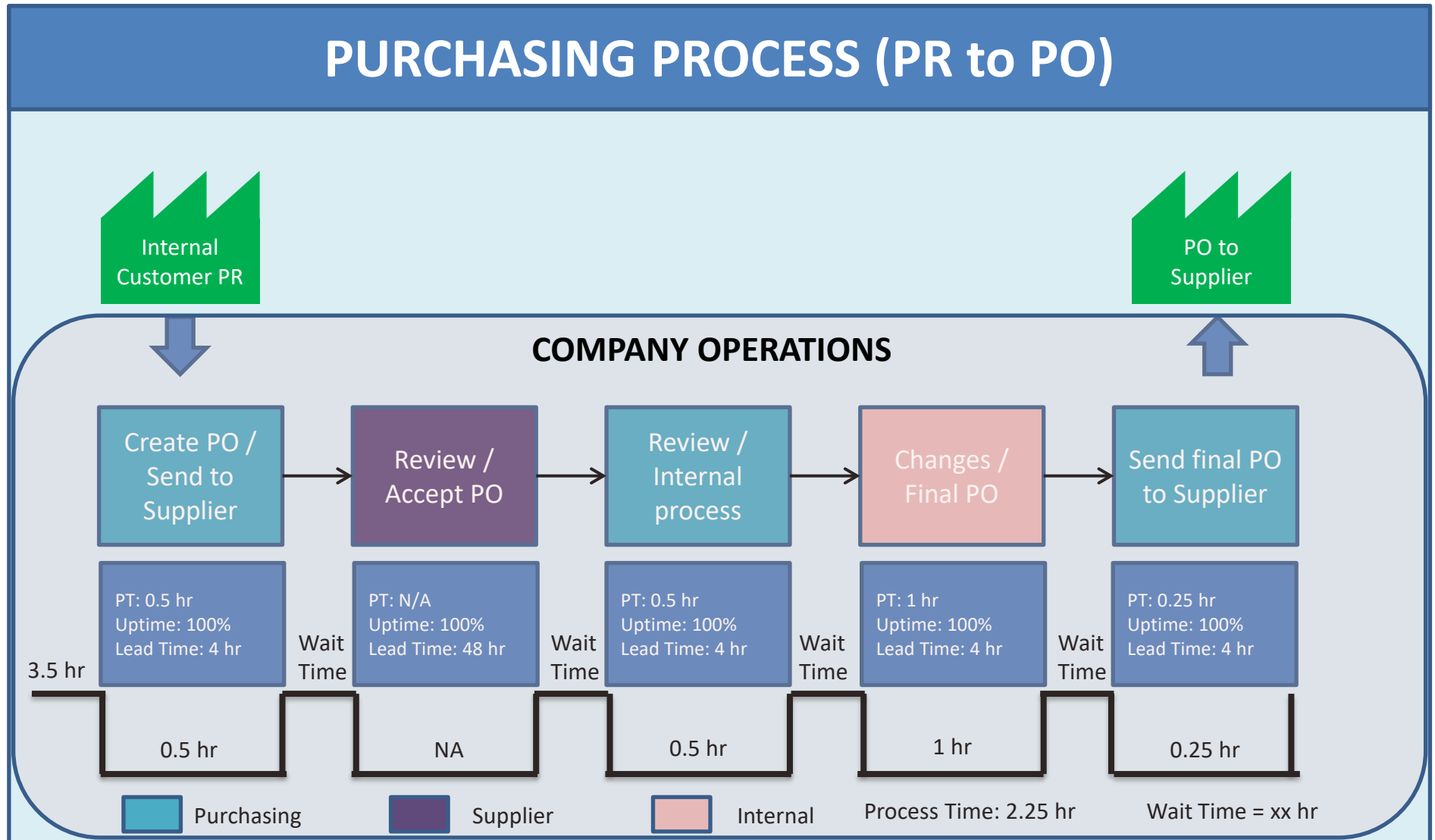
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Value Stream mapping: Procurement example (adapted)



Identify VA / NVA / ENVA

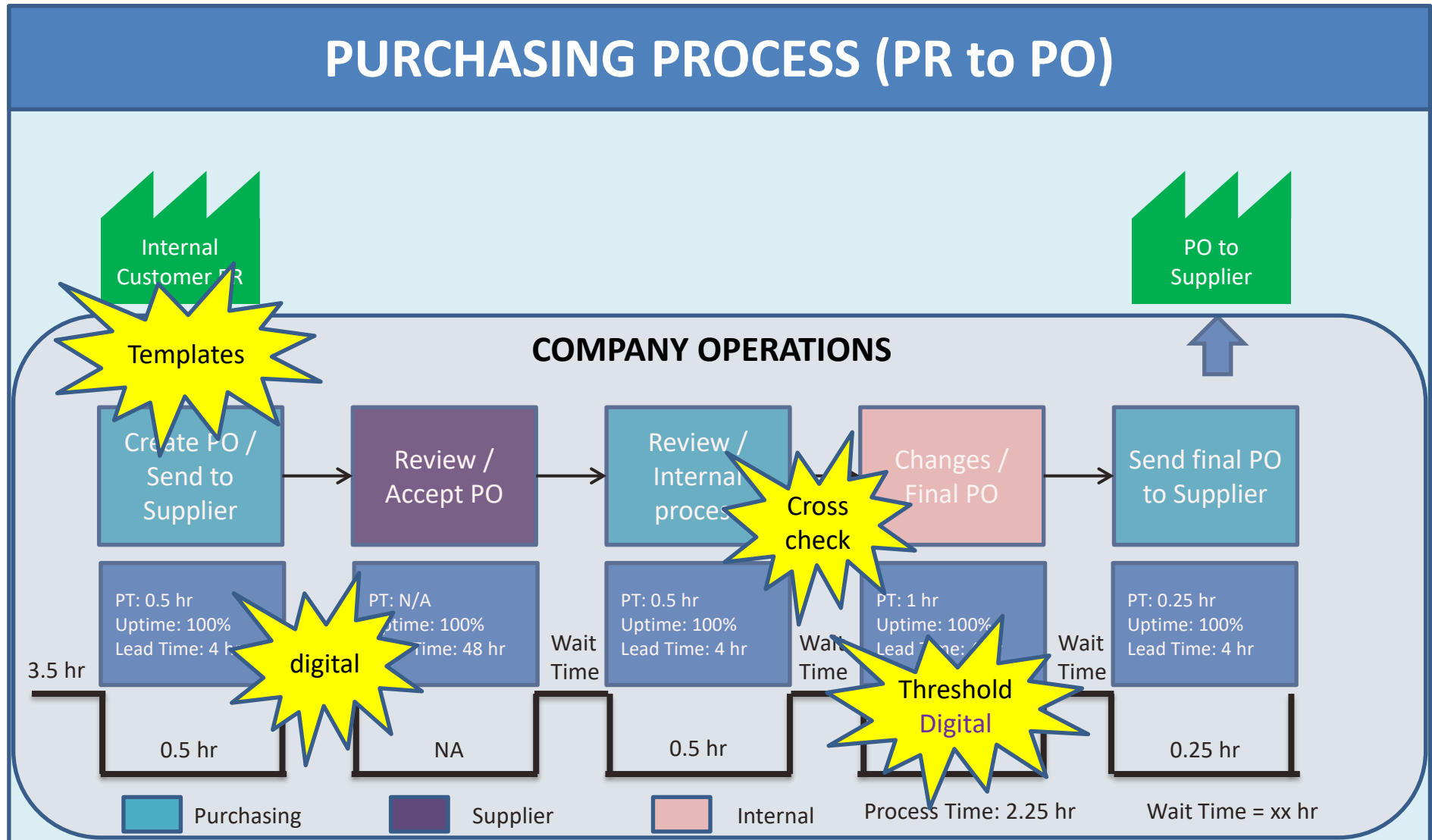
VA: Initial Review with Supplier, Internal checks, etc

NVA:

- Defects: Errors in PR / PO
- OverProduction: xxx
- Waiting: Waiting from Internal teams
- Non-Utilized Talent: xxx
- Transportation: Not applicable
- Inventory: Not applicable
- Motion: xxx
- Extra-processing: xxx

ENVA: Company compliance, Threshold levels for workflow, etc

Value Stream mapping: Procurement example (adapted)



Action Steps	Ownership	Deadline	Resources / Team	Potential Barries
Templates	Procurement	xxx	Business / Procurement / Finance..	Customization, Variability,...	
Digital workflow	Procurement	xxx	IT / Procurement	Compliance, ..	
...	
...	

Trade-Off among Quality / Cost / Variability



Tips on VSM

- Product / Service / Process, Distribution channel or business segmentation
- Physical and Information flow mapping
- Start with the End and work Upstream to the Start of the process
- Focus on Data quality and accuracy

Limits of VSM

- Requires Team Work for motivation, coordination and problem solving
- VSM doesn't address directly Lean Manufacturing methods such as 6 sigma, 5S, Total Q Management ...
- Symbology requires proper usage
- VSM is not a catch-all multi-purpose tool that solves all process problems.
- If NO Material or Information flow, VSM may not be the right tool.



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