

Lean Six Sigma Process Mapping

Process Mapping Module

Objectives

Be able to...

- Create Process Maps to visualize all activities in your process, establish boundaries for your project, and identify all inputs (Xs) and outputs (Ys).
- Analyze Process Maps to reduce cycle time, reduce defects, and eliminate bottlenecks and non-value added activities.

What Is a Process?

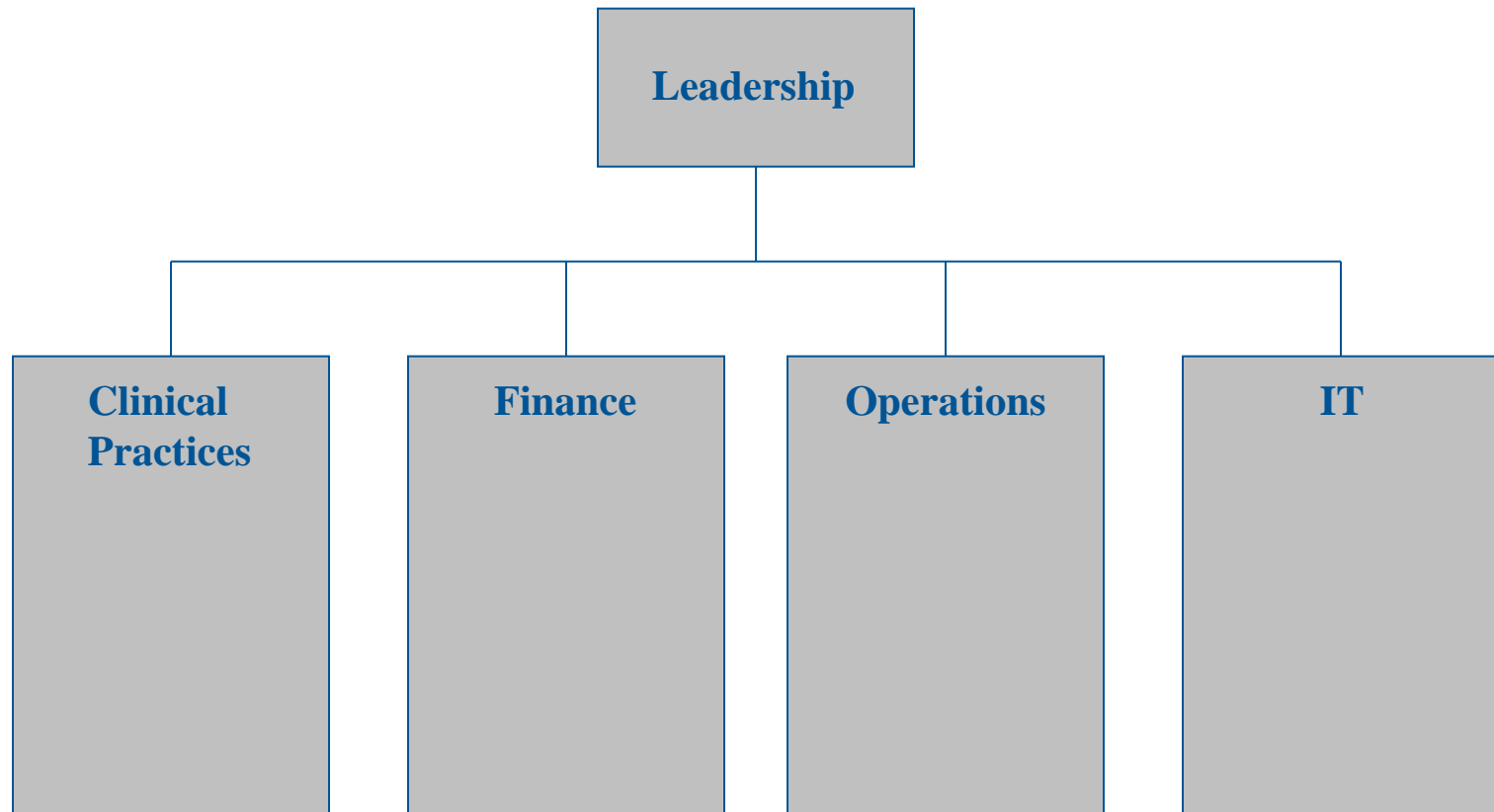
- A sequence of activities creating outputs of value to a customer:
 - Approving a loan application.
 - Building a software application.
 - Developing a report.
 - Opening a new account.
 - Paying a bill/invoice.

Visualizing the Process Helps Identify...

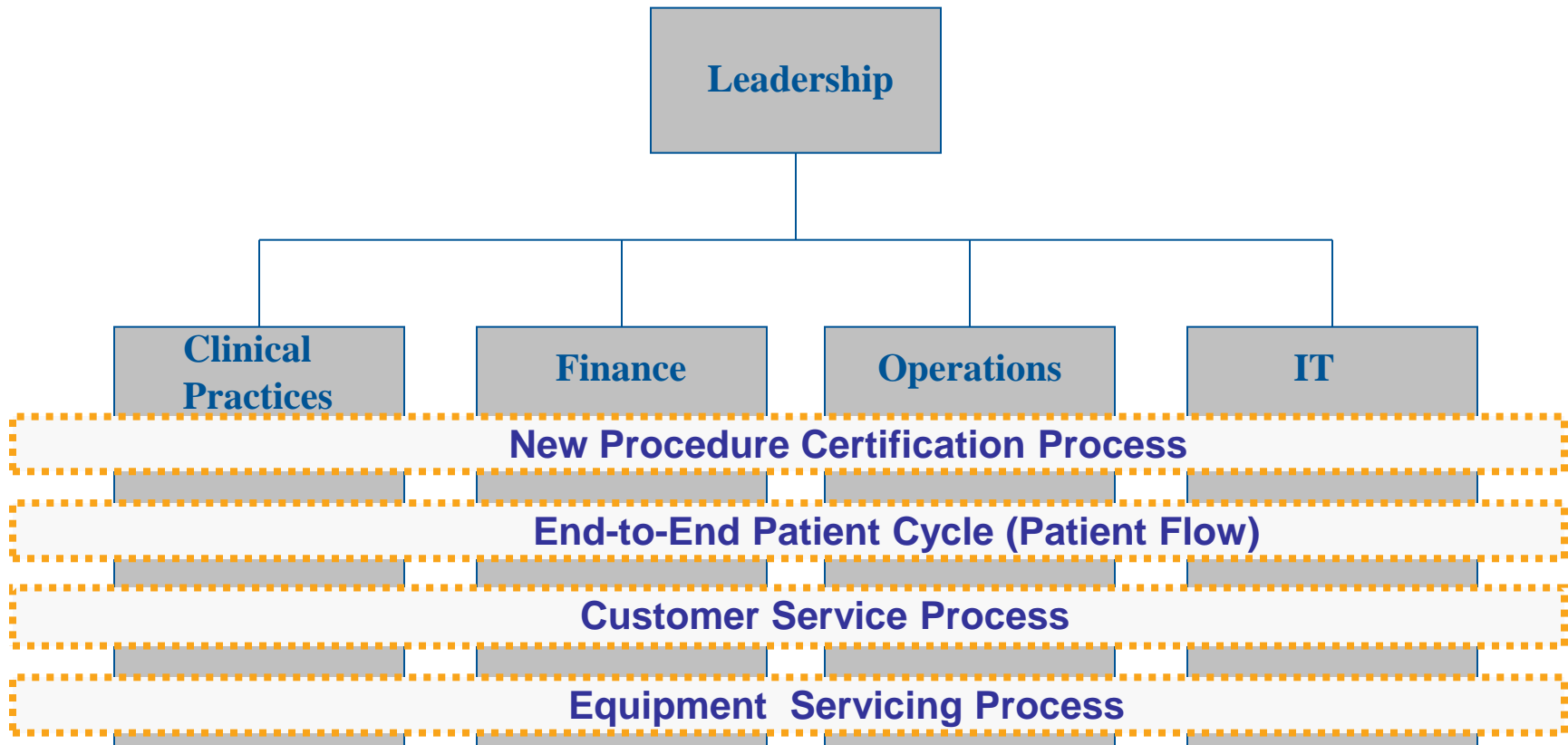
- What to measure
- Where to measure
- Gaps between strategic focus and actual process
- Projects – to strategically assign Green Belts and Black Belts
- Project/process focus areas

Process mapping may be the most effective improvement tool in the Lean toolbox!

Functional Organizations are Driven by Org. Charts

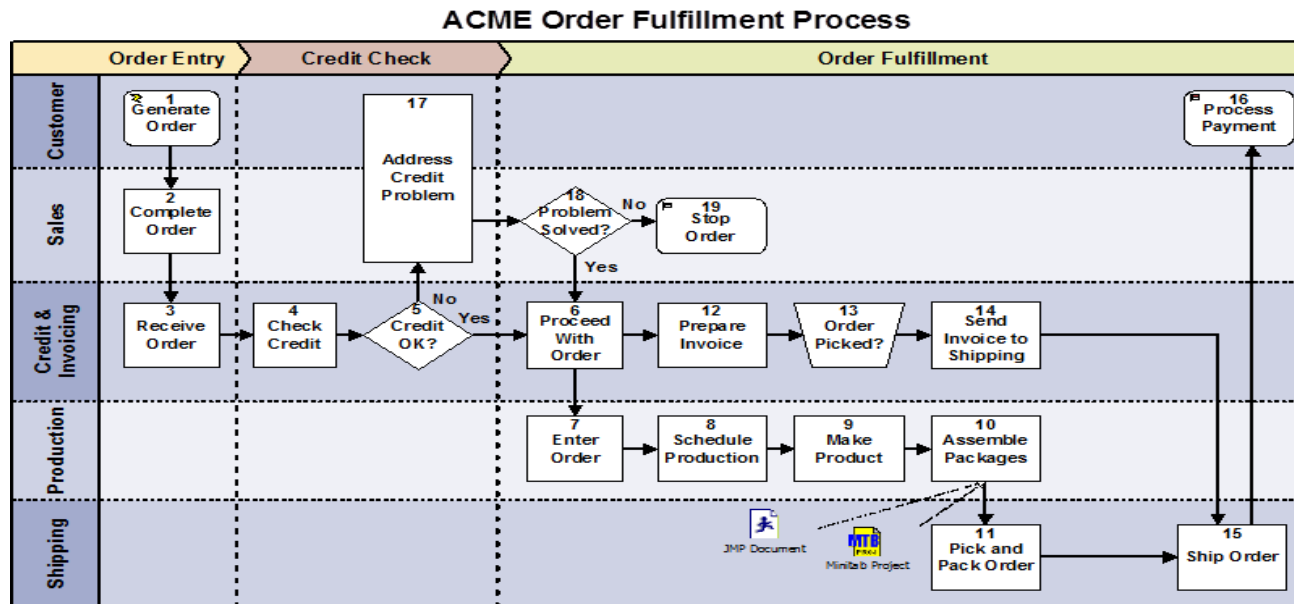


The Process Difference: Process Organizations are Holistic



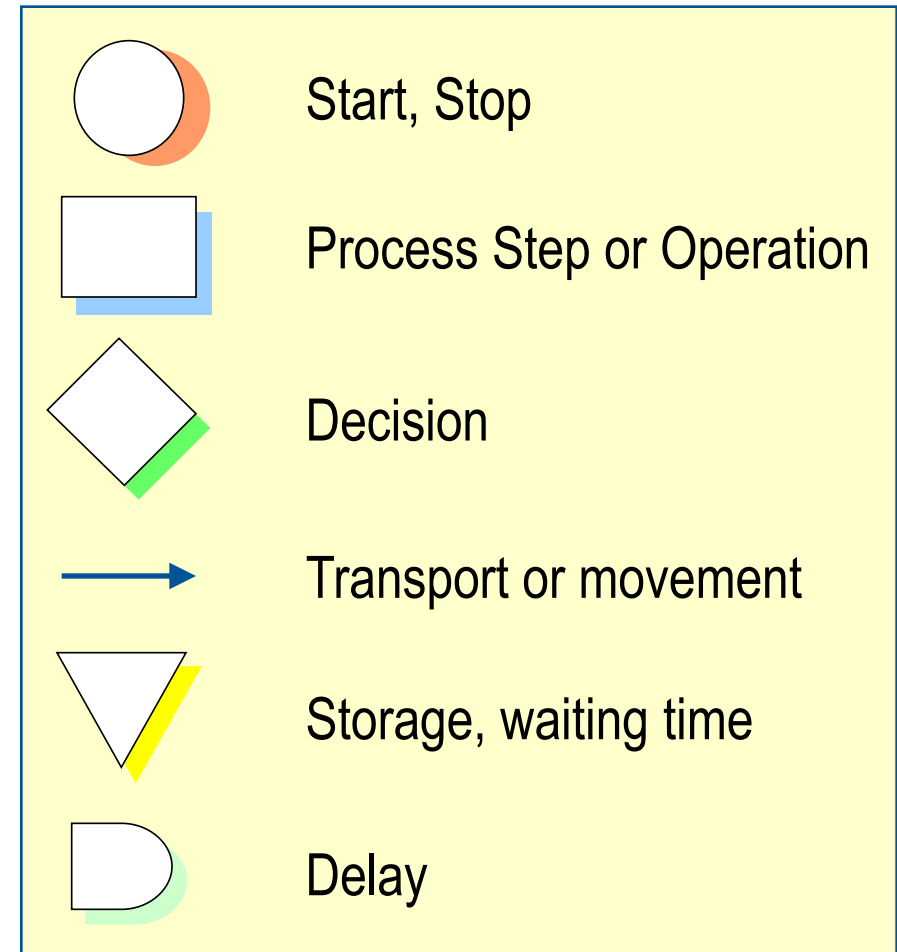
What Is a Process Map?

- A graphical representation of a process flow
- It identifies the steps of the process, and the X's (inputs), and Y's (outputs) of each step.
- Process maps should be modified to fit the particular needs of any specific process.



The Process Map Should Contain Enough Detail to Enable Effective Analysis

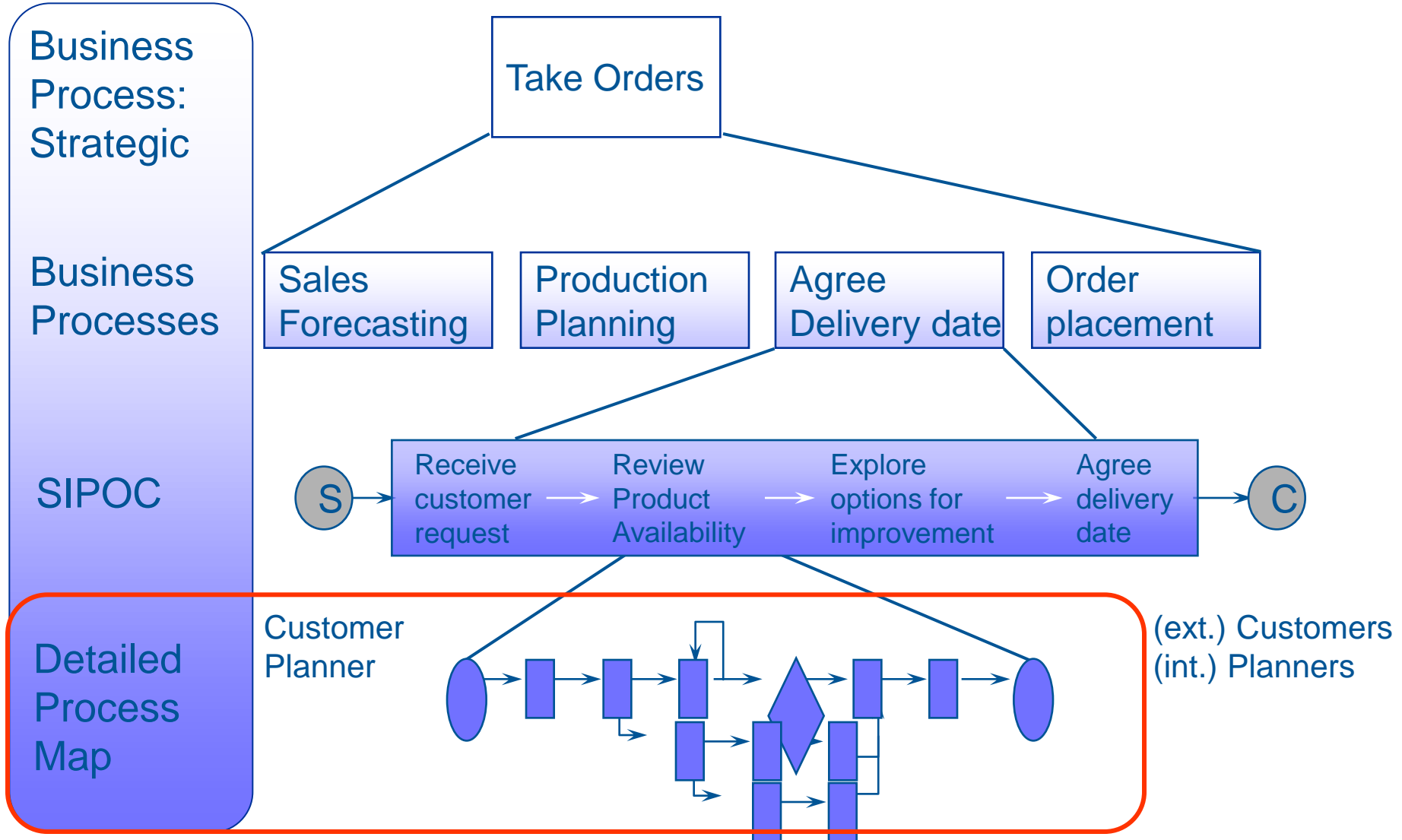
- It should illustrate both the work flow and the organizational interaction
- It should use a common language (symbology) which is understood by everyone
- It should capture all multiple paths, decisions, and rework loops
- It should contain adequate detail



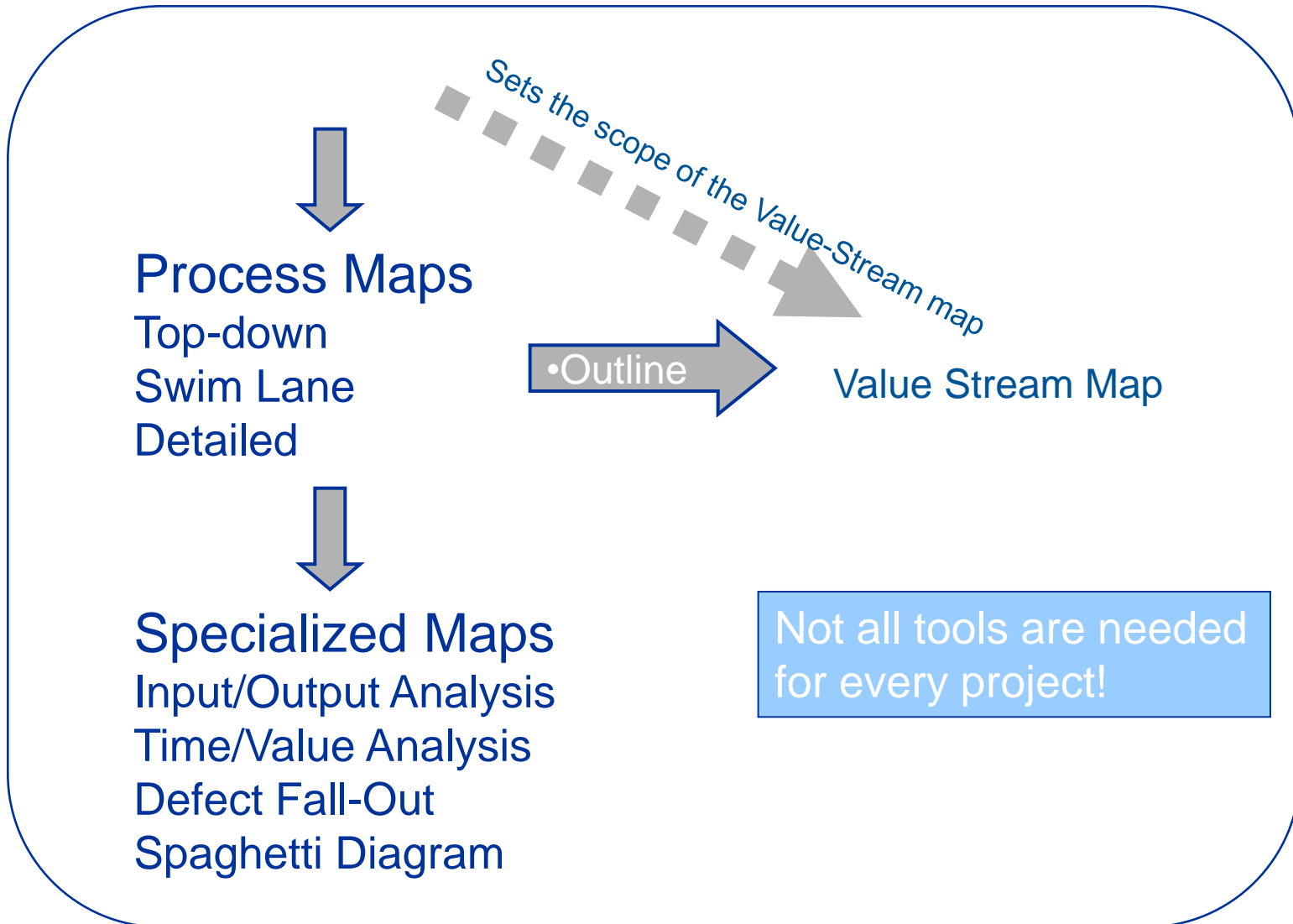
The Process Map Should Address All Types of Tasks

- Operation
- Transportation
- Storage
- Delay
- Inspection

Process Map Level of Detail



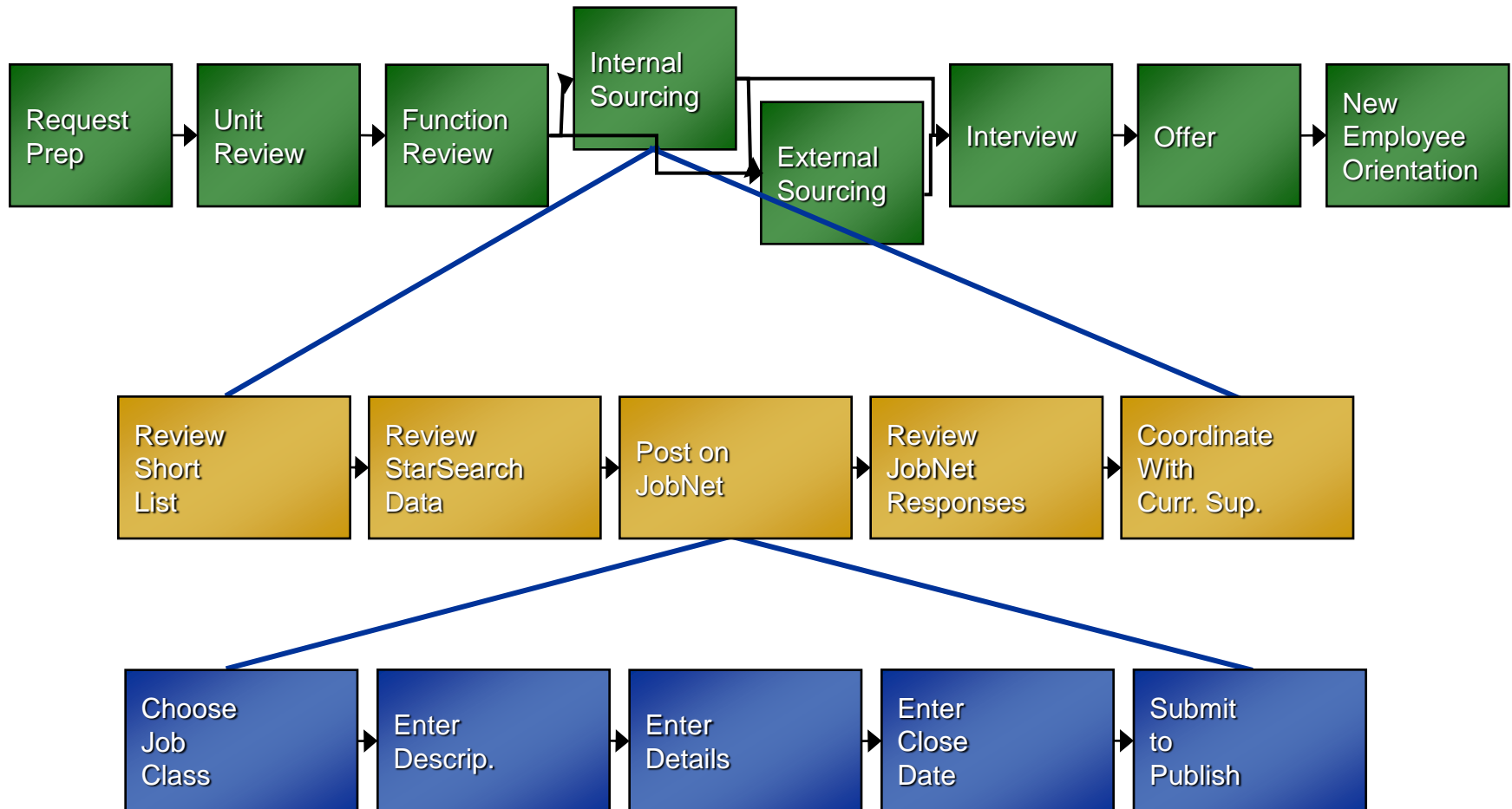
Process Mapping Outputs



Top-Down Chart

- A high-level chart that is selectively expanded from the highest level down to the level where the root cause is located.
- A tool to aid in focusing flow-charting effort
 - Do not flowchart a large process to a significant detail: Focus!

Top Down Flowchart – Example

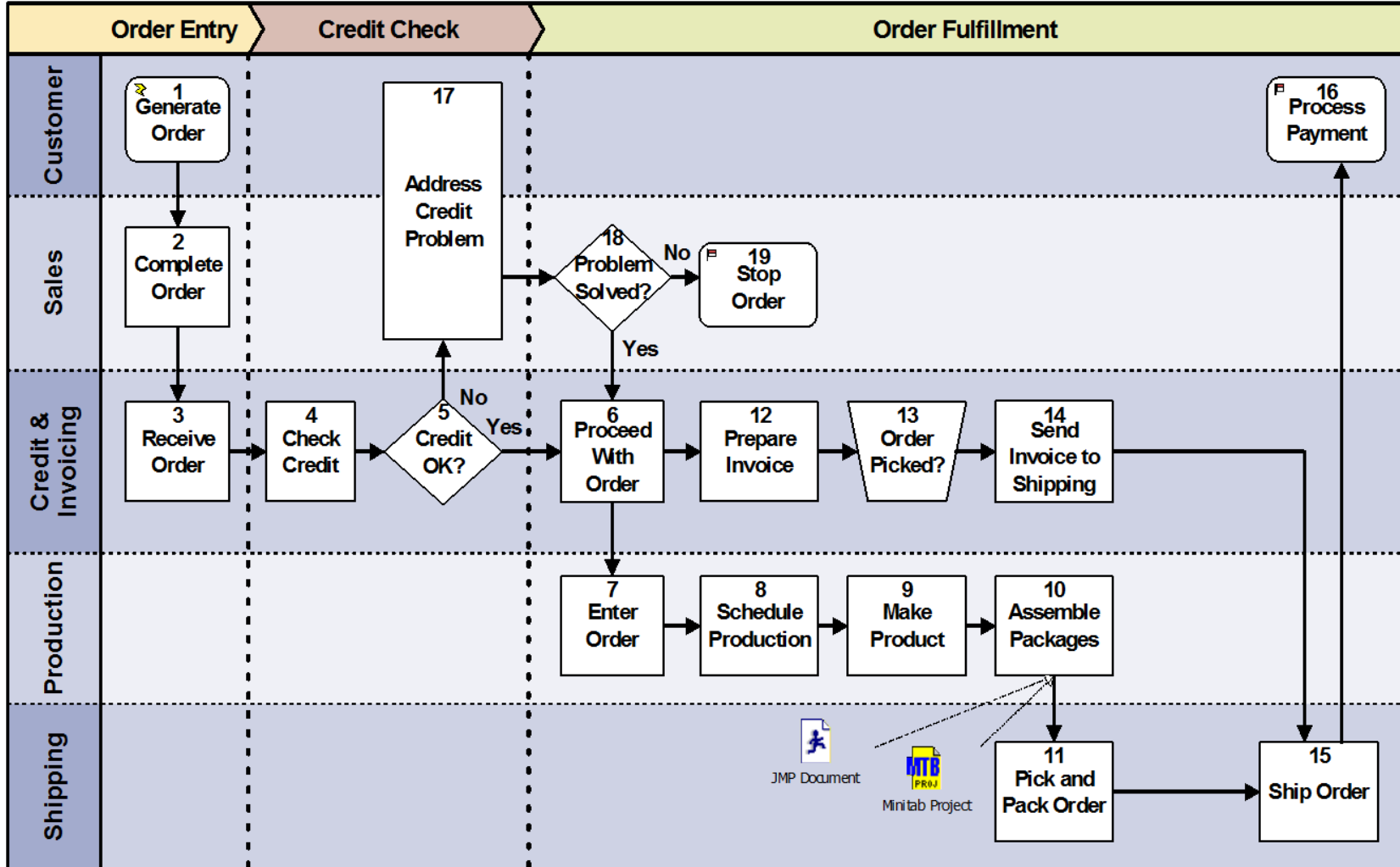


Swim Lane Map

- Use for large, complex processes when:
 - Multiple departments/functions are involved, including outside the firm.
 - Sequence and time of processes is important (as in cycle time reduction).
 - Can show information and service flows as needed.
 - The top lane is typically process customer

Swim Lane Map Example

ACME Order Fulfillment Process



Creating a Swim Lane Process Map

1. Gather a team with process knowledge.
2. Use Post-Its on a wall to get initial flow.
3. Validate with those working in the process.
4. Collect necessary process information.
 - Department or individual
 - Process phase or timeframe
 - Start and stop points
 - Activities

1. Identify Departments that are Doing the Work

Dept 1	
Dept 2	
Dept 3	
Dept 4	
Dept 5	

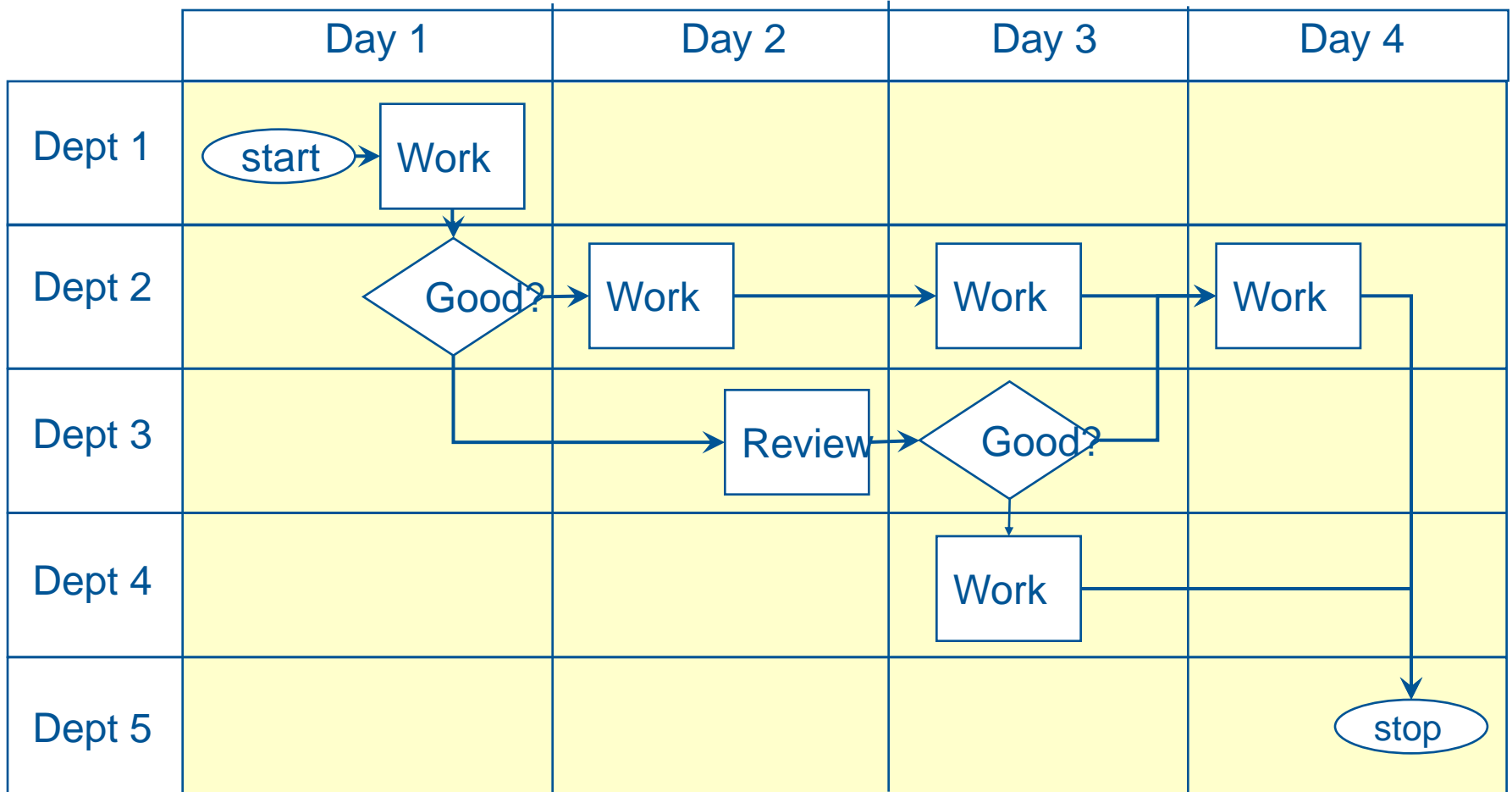
2. Identify Phases or Timeframes

	Day 1	Day 2	Day 3	Day 4
Dept 1				
Dept 2				
Dept 3				
Dept 4				
Dept 5				

3. Enter the Start/Stop Points

	Day 1	Day 2	Day 3	Day 4
Dept 1	start			
Dept 2				
Dept 3				
Dept 4				
Dept 5				stop

4. Enter Intermediate Activities



Process Mapping Hints

- Map one process; do not try to map every process.
- Map together, as a team; do not map individual processes and paste these together.
- Map the flow of products through the organization; do not map the organization.
- One person should coordinate the final mapping.

- Peer Review
 - By those who know the process.
- Be the Process
 - A team member follows the process from end to end.
- Done by both the core and extended teams, the goal of this step is to review the map while considering the following questions:
 - Does the map represent the way we actually perform the process?
 - Can we identify any additional issues, disconnect, or opportunities? (Be sure not to debate the ones already identified)
 - How long does it take to take us to perform various parts of the process (especially is the project goals or issues are time related).

Contact Us

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