Lean Product and Process Development: Putting Principles into Practice

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John Drogosz, PhD

lppd Lean Product & Process Development

Virtual Lean Learning Experience 2020

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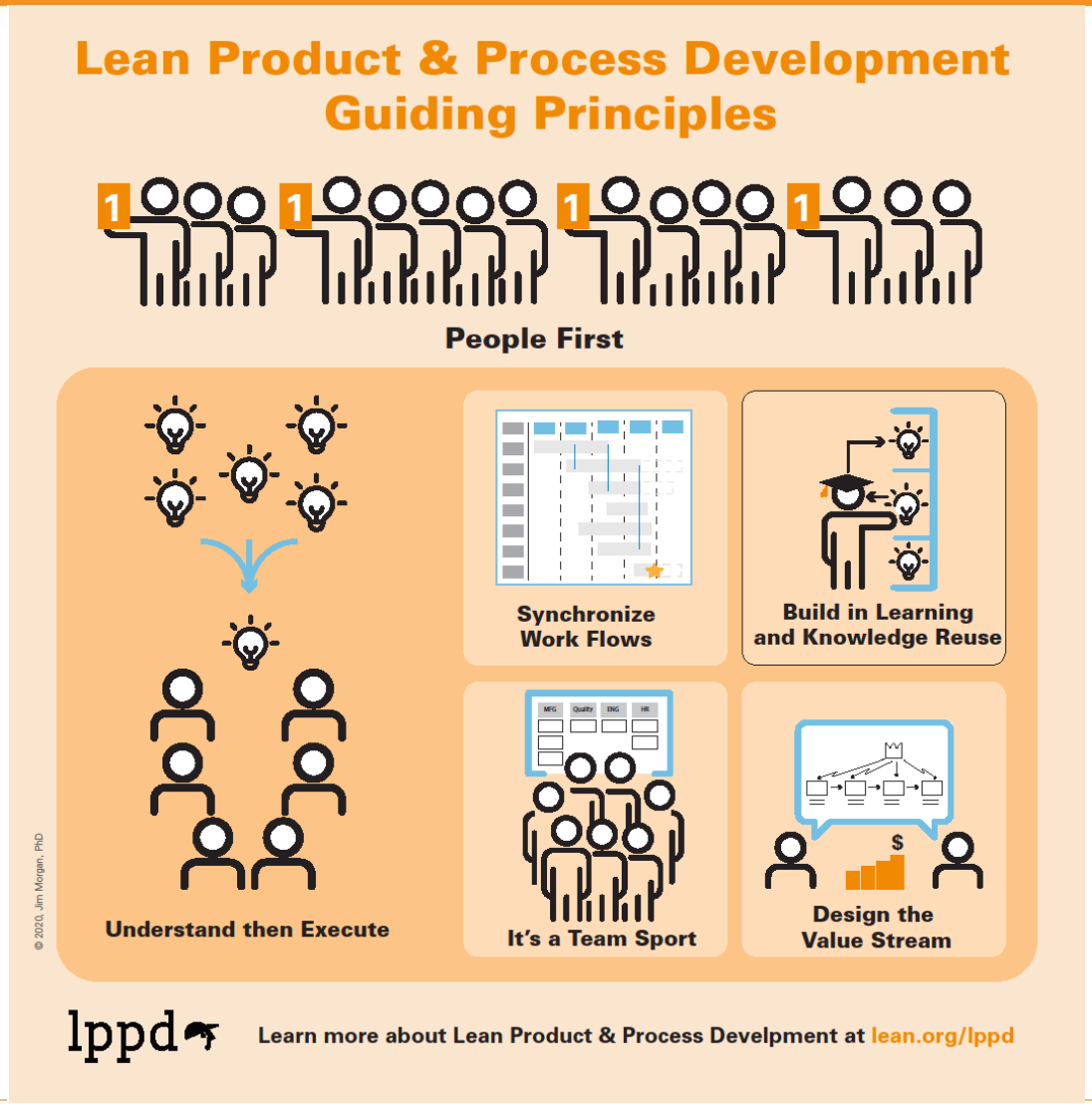
Putting People First into Practice



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Putting People First into Practice

Management System

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Leadership Behaviors (People)

x

Operating System (Practices)

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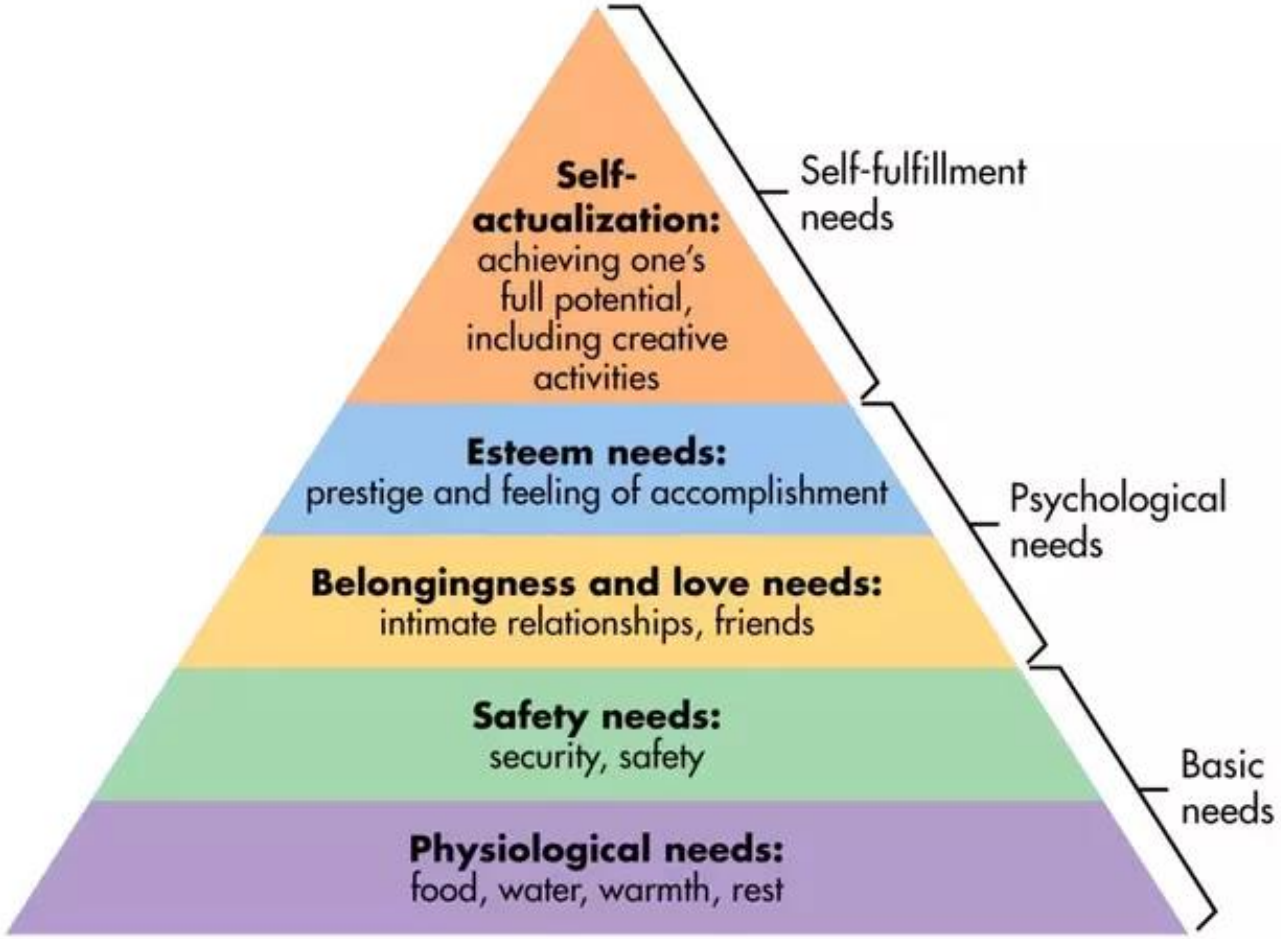
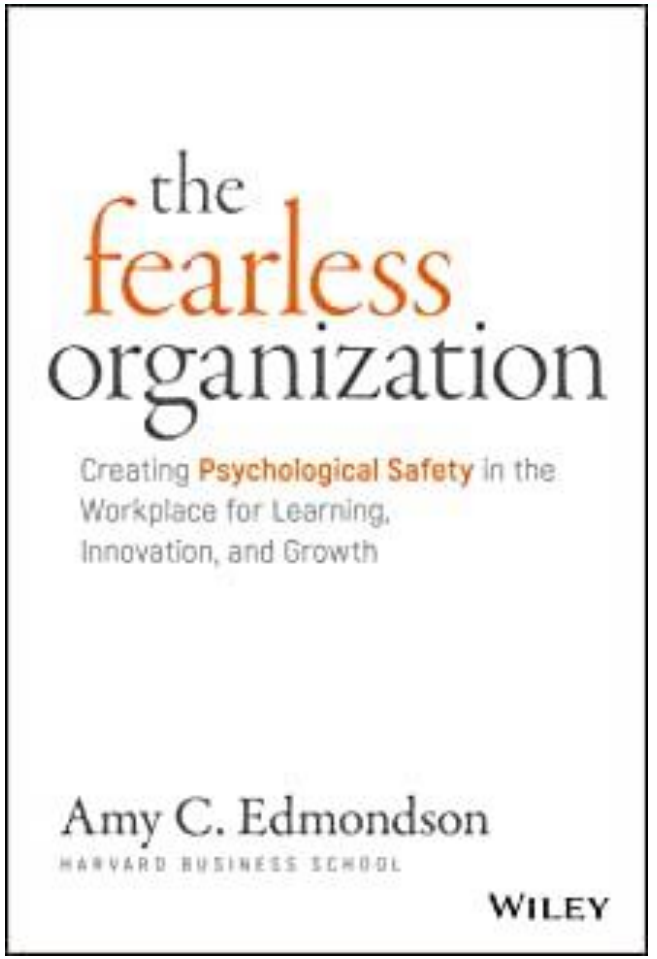
Putting People First into Practice



A Theory of Human Motivation A. H. Maslow (1943)
"Maslow's Hierarchy of Needs"



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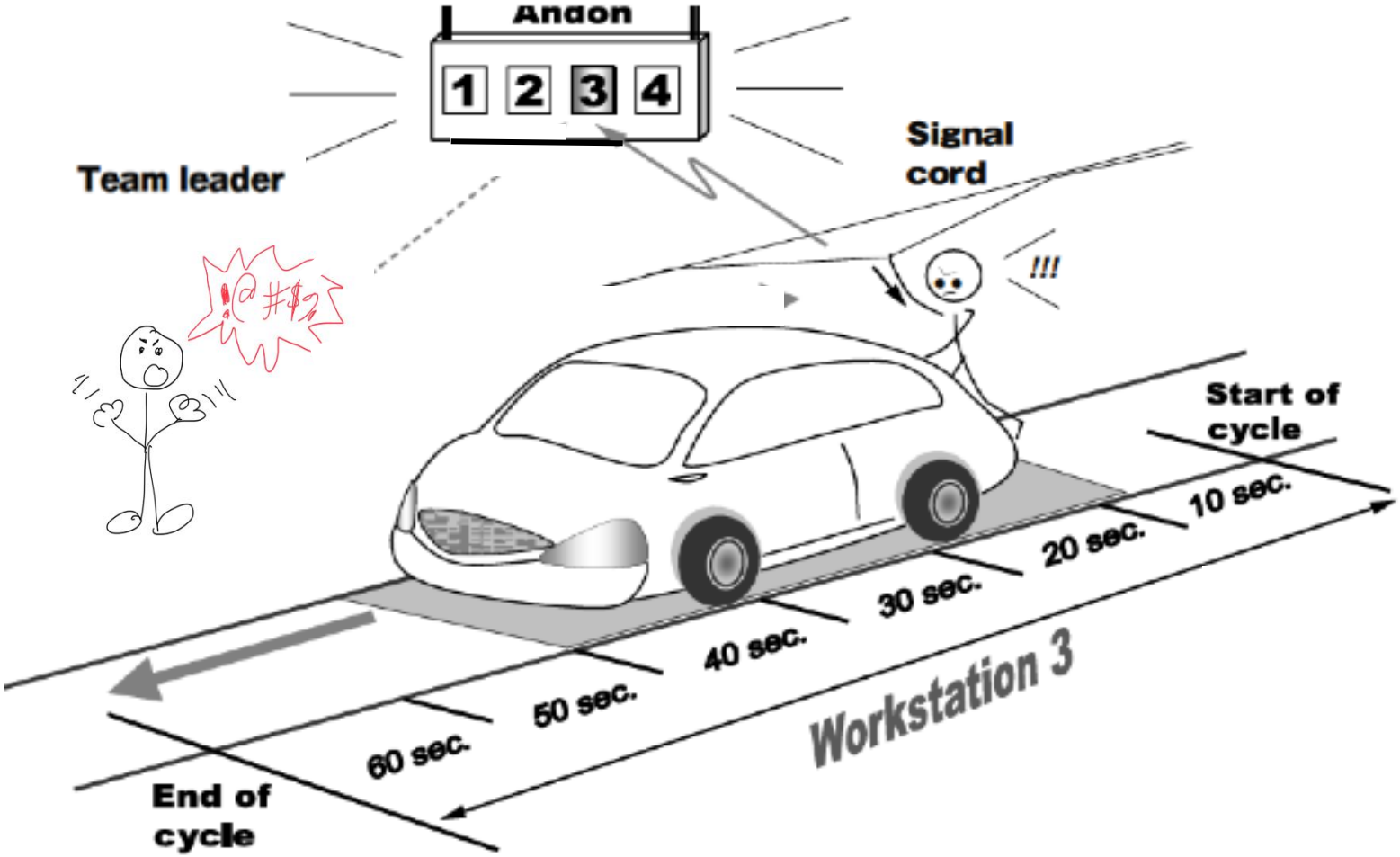
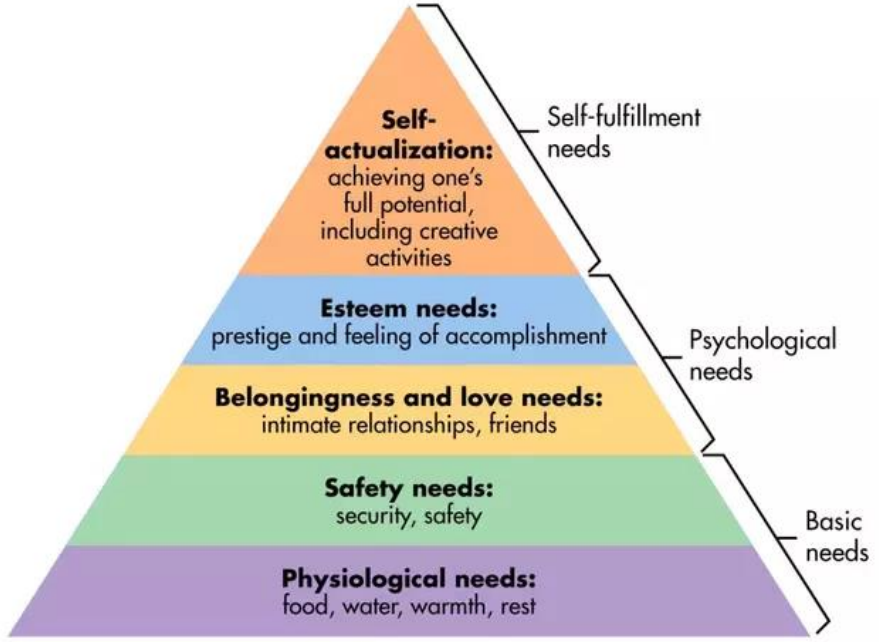
Consider a Basic Management System





Maslow's Hierarchy of Needs (1943)

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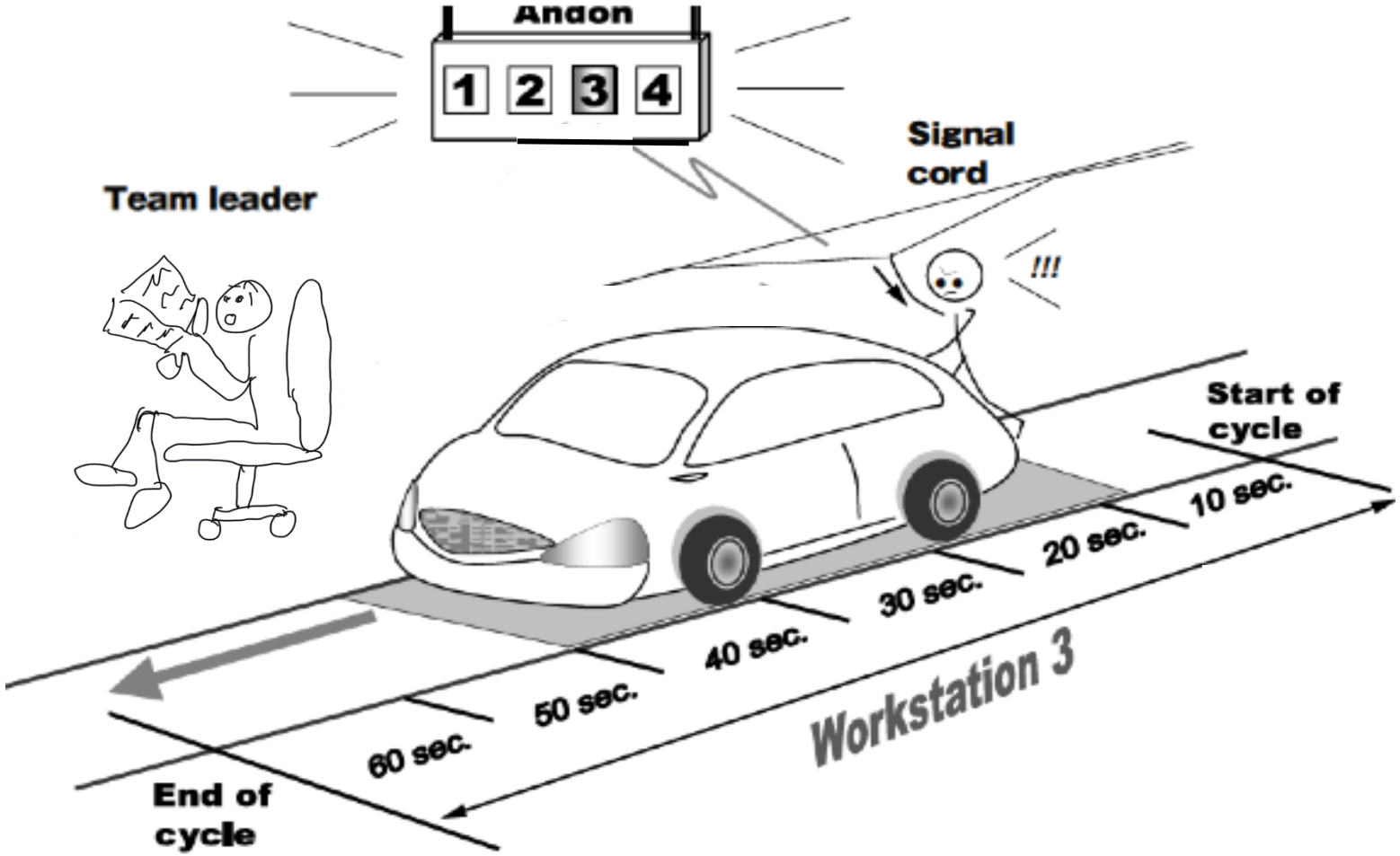

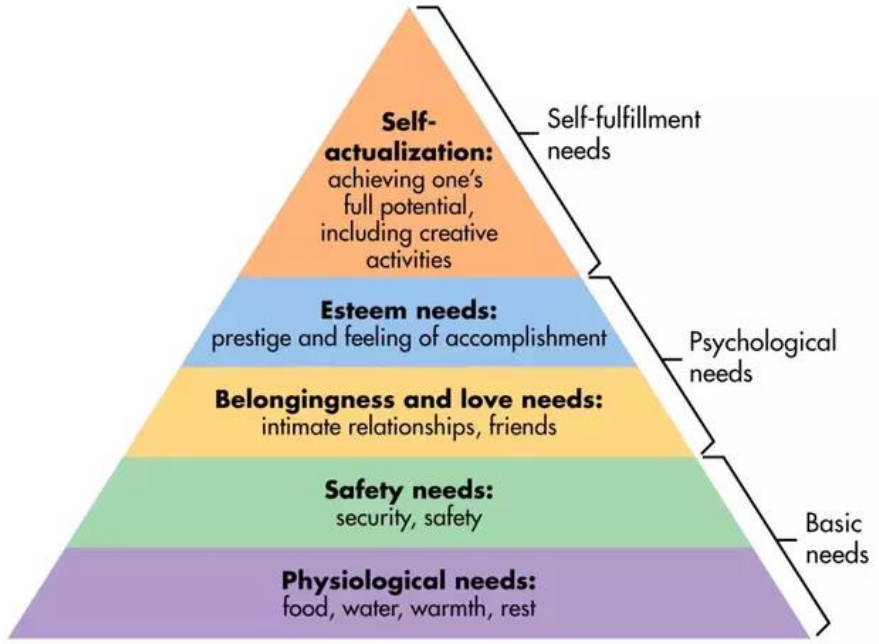

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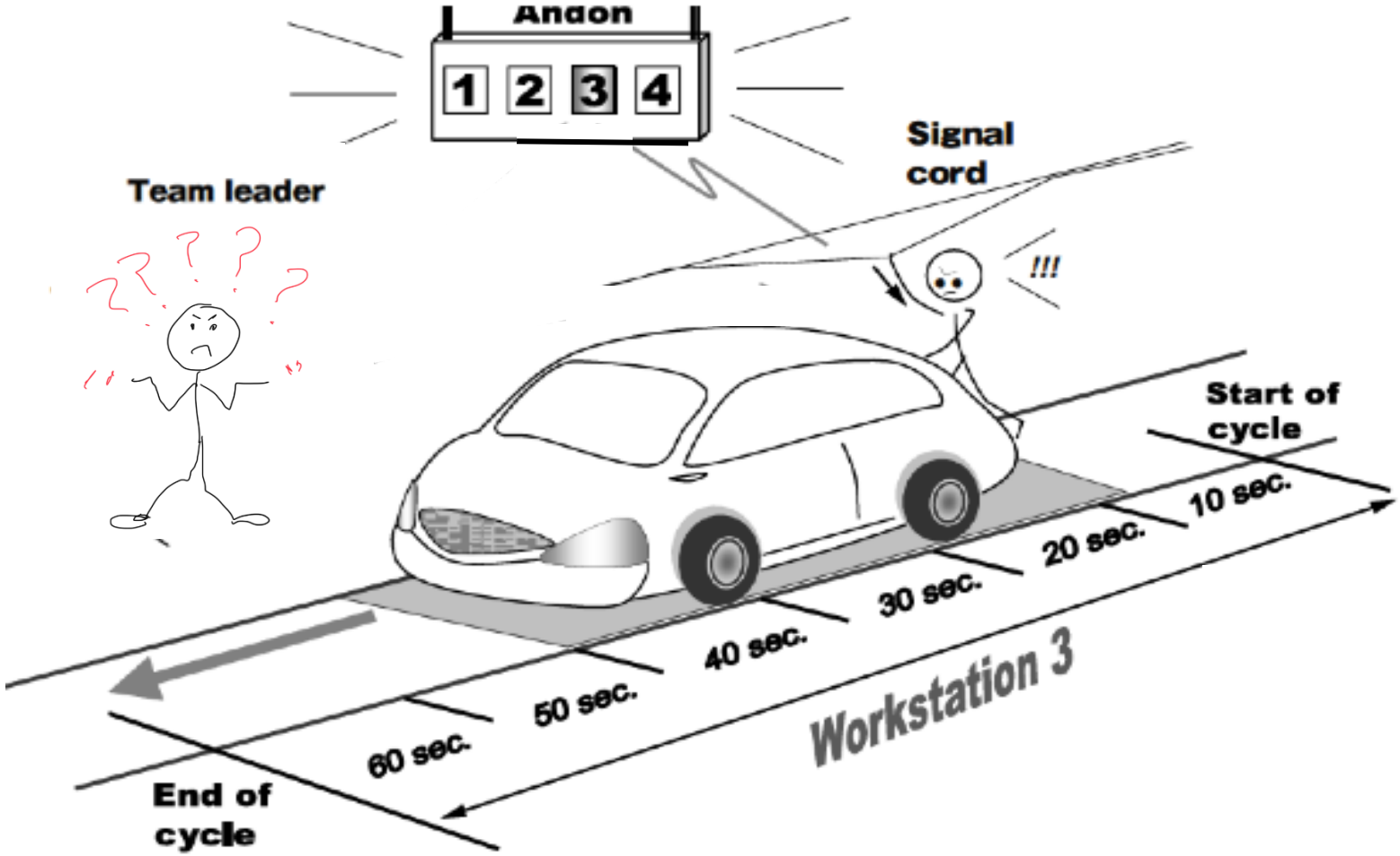

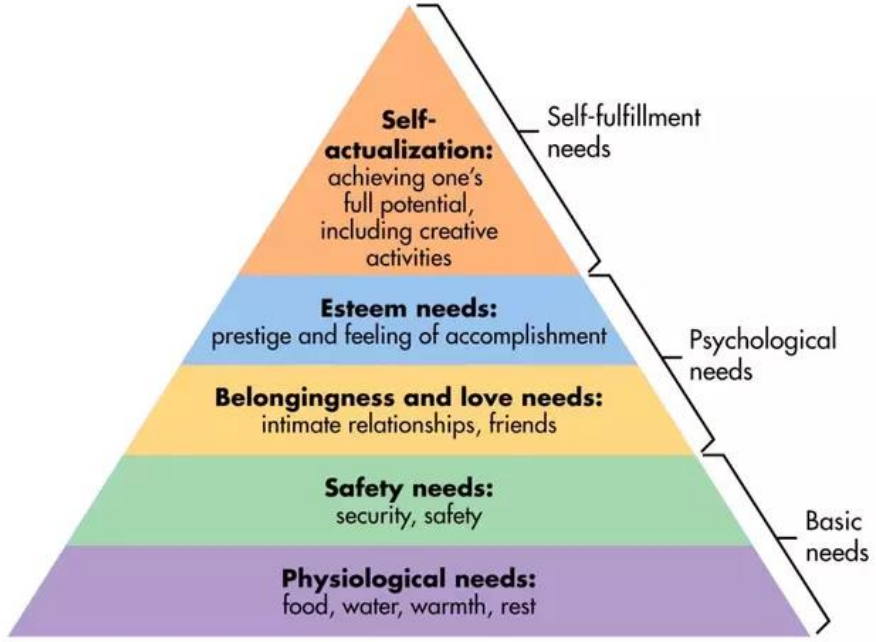

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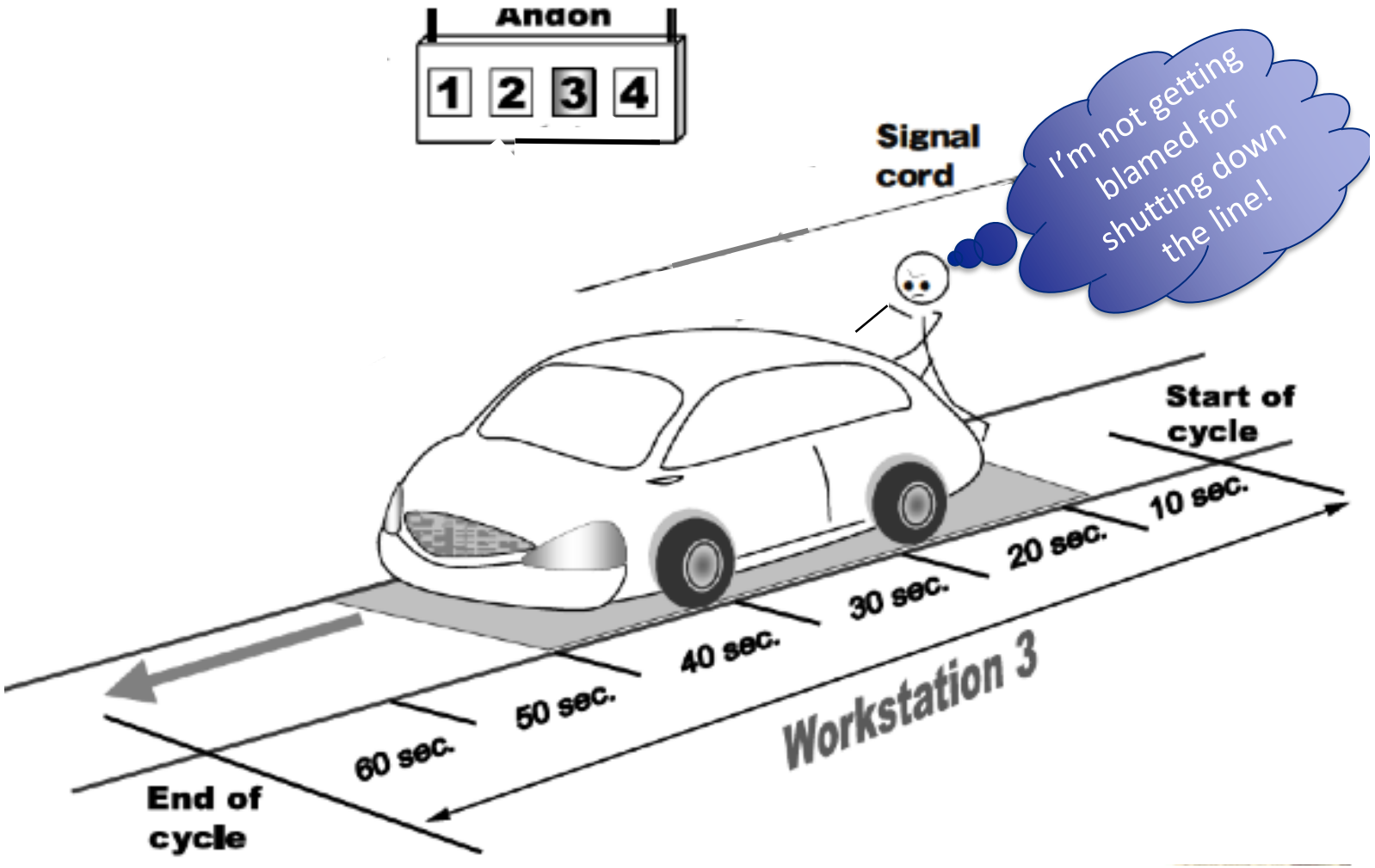

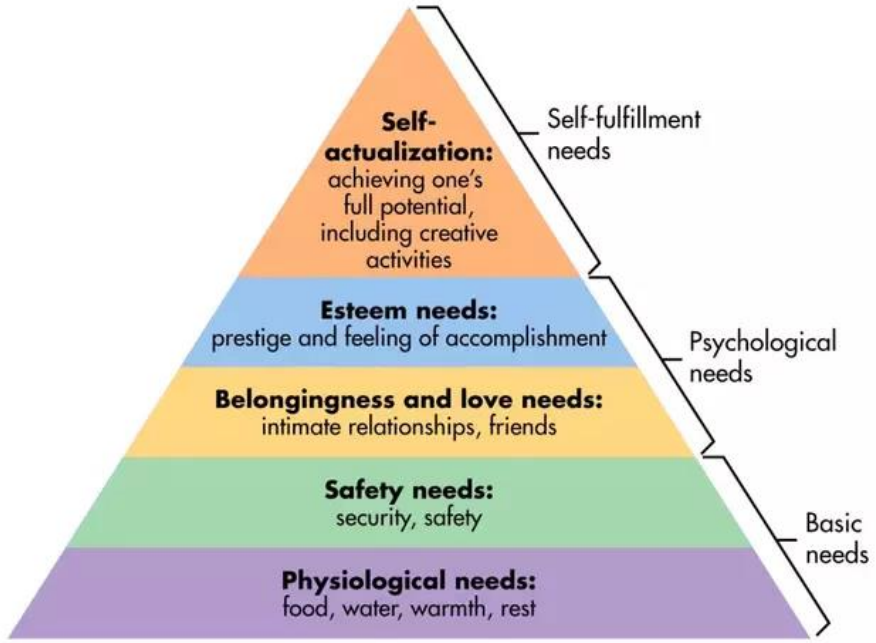

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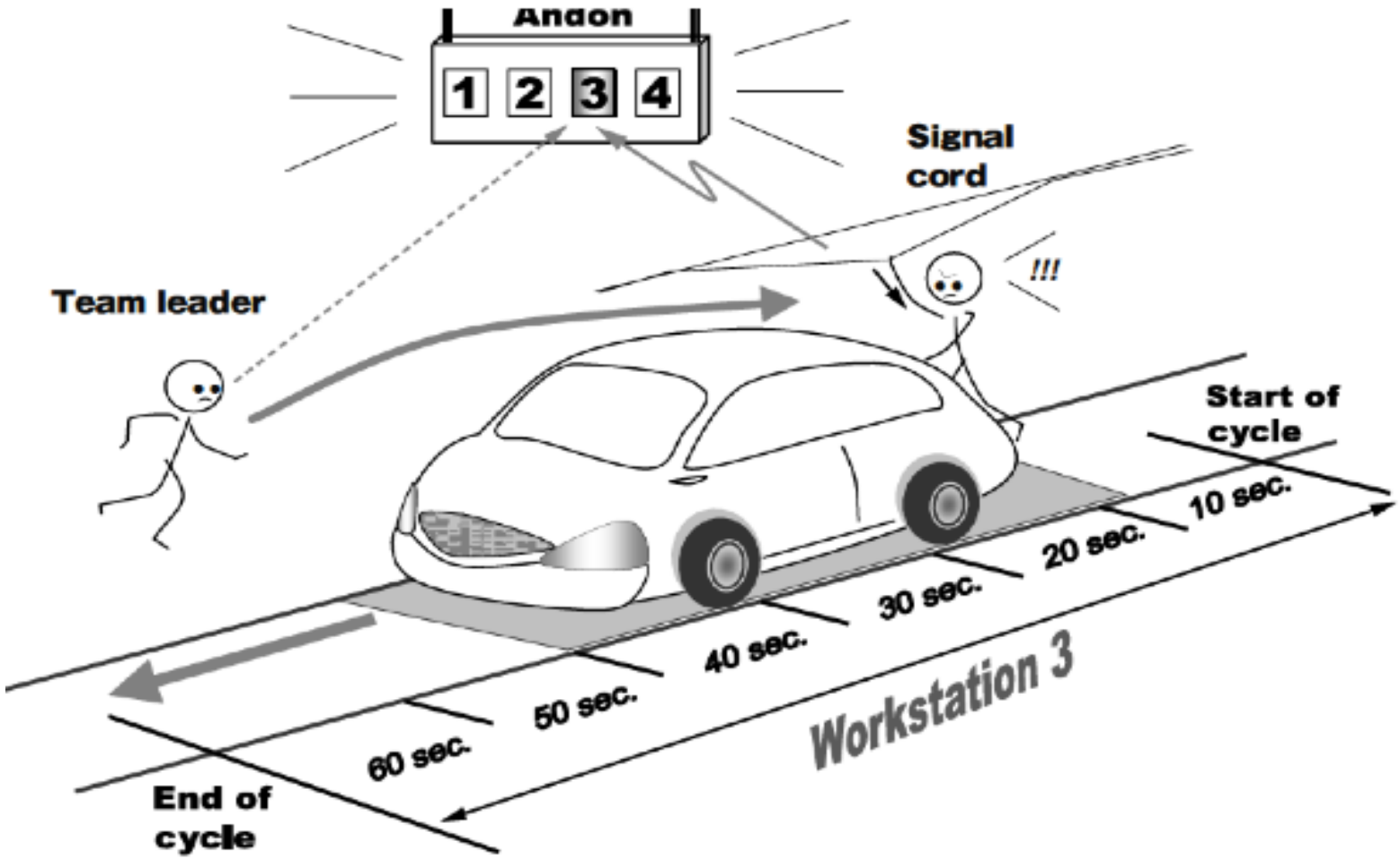

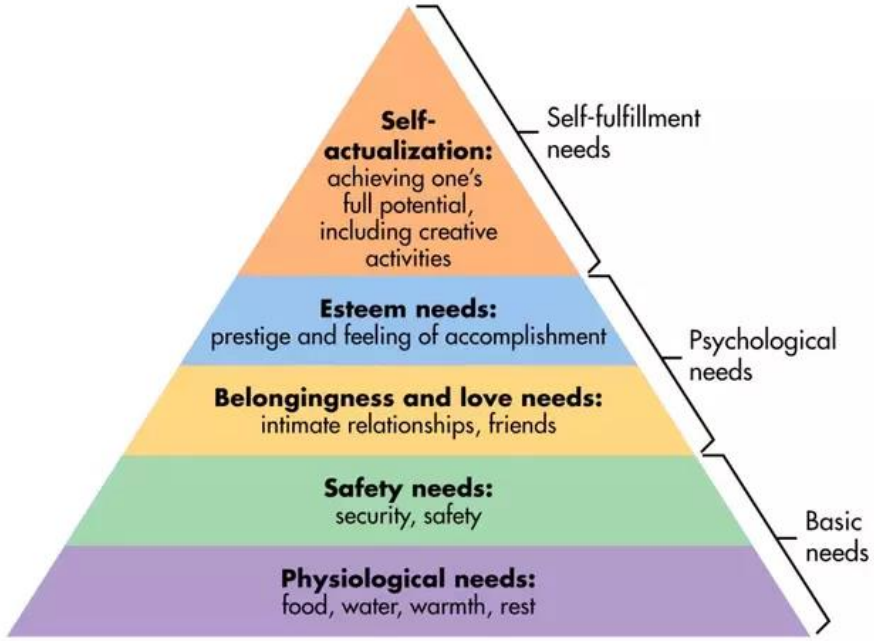

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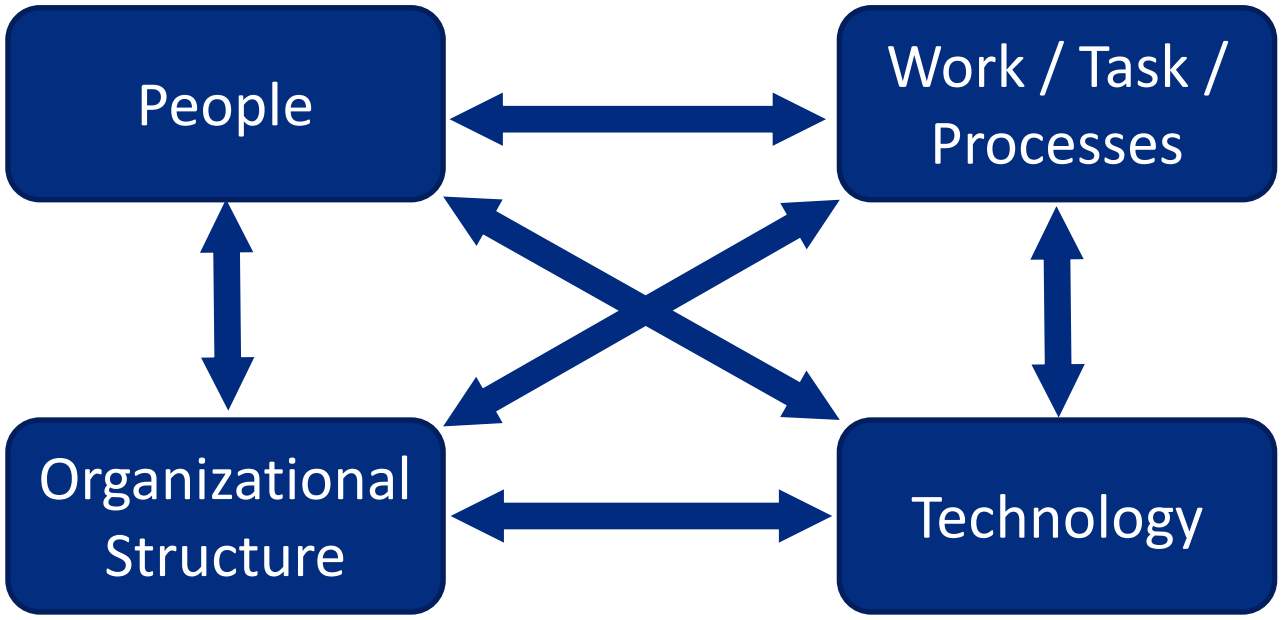
Putting People First into Practice



Socio – Technical Systems Theory

Adapted from:
Trist, E. & Bamforth, K. (1951)
Leavitt, H. J. (1965)

How you use a practice will impact your results.

Deliberately use practices in a way that enables people to perform their best.

Enabling people starts with understanding their needs.

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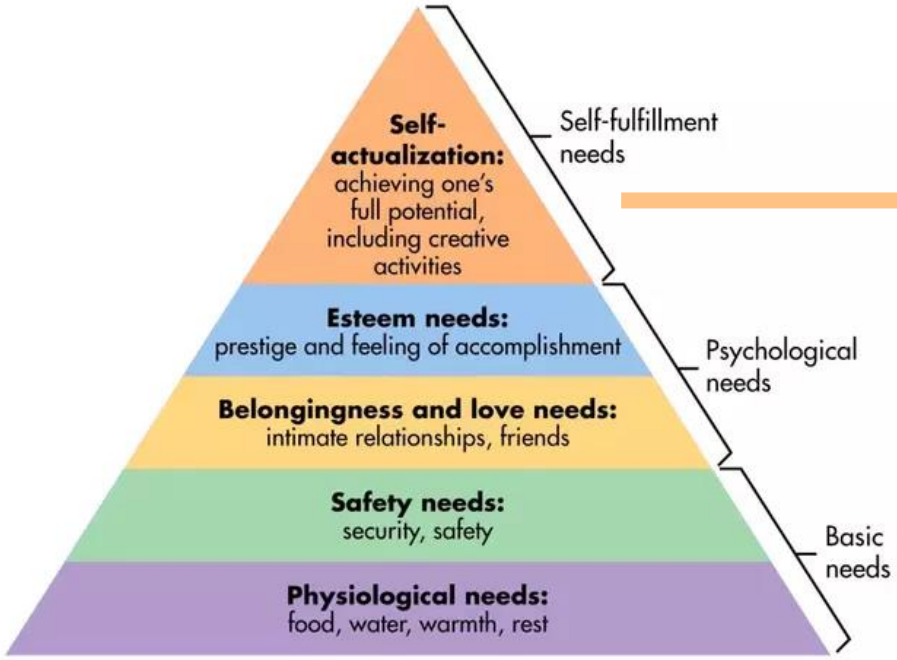
Better Performance through Putting People First



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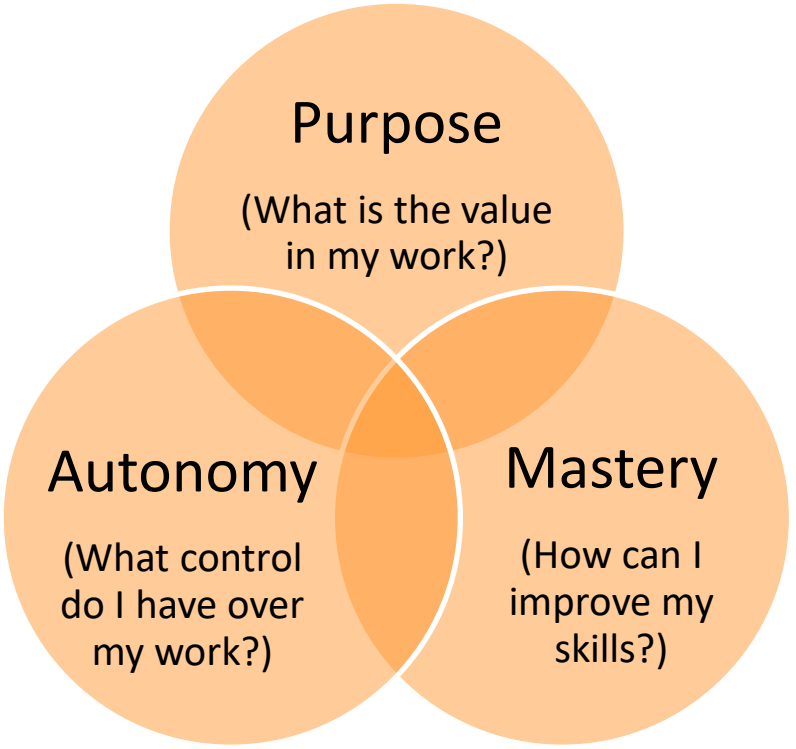

Drive by Daniel Pink (2009)

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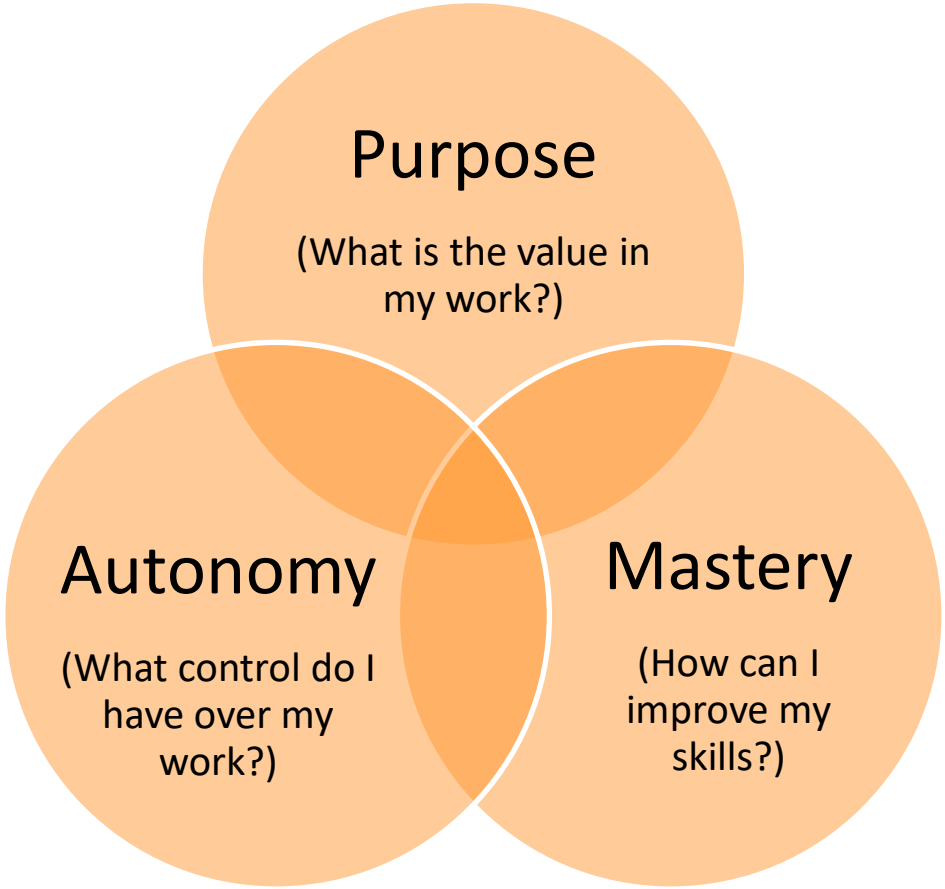
Consistency + Transparency = Accountability – Drama



- Consistency + Transparency creates the conditions to give people *Autonomy* while maintaining accountability
- Consistency + Transparency makes it easier to see what skills should be improved pursuing *Mastery* for the organization to be successful
- Transparency helps people connect to *Purpose* when they can see how their work fits together to support the project and organization

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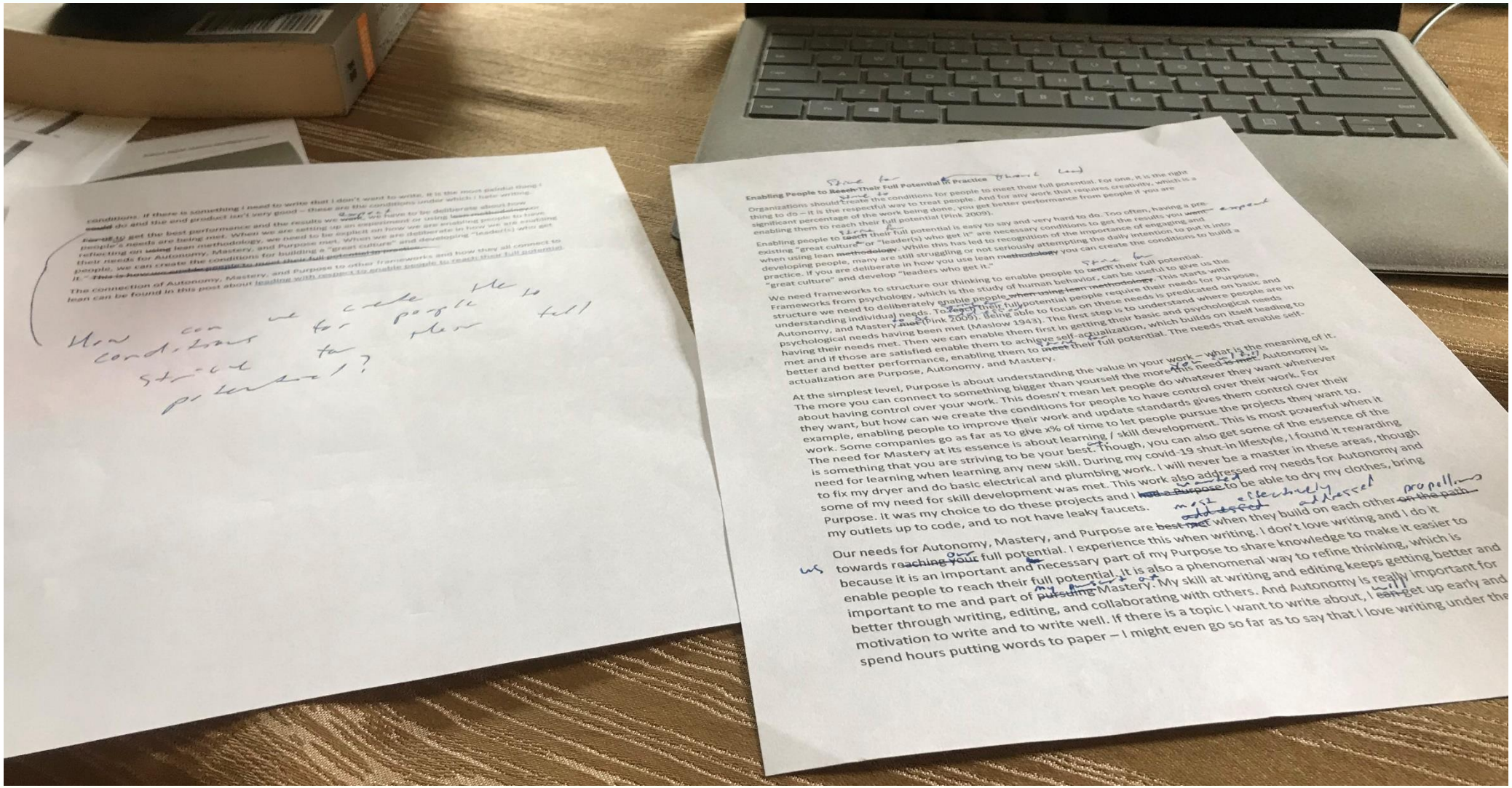
Autonomy, Mastery, and Purpose in Practice



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Autonomy, Mastery, and Purpose in Practice

Enable individuals and teams to:

- Manage the flow of activities within teams (***Autonomy***)
- Create and maintain checklists and standards (***Autonomy***)
- Continuously improve processes and products (***Mastery***)
- Develop skills on the job with mentoring (***Mastery***)
- Understand how their work fits together (***Purpose***)

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Autonomy, Mastery, and Purpose in Practice

How do you *personally* get your needs for *Autonomy*, *Mastery*, and *Purpose fulfilled*?

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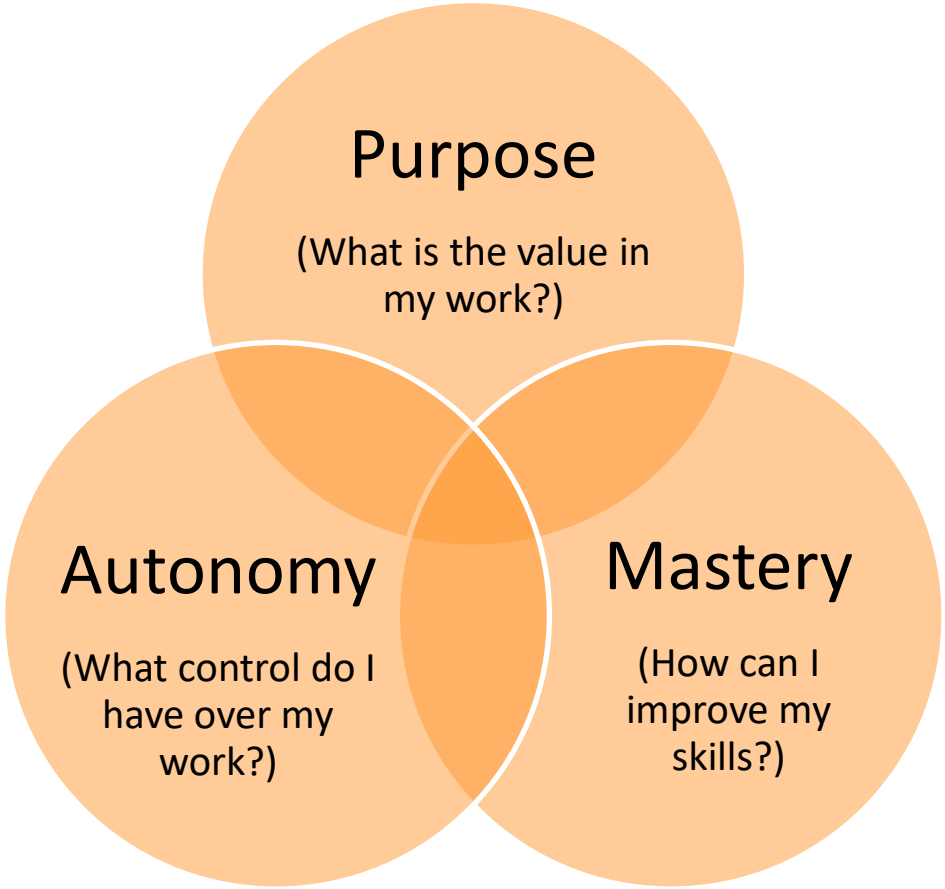
Deliberately Creating the Conditions for Better Performance



People require Autonomy, Mastery, and Purpose for better performance

LPPD can create the conditions to fulfill these needs if we are deliberate

Design the system and practices to enable people to fulfill their needs

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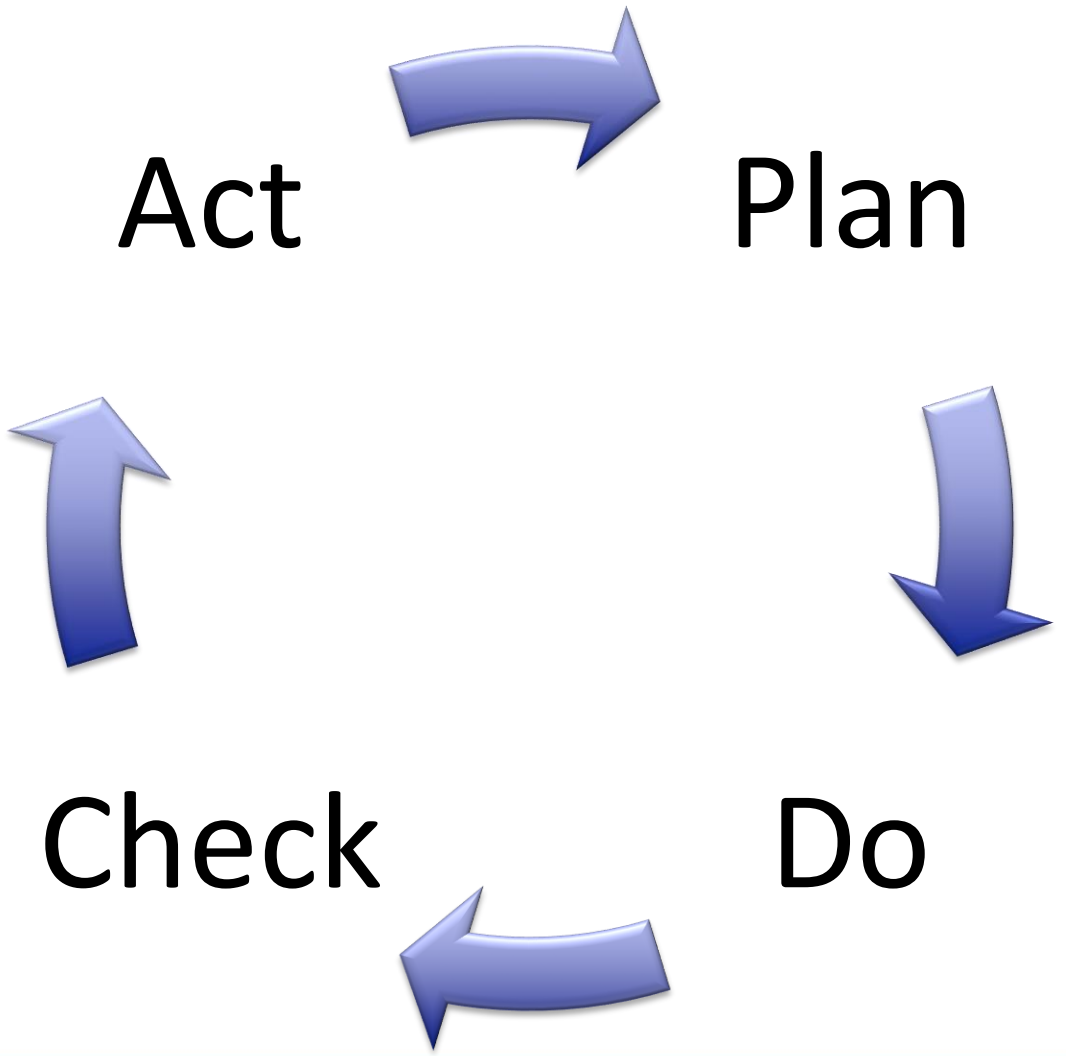
Deliberately Creating the Conditions for Better Performance

- Create the conditions for individuals to discuss and fulfill their needs.
  - Do people have psychological safety?
  - What behaviors are needed?

- Be explicit on how practices enable people to fulfill their needs when:
  - Planning
  - Doing
  - Checking (Learning)
  - Acting (What do you do with what you learned? What are you going to do next?)



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Be Explicit and Transparent about Expectations

- When using *obeya* we expect:
  - People will have *Autonomy* through planning and organizing their work to effectively work with team members and to meet milestones
  - People will have the opportunity to gain *Mastery* through improving their leadership skills working in an *obeya* management system
  - People will have *Purpose* through seeing the interdependencies between their work and team members' work and seeing how their work connects to the project and organization
- What actually happens?
- How do we adjust our behaviors to meet our expectations?

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Autonomy, Mastery, and Purpose in Practice

How will you *enable people* to get their needs for *Autonomy*, *Mastery*, and *Purpose fulfilled*?

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Purpose of Product & Process Development

1. Create ***new customer value***

2. ***Design the future value streams*** to deliver value at the lowest total cost throughout the product's lifecycle

How do we set the stage to help our people to effectively and efficiently deliver value to our customers?

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How can we “see” if the PPD Value Stream is achieving its mission?

What is the current status?

Where is the value being created?

Where are the issues and pain points impacting our people?

What improvements need to be made to better deliver value to our customers?

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PD Value Stream Map

- Helps the team ***see*** the entire process (big picture)
- Creates a mutual ***understanding*** of how everyone's work fits together (synchronize the work)
- Makes **problems and waste *visible*** to everyone
- Creates a ***shared vision*** and plan to ***improve*** the work
- Designs a system that **enhances people's talent** instead of one that frustrates and defeats it

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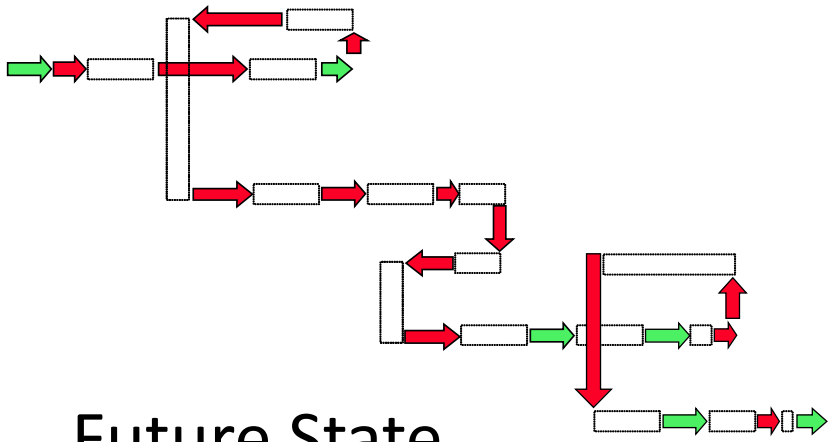
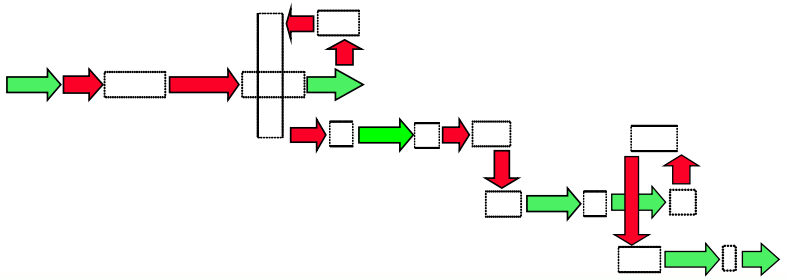
Every Process Has At Least 3 Versions

What we **Think it** is … Procedures

What it **Actually** is … Current State



What it **Can Be** … Future State



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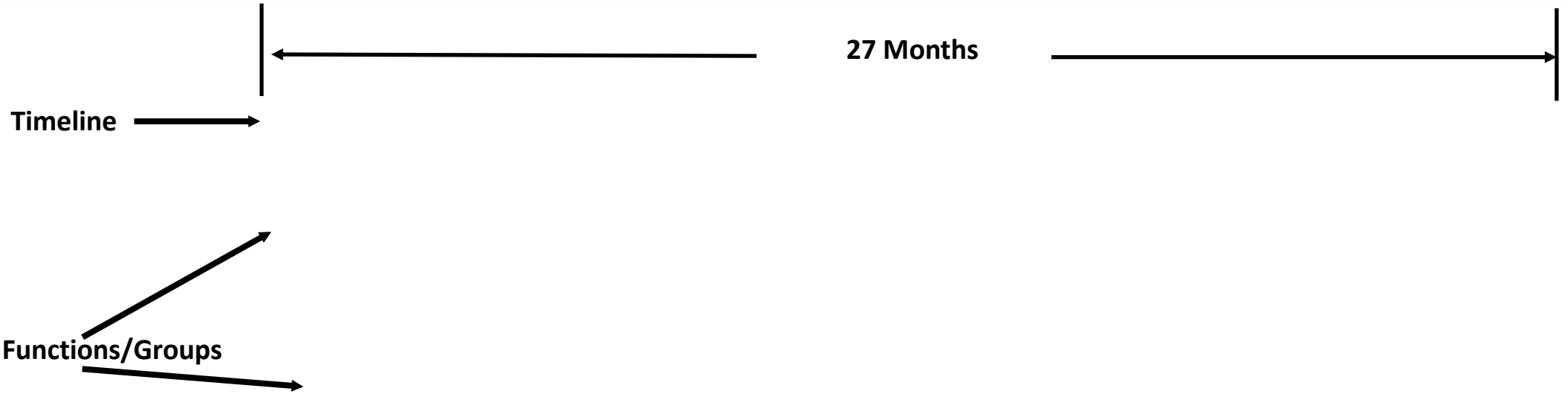
1. The Current State Map – Understand together



- Common understanding of the flow
- Baseline measures and capability of the current process
- Identify wastes/opportunities for improvement

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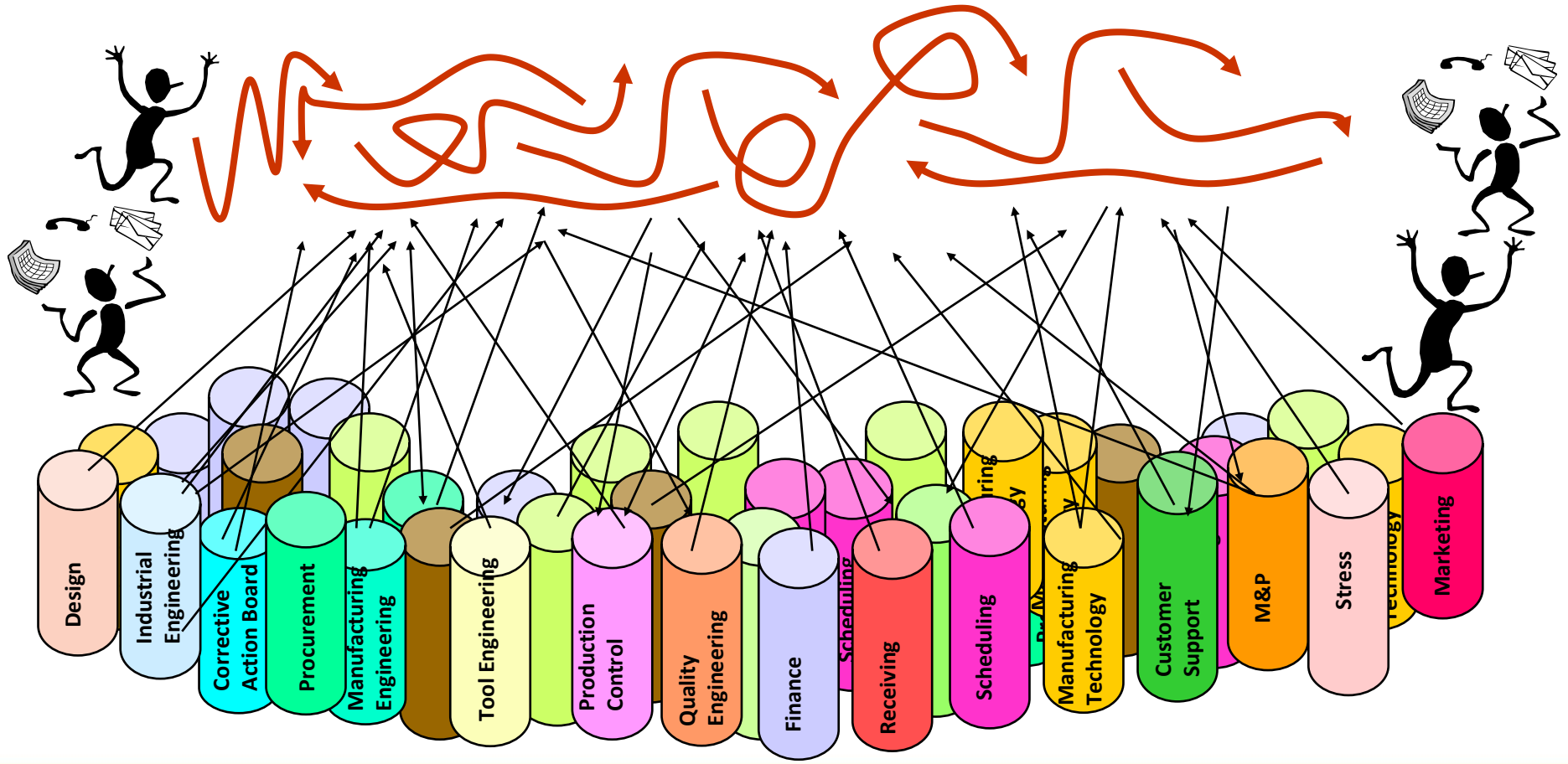
Value Delivery Process is not always Facilitated by Functionality



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The Value Delivery Process

How have functional divisions in your organization gotten in the way of delivering value ?

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Common Pain Points in Product Development

12 Wastes*

1) Hand offs
2) Waiting
3) Overdoing
4) Rework/Redundant tasks
5) Stop and go tasks
6) Reinvention waste
7) Unused/Misused talent
8) Transaction waste
9) High process and arrival variation
10) System overutilization
11) Wishful Thinking
12) Unsynchronized concurrent tasks

https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=1069

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2. The Future State Map: Setting the Stage for the Future

Create the vision and game plan to address the challenges we are facing…

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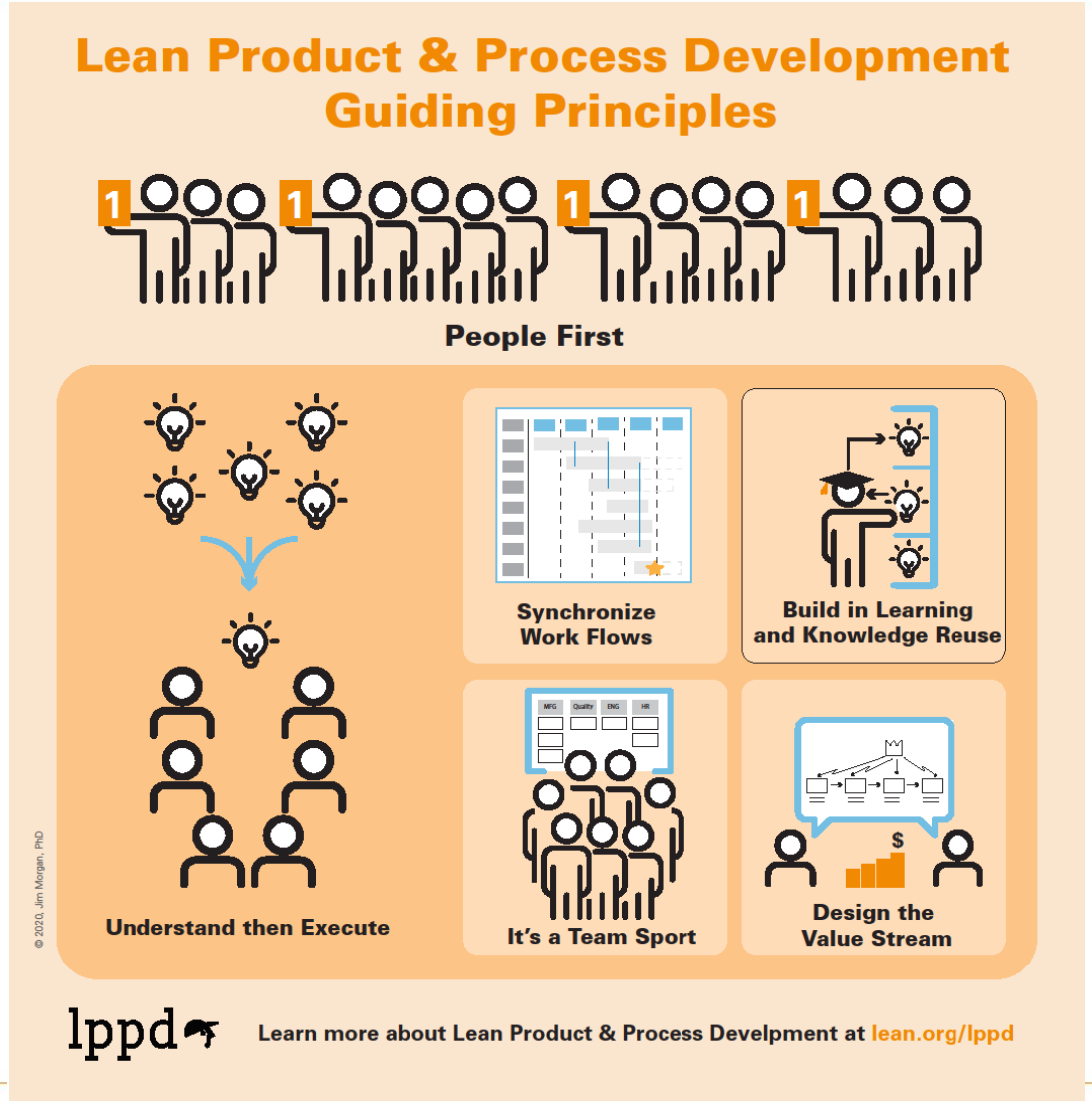
Guiding Principles for the Future State



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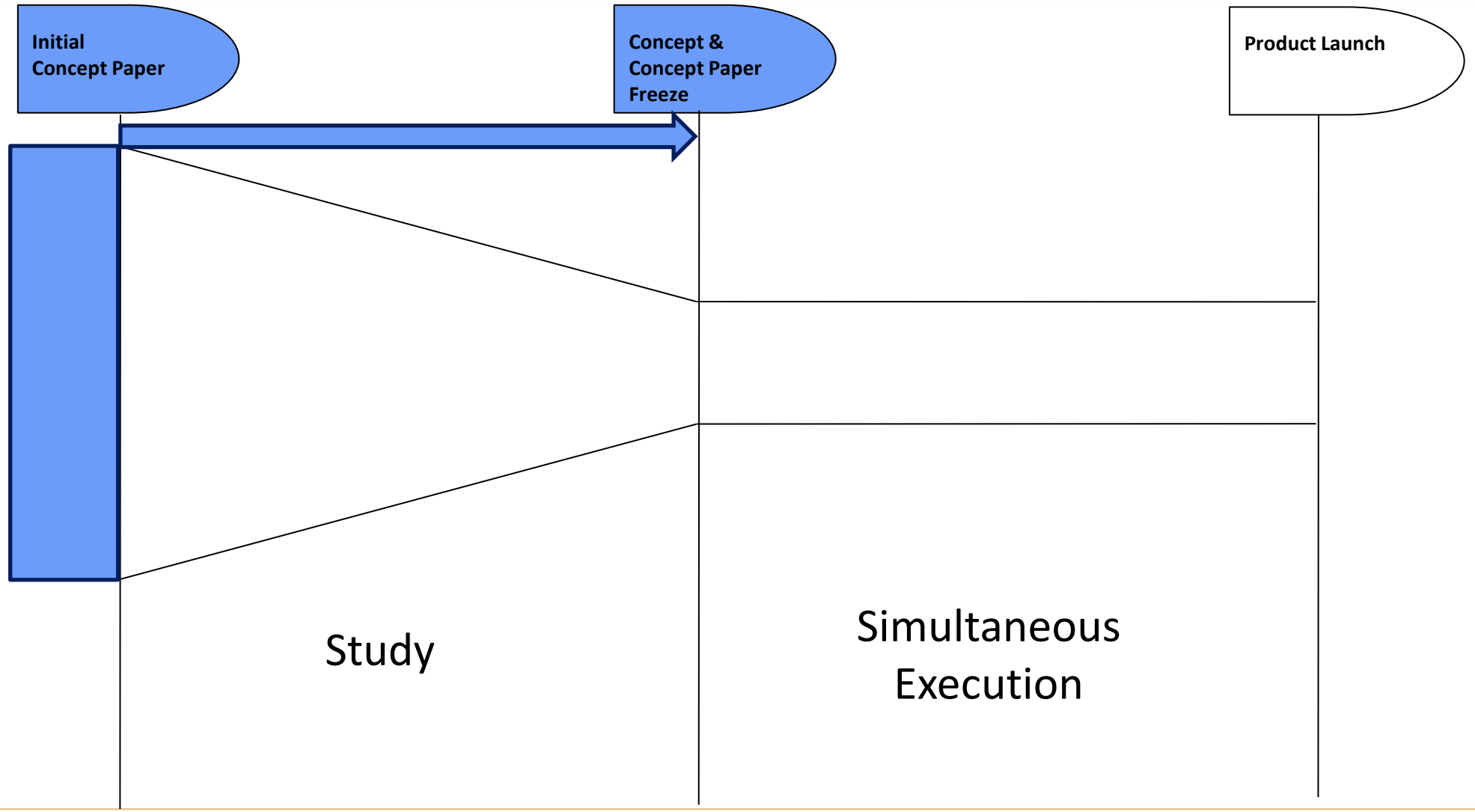
Future State: Understand then Execute



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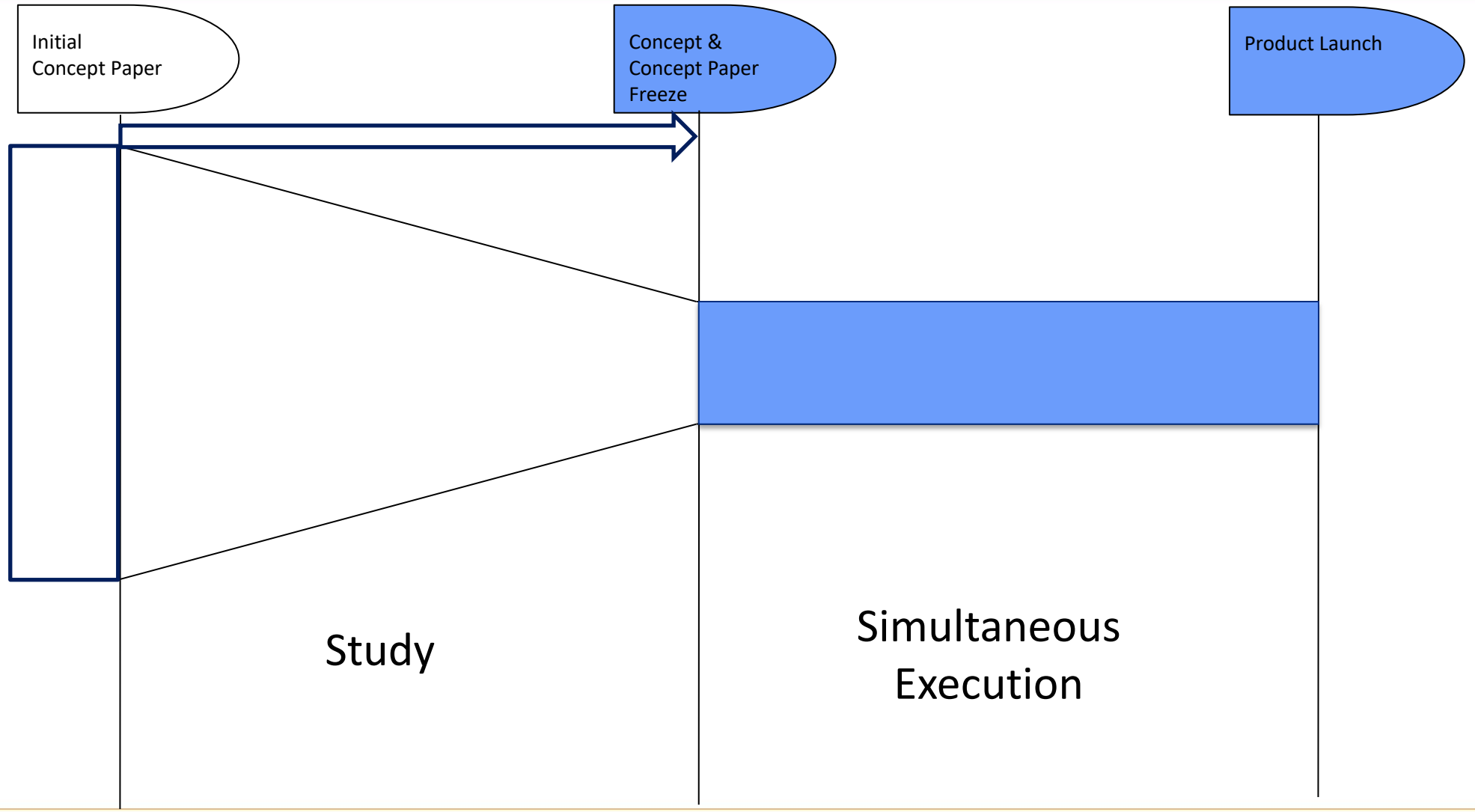
Future State: Synchronize Workflows



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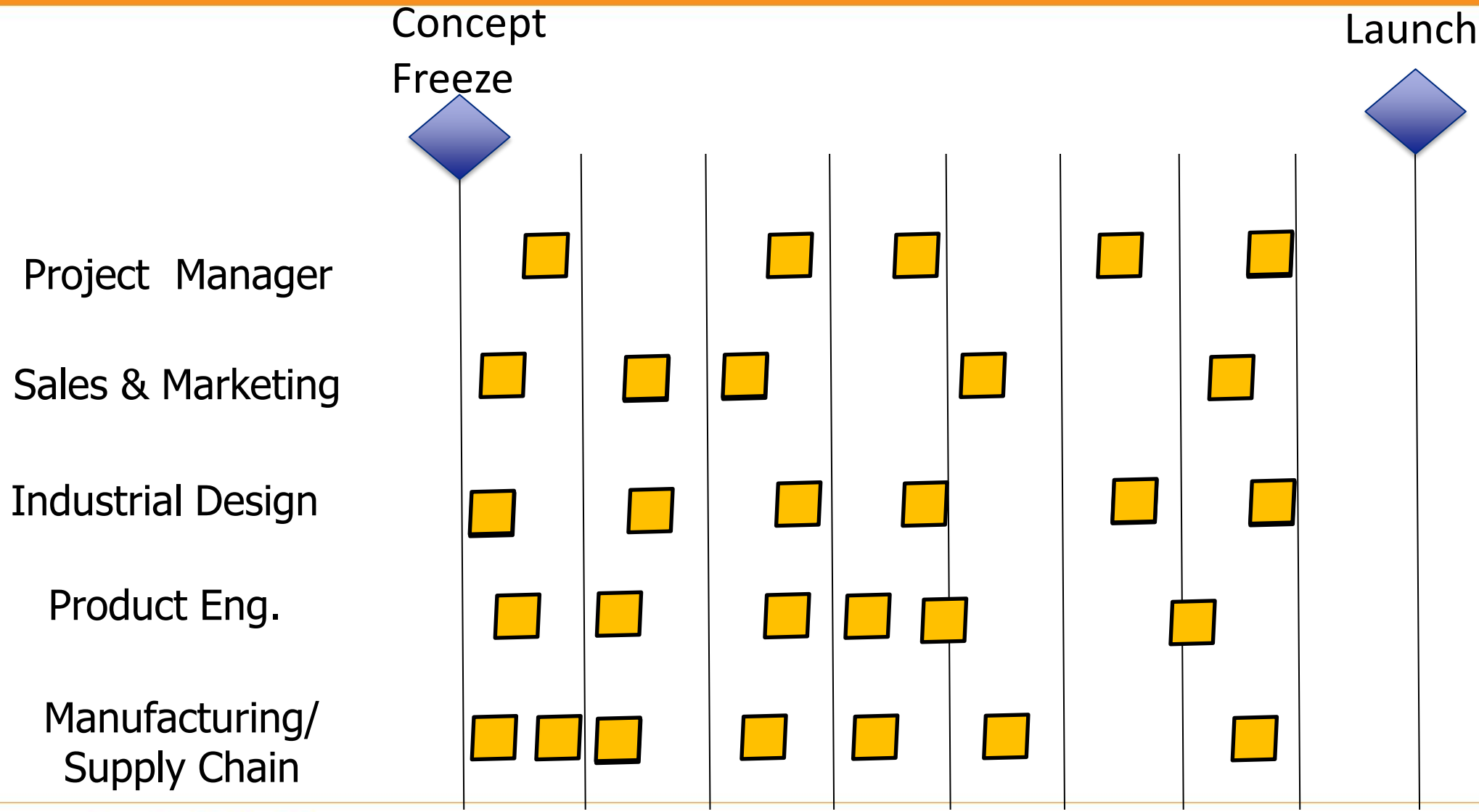
Synchronize Workflows:
Collaborating to execute with speed and precision



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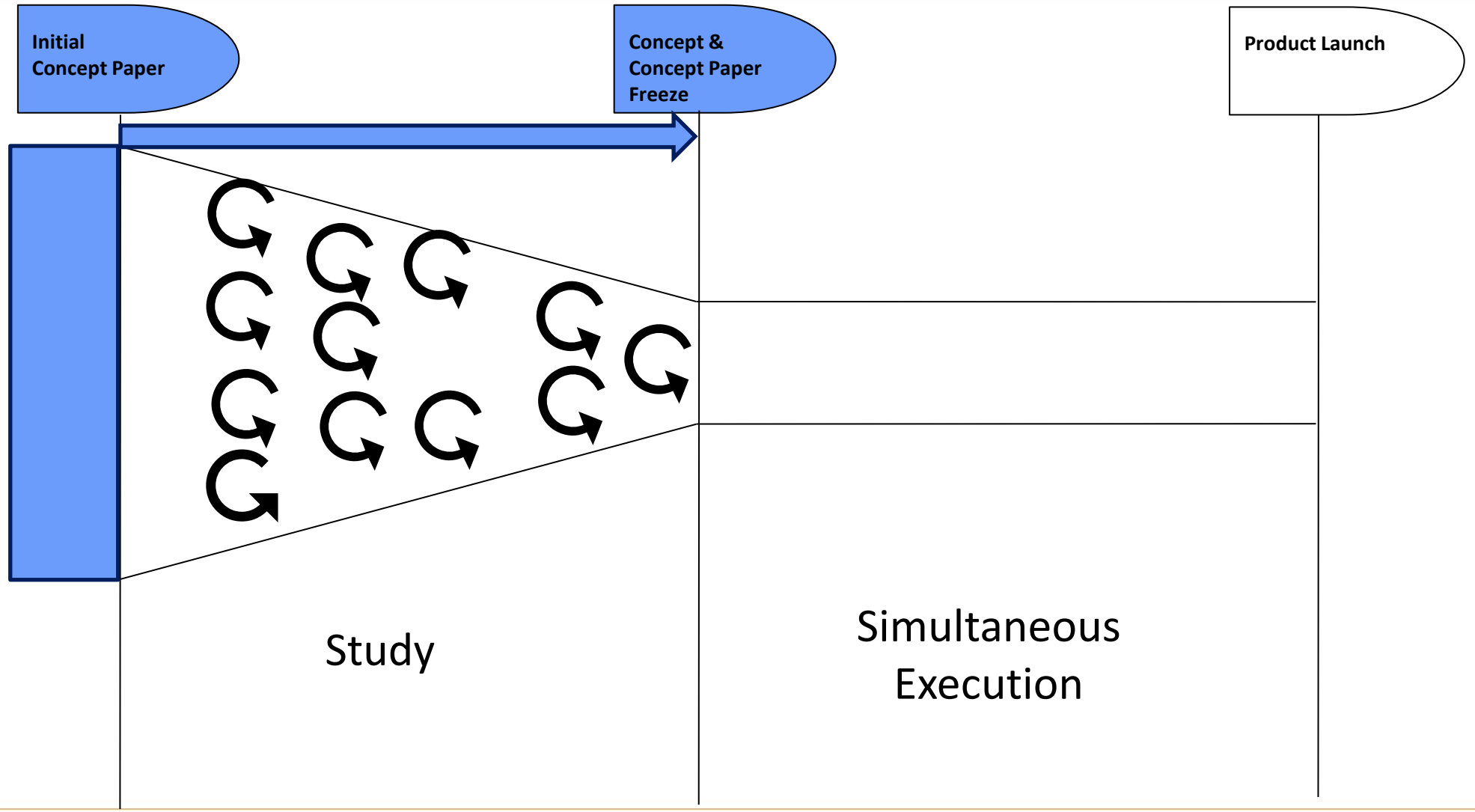
Future State: Build in Learning



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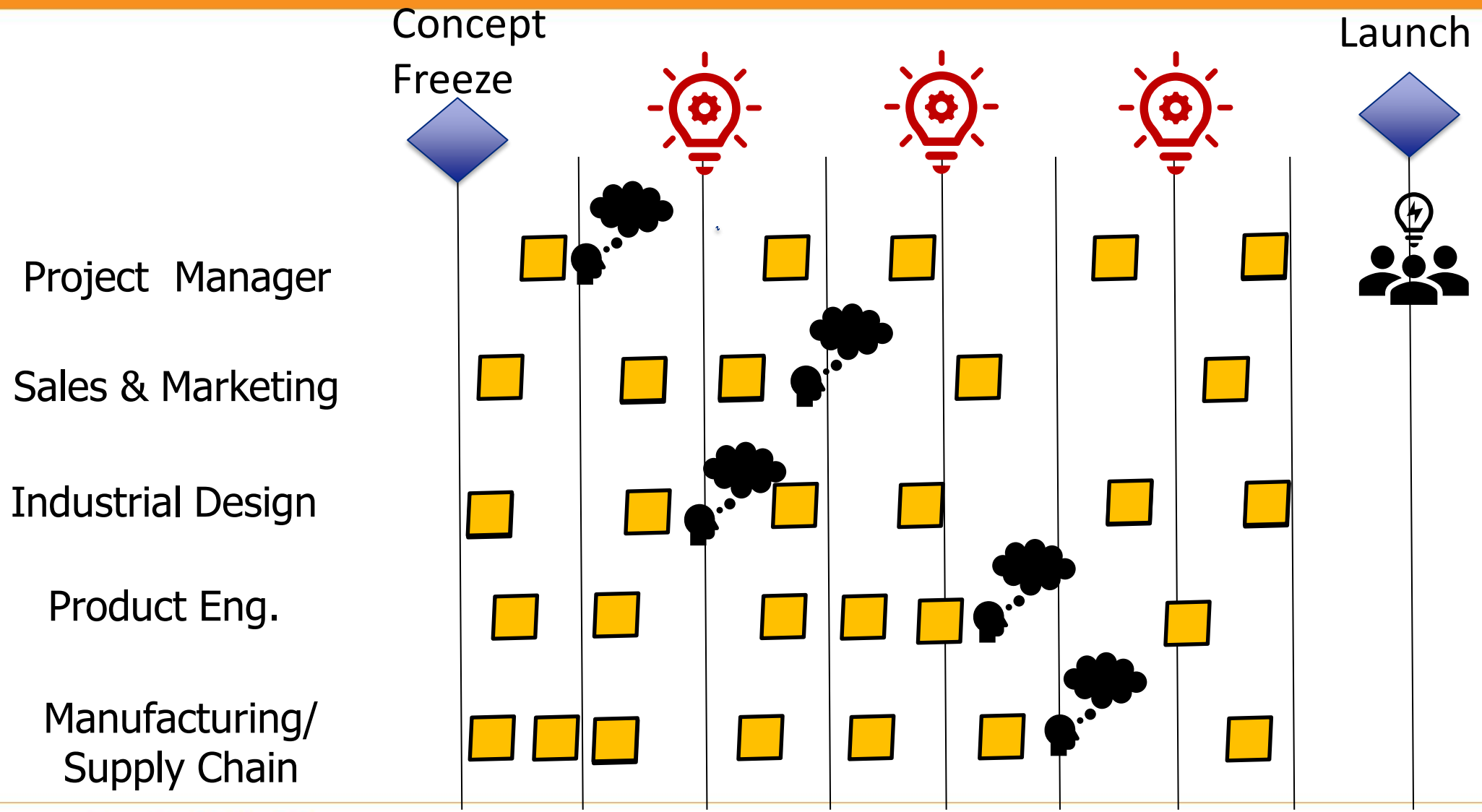
Build in Learning and Knowledge Reuse: Design Reviews and Reflection



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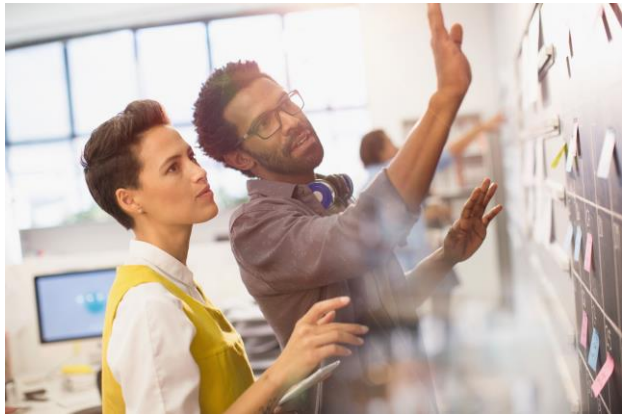
3. Implementing your future: Run the experiment and learn together

- Treat changes as experiments – PDCA
- People First – Those doing the work provide the energy and creativity to arrive at the best solutions. Be explicit on how practices are enabling people.



- Leaders – provide guidance, support and encouragement
- Make improvement activities visual
- Keep a steady cadence for improvements – incorporate them into the daily work.

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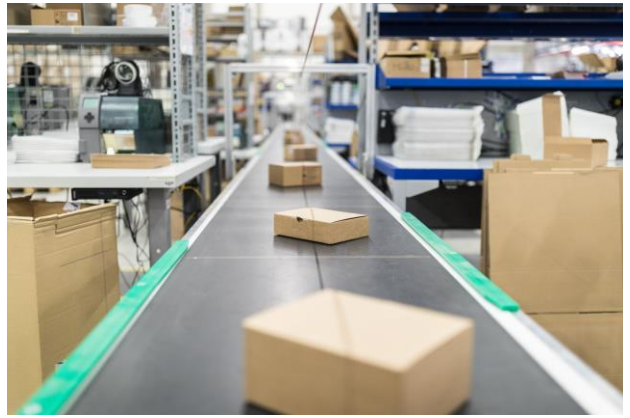
The Future State: Continually adapting the way we work to our ever–changing world

- Keep designing your future based on your learnings from your experiments
- Technology changes are shifting how people work
- The future is not static – customers and industry needs are always changing.

- We need to accept and adapt the way we work to these changes.
- Your Future State Map should adapt to meet these challenges (and opportunities!)



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Getting Started on your future…Taking the First Steps

1. Identify your Value Delivery Process

2. *Who do you need to engage to see how the work is actually being done today and help resolve the barriers to creating value?*