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Leading with Value Stream Maps

I already know what Value Stream Maps Are…

…so why am I here?

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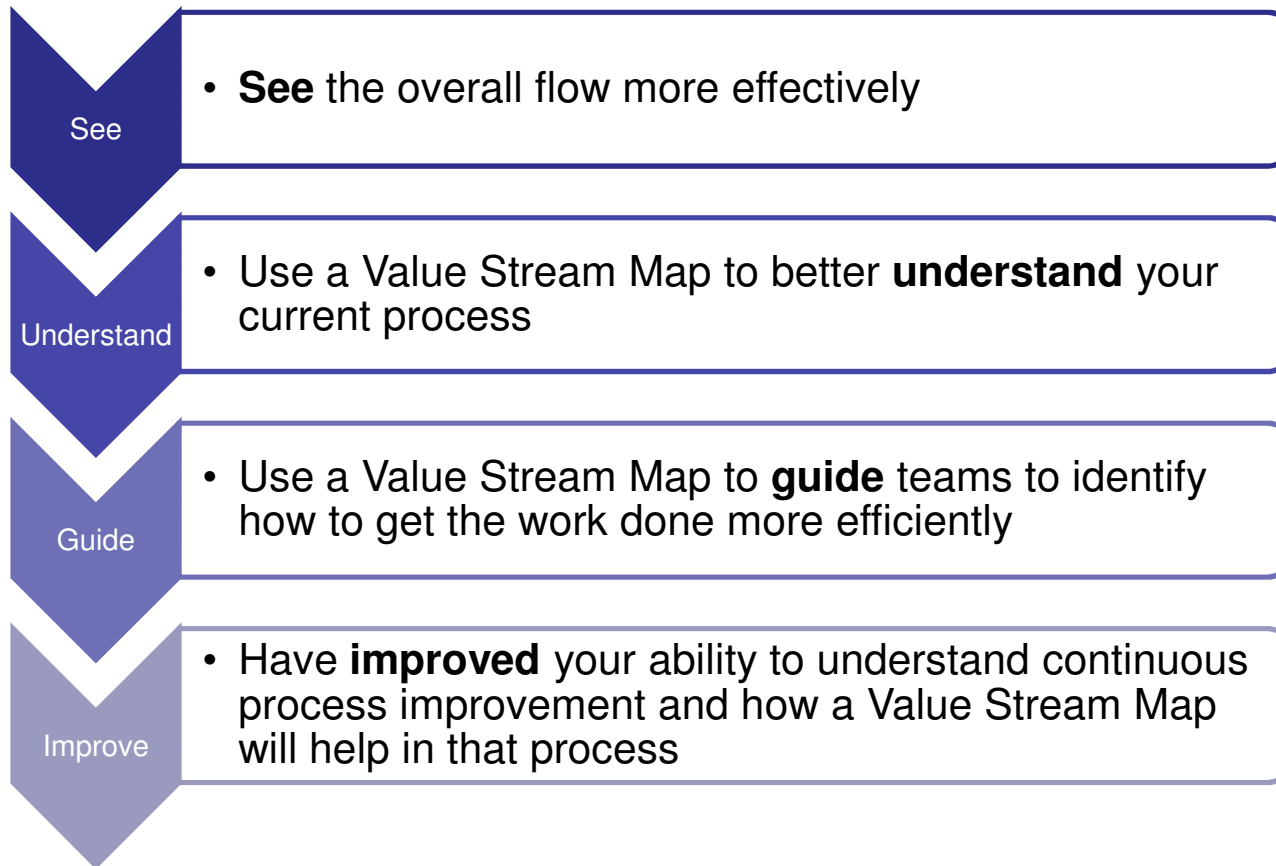# Lean Way of Life: Enterprise Shift

Traditional Org		Lean Org
Short-term financial results focused	vs.	Long-term philosophy
Local optimization	vs.	Overall optimization
Standards limit creativity	vs.	Standards enable continuous improvement
Hide the problem	vs.	Make the problem visible
Leader is the boss	vs.	Leader is a teacher
Go to the charts/graphs & count the mistakes	vs.	Go see at the workplace
Who?	vs.	Why?
Quick to plan, slow to act	vs.	Slow to plan, quick to act
Experts and specialists solve the problems	vs.	Everyone solves the problems

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What's in VSM *for Me* as a leader?

- Value Stream Mapping is a visual tool to help understand your entire stream of value delivery to your customers

- It allows people to easily understand where waste exists in the process

- It gives your improvement team a basis for prioritizing improvement efforts

- It gives your team a visual tool for representing their improvement ideas, so they are better able to communicate with people inside and outside the organization
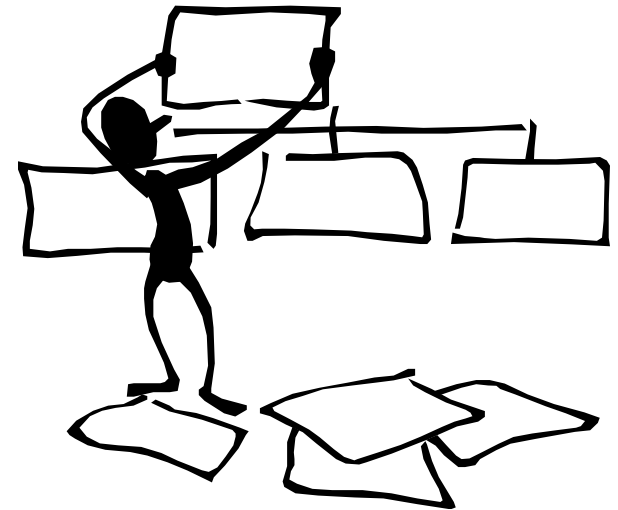
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Learning Objectives

- After this course, you should…

See	• **See** the overall flow more effectively
Understand	• Use a Value Stream Map to better **understand** your current process
Guide	• Use a Value Stream Map to **guide** teams to identify how to get the work done more efficiently
Improve	• Have **improved** your ability to understand continuous process improvement and how a Value Stream Map will help in that process

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What is a Value Stream?

- A 'Value Stream' describes series of steps (the process) that must be performed in the proper sequence to <u>create value</u> for a customer

- Value Stream Mapping (VSM)

  - follows a *process* or product's *path* from *beginning to end*

  - draws a visual representation of every process, material and information flow

  - Allows easy identification of waste

Benefits of Value Stream Mapping

- Helps you <u>visualize more than just the p</u>rocess level

- Allows you to see the <u>sources of waste</u>

- <u>Identifies key leverage points</u> for improvements

- Displays linkage between <u>process</u>, <u>information</u> and <u>material flow</u>

  - Admin processes may show linkage between information flow and the actions that result from the information flow

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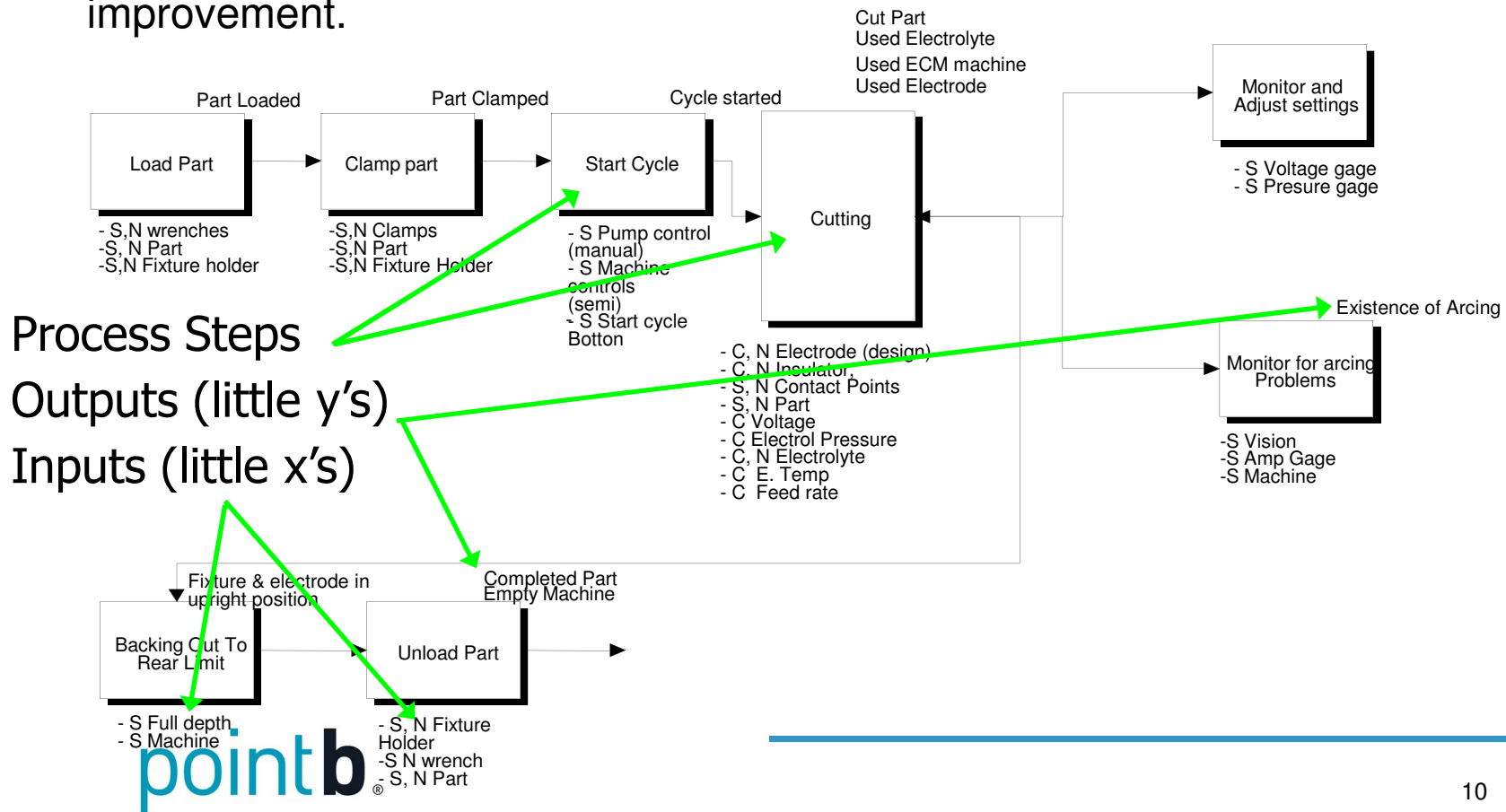
Basic Elements of Value Stream Mapping

➢ Start by collecting data on the flow of a <u>single family of products</u>

➢ Document <u>Current state</u> flow with value add and non value add costs

➢ Hypothesize <u>Future state</u> with non value add costs removed

➢ Prepare to lead the <u>Implementation</u>.

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Who Uses Process and Value Stream Maps?

- Managers/Executives: Value Stream Maps are used at the <u>Strategic business level</u> for opportunity and project identification by <u>management teams</u>. Charting the future and leading the change!

- Supervisors/Workers: At the tactical project level, process and Value Stream Maps are used by <u>improvement teams</u> to identify and visualize the improvement opportunities, and as an effective communication mechanism to all levels of the company
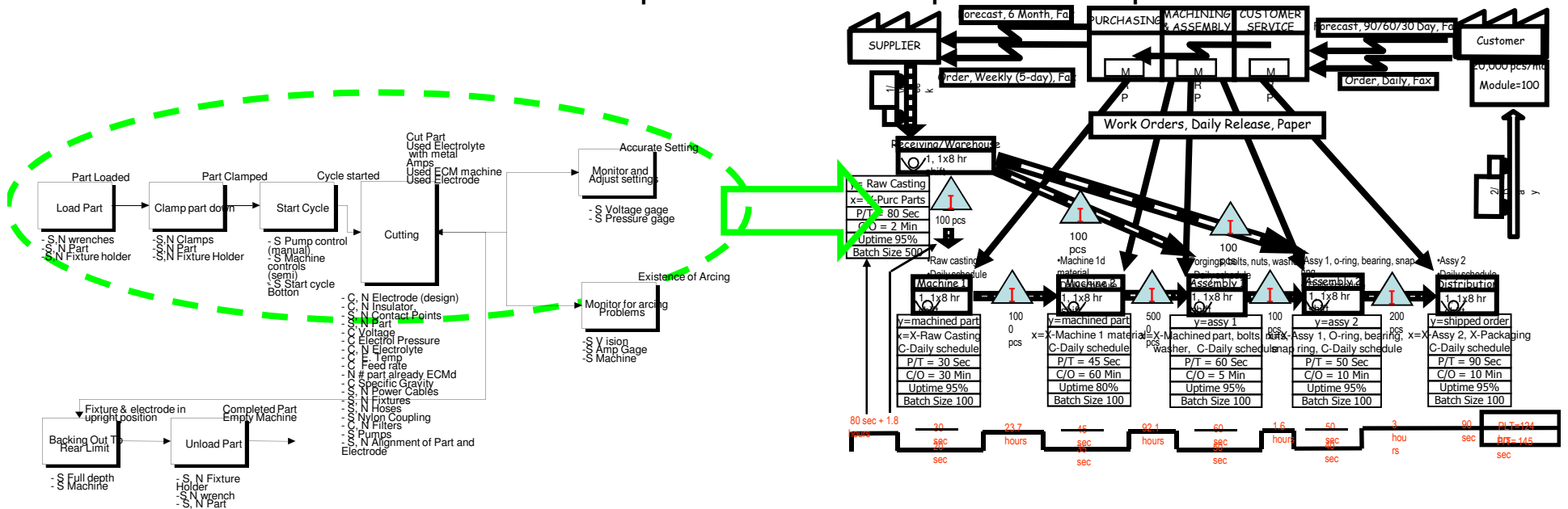
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What Is a Process Map?

- A graphical representation of a process flow identifying the steps of the process, and the x's and y's of the process steps

- Provides ability to visualize the process, and helps identify opportunities for improvement.
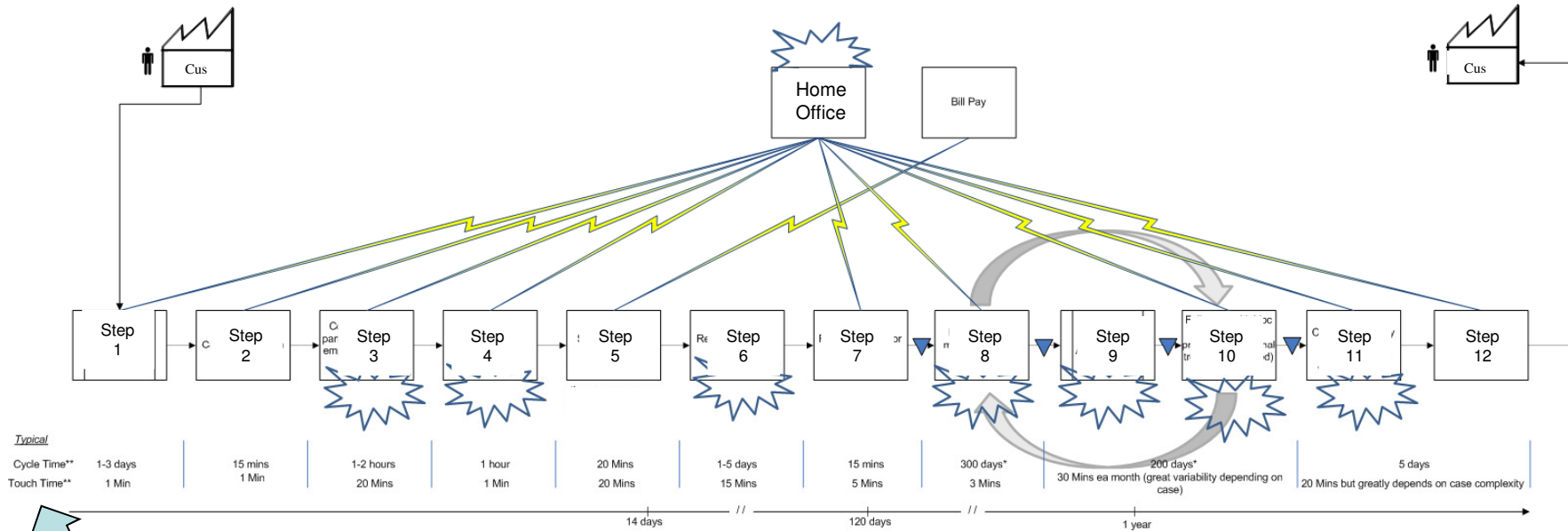
Cut Part
Used Electrolyte
Used ECM machine
Used Electrode

Part Loaded   Part Clamped   Cycle started

Load Part   **Clamp part**   **Start Cycle**   **Cutting**   **Monitor and Adjust settings**

- S,N wrenches
- S, N Part
- S,N Fixture holder

-S,N Clamps
-S,N Part
-S,N Fixture Holder

- S Pump control (manual)
- S Machine controls (semi)
- S Start cycle Botton

- S Voltage gage
- S Presure gage

- C, N Electrode (design)
- C, N Insulator,
- S, N Contact Points
- S, N Part
- C Voltage
- C Electrol Pressure
- C, N Electrolyte
- C E. Temp
- C Feed rate

Existence of Arcing

Monitor for arcing Problems

-S Vision
-S Amp Gage
-S Machine

Process Steps

Outputs (little y's)

Inputs (little x's)

Fixture & electrode in upright position   Completed Part Empty Machine

Backing Out To Rear Limit   **Unload Part**

- S Full depth
- S Machine

- S, N Fixture Holder
-S N wrench
- S, N Part

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What Is a Value Stream Map?

- Think of a "Value Stream Map" as a data-rich process map:

A "Value Stream Map" extends process maps by adding:
value add vs non-value add;
material and information flow;
operating parameters;
process and lead times, and more.

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Example Current State VSM

Non-Value Add Time vs Value Add Time

Typical												
Cycle Time**	1-3 days	15 mins	1-2 hours	1 hour	20 Mins	1-5 days	15 mins	300 days*		200 days*		5 days
Touch Time**	1 Min	1 Min	20 Mins	1 Min	20 Mins	15 Mins	5 Mins	3 Mins	30 Mins ea month (great variability depending on case)			20 Mins but greatly depends on case complexity

14 days — 120 days — 1 year

Legend:
- delay
- Key improvement target
- Hand-off process outside of CM process
- Electronic communication with key system

**for "typical" profile

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What Should Leaders Look For? The 3 Ms

Muda—Wasteful activities (see below)
Muri—Unreasonableness or absurdity
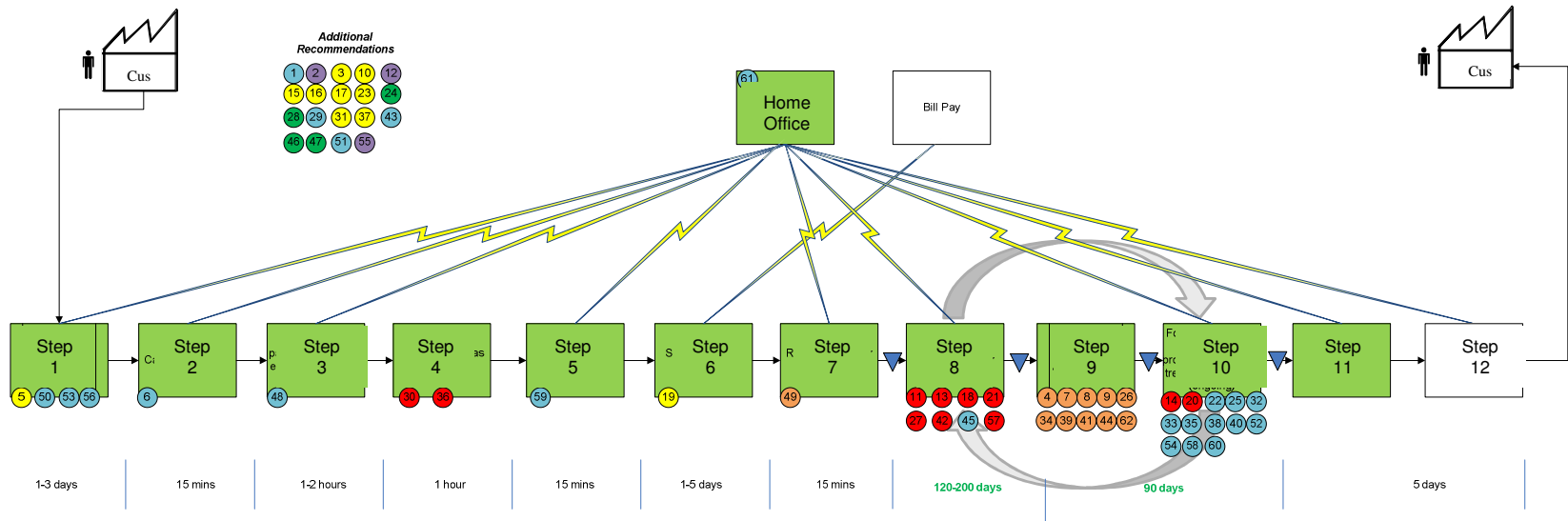Mura---Inconsistency or uneveness

Manufacturing

➤ Transportation
➤ Inventory
➤ Motion
➤ Waiting
➤ Over Processing
➤ Over Production
➤ Defects

TIMWOOD

Knowledge

➤ Partially done work
➤ Extra features
➤ Paperwork and relearning
➤ Hand-Offs
➤ Task Switching
➤ Delays

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VSM: Future State

Prioritized list of considerations

- The improvement considerations were mapped to the 5 current state focus areas identified during the current state assessment:
  - VOC
  - Process
  - Capacity
  - Measurement & Reporting
  - Lean Initiatives
- Considerations were also categorized by Expected Benefit vs Expected Level of Effort in the adjacent "Payoff Matrix"
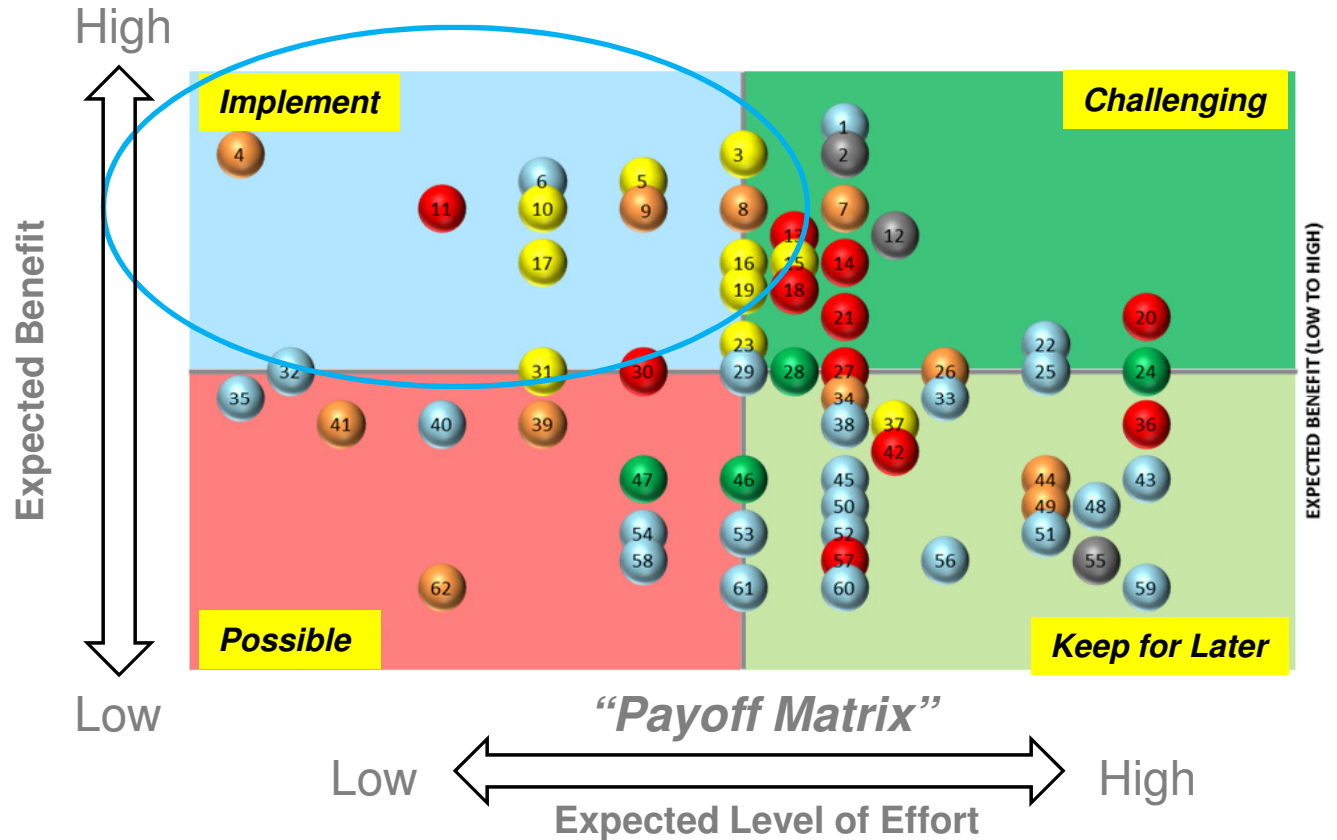
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Breakout Sessions!

Breakout Sessions

- Five Breakout Topics

- You get to go to three topics (CHOOSE WISELY)

- Activity after the third topic (so stay in your group and await instructions)

BOT#1:
What Leaders Should Expect During a VSM Workshop?

BOT#2:
How can the Leader Best Support the Improvement Implementation Effort?

BOT#3:
How Do I Help Ensure Stability of Improvements?

BOT#4:
What are critical actions of leaders before, during, and after a VSM workshop?

BOT#5:
How do I manage cross-functional value streams?

Breakout Topic #1

What Leaders Should Expect During a VSM Workshop?

Tips and Tricks

Tips

- Establish a common language.
- Define your scope precisely.
- Push for clarity and alignment.
- Have the people in the room who will be implementing the change.

Tricks

- Step back and see the whole.
- Always be right sizing the conversation.
- Include the "nay-sayers".
- When the conversation lags, simply repeat what was last said
- Use the phrase "And, what happens next?" often

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As a Leader,

- Why are we doing this?

- What does the pre-work look like? What's the level of senior leadership commitment?

- How do we build a team? Who is on the team?

- How do we kick off this event?

- You have an investment in time and money in this effort

  - What are your expectations for an outcome?

  - How would you like to be engaged in this work?

"The root of the Toyota way is to be dissatisfied with the status quo; you have to ask constantly, *"Why are we doing this?"* (Katsuaki Watanabe)

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Breakout Topic #2

How can the Leader Best Support the Improvement Implementation Effort?

Tips and Tricks

Tips

- Have a plan.
- Have a bias towards action.
- Be optimistic.
- Be prepared to engage senior leaders.
- Celebrate success AND failures early and often.

Tricks

- Be ready to motivate the immovables.
- Communicate broadly, early and often.
- Build alignment, horizontally and vertically.
- Be ready to pull the right lever or create the right crisis.
- There is always a burning platform.

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As a Leader…

- What do I do to make sure the improvement team has the best chance for success?

- What is my role in developing an atmosphere of success?

- OK, so the team is done and has presented me with their recommendations. What should I as a leader recommend they do?

- How do I recognize and celebrate their achievements (and learning, and failures, and…)?

"Are you a Leader or a Teacher"
(Bob Brown, Point B)

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Breakout Topic #3

How Do I Help Ensure Stability of Improvements?

Tips and Tricks

Tips

- Develop measures and baseline. Have a data collection plan.
- Measure early and often. Make sure you are measuring what you think you are measuring (Measurement System Analysis)
- Develop an agreed upon daily management system.

Tricks

- Use visual management.
- Leadership goes on weekly (or more frequent) gemba walks.
- Set aside time for improvement.
- Talk to the workers on the floor and ask their opinion on things.

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As a Leader…

- What actions can I take to help make sure the improvements don't unravel?

- What kinds of Key Performance Indicators (KPIs) would I want?

- What are the cultural aspects of Change Management?

  - How do I handle people who want to roll back change (spoilers)?

  - How do I communicate the changes effectively (new VSMs, standard work, new training, etc.)?

  - How do I create an ongoing environment of continuous improvement?

"All processes should have tools."
(Chihiro Nakao)

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Breakout Topic #4

What are critical actions of leaders before,
during, and after a VSM workshop?

BOT#4:
What are critical actions of leaders before, during, and
after a VSM workshop?

Tips and Tricks

Tips

- Be an active sponsor.
- Understand your role.
- Ensure all roles are well understood.
- Follow your instincts!

Tricks

- The outcome is improvement! Do not let the outcome be a plan for a plan.
- Rigorously define scope.
- Optimistic pragmatism.
- Trust but verify.

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BOT#4:
What are critical actions of leaders before, during, and
after a VSM workshop?

As a Leader…

- What specific actions do I take

    - At project conception/inception?

    - During team selection and team building?

    - During the event?

    - After the event (follow up and follow through)?

"Without consistent execution, all of the
great plans are nothing but ideas."
(James Womack)

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Breakout Topic #5

How do I manage cross-functional value streams?

Tips and Tricks

Tips

- Leverage VSM to understand ALL stakeholders.
- Build involvement.
- Allow quick wins to be successes for all.

Tricks

- Engage powerful opposition in identifying mutual challenges.
- Look for the mutual wins.
- Always be optimizing across rather than within.
- Understand before attempting to be understood.
- Understand the strengths and weaknesses of the various organizational archetypes.

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As a Leader…

- Matrix organizations provide unique challenges to the leader. How do you handle Value Streams that cross various silos?

- How do you handle leaders from across disparate departments?
  - How do you ensure they are aligned with you on the problem?
  - How do you ensure they are aligned on how to solve the problem?
  - How do you ensure they are focused and motivated?

"We are what we repeatedly do. Excellence, then, is not an act, but habit."
(Aristotle)

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Team Report Outs

More to Learn!

- The world of Lean is very large. We encourage everyone to:

  - Read books

  - Attend classes

  - Most importantly – Take a leadership position in the Lean improvement process. Kaizen!

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