

Obeya: Seeing and Understanding Together for Effective Collaboration Throughout Product and Process Development

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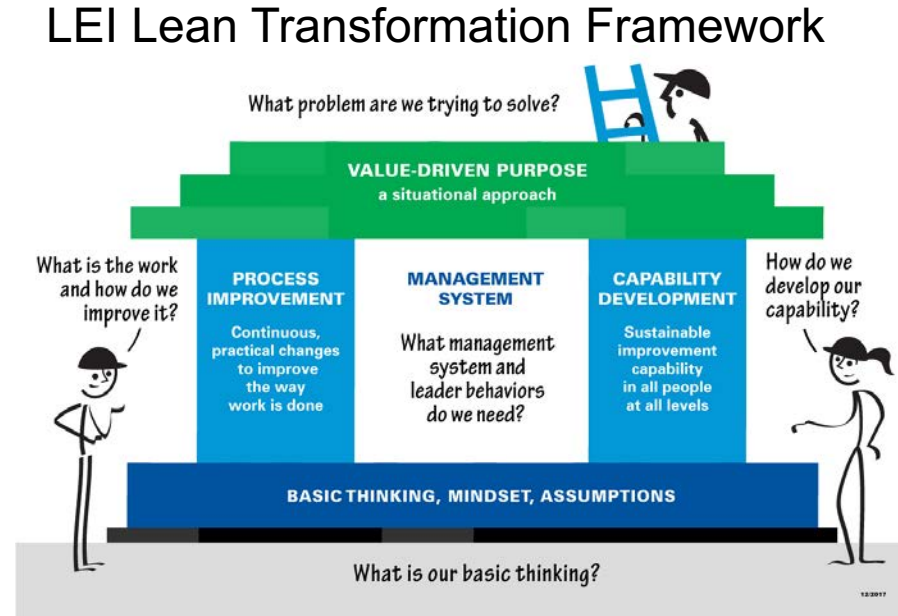


Designing the Future Summit 2019

lppd  Lean Product & Process Development

A framework for using *Obeya* effectively

1. What problem are we trying to solve?
2. How do we understand and improve the work?
3. How do we develop people?
4. What management system and leadership behaviors do we need?
5. What basic thinking, mindset, and underlying assumptions do we need?



What basic thinking, mindset, and underlying assumptions do we need?



Carol Dweck

Problems



Drive by Daniel Pink

“It's easier to act your way to a new way of thinking
than to think your way to a new way of acting”
– John Shook

What leadership behaviors do we need?



What problem(s) are we trying to solve?

- A need to make decisions quickly with technical experts discussing trade-offs?
- Alignment to what our product must be?
- Cross-functional integration & collaboration?
- Problem identification?
- Something else?

How do we understand the work?

Make it visual

- Product vision – Translate the concept paper to the wall
- Performance attribute targets with glide paths
- Project schedule with ability to see problems early
- Leading metrics
- Information each function thinks is important to share – How does our work fit together?
- Knowledge gaps & plans to close
- Concept sketches / product mock-ups

The *obeya* should change as the work changes through different phases of development.

How do we develop people?

- Chief Engineer or Program Manager “walking the walls” enables each function / section leader to take greater ownership and leadership
- “Walking the walls” provides coaching opportunities
- Modeling leadership behavior
- Cross-functional problem solving
- Cross-functional learning opportunities

What management system do we need?

Management System = Leadership Behaviors X Operating System

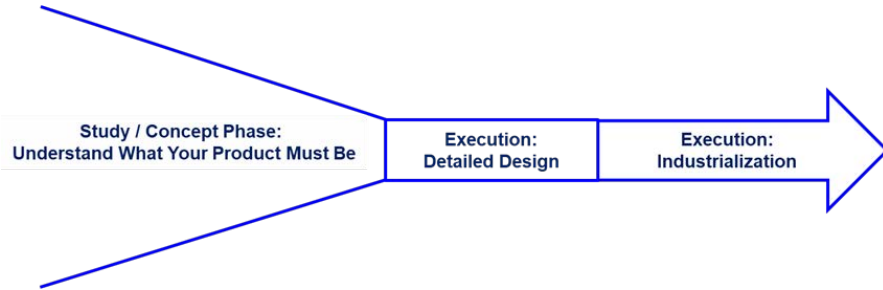
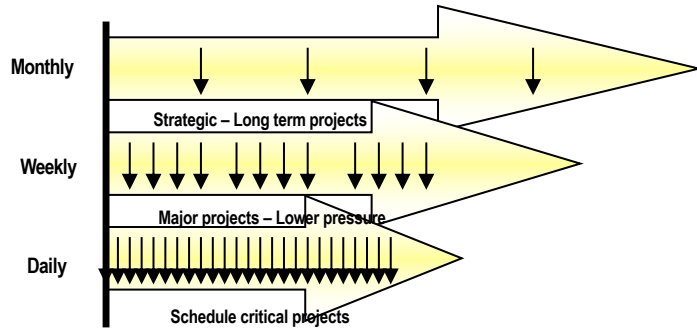
What behaviors are needed for an effective management system?

Management System Example (Problems)

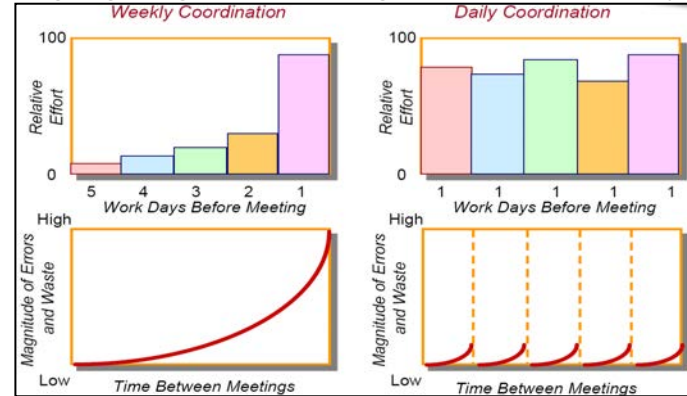
- Tracking actual vs. plan
- Identifying problems – when actual deviates from the plan
- Effectively communicating problems
- Effectively responding to and solving problems

What is the right cadence?

General Framework



More frequent collaboration leads to highlighting and resolving issues more quickly



LPPD Core Principles:

1. Deeply understand what your product must be.
2. Create flow and eliminate waste for speed to market.
3. Create new value through experimental learning.
4. Respect people, who are central to everything in LPPD.

Source: Jim Morgan

How do we improve the work?

- Understanding how our work fits together enables more effective integration & collaboration
- Understanding problems earlier enables more effective problem solving with team support
- Problems surfaced through the *obeya* can identify the need to make process improvements to the development process
- Reflecting on a regular basis can identify opportunities to improve
 - Development process
 - *Obeya*

Obeya experience: New Product

- Unit Organizer
- Sold as a kit
- Some assembly required by customer



Visual Schedule: Execution Phase - Instructions

- In your Obeya, create a visual schedule for the detailed design phase. In practice you would want to include the industrialization phase at the same time to see the interdependencies.
- Use weekly increments for your timeline.
- Sequence and align tasks to ensure each team members has the information/materials they need to complete their respective tasks.
- Concept Paper is an output of the Study / Concept Phase



Visual Schedule Debrief

What Fasteners should we use?

- Question from Product Engineering...What fasteners should we use on the project.
- As the project has evolved, several options have come to light in terms of the use of fasteners on the product.
- Clearly, cost is a large driver but other customer considerations (external and internal) need to be discussed to find the best overall solution.
- How can we make our knowledge visible to the rest of the team?
- Let's discuss the trade-offs as a team...
- What is your team decision?

Fastener Options

A - Cam Lock



B - Hex Socket Drive Head
Connecting Bolts with Barrel
Head Nuts



C - Wood Screws



D - Wood Nails



E - Wood Dowels



Fastener Selection Debrief

Common *Obeya* failure modes

- Used to control and not enable
- Everything is green
- Red is the new normal with no plans to green
- *Andons* are not responded to
- Lack of clarity on what is important
- Information is not updated
- Room is only used for meetings
- Only thing visual is a project schedule

Obeya tips for effectiveness

- Simplicity – Clarity, easy to interpret
- Information
 - What do I need to share with others - You know your work better than anyone else. From your perspective what do others need
 - What information do I need from others - People don't always know what you need. Be sure to ask
 - Display data in a way to see abnormal from normal
- Visualization of the product - (mock-ups, renderings, drawings, CAD, etc...)
- Leading metrics to identify issues sooner
- *Andon* in place to flag issue and ask for help
- Adjust the information & visuals to fit everyone's needs as the program evolves