



A Lean Approach to Balancing Change, Risk & Integrity

History: Henry Ford, W. Edwards Deming and Taiichi Ohno
- Physical vs. Cognitive Tasks

A Simple Definition – Create more value while reducing waste and cost for everyone. Eliminate waste, non-value add activity and cost - Improve efficiency & customer value.

Five Principles of LEAN:

1. Define value as seen from the _____ point of view.
2. Improve the activities that deliver _____ to the customer (internal/external).
3. Create and maintain _____ in the value stream.
4. Create _____ (order driven) in the value stream.
5. Create a culture of _____ in the organization.

MUDA (Waste)

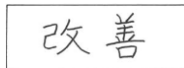
1. "Value Add" means _____ to the customer.
2. "Non- Value Add" equates to _____ in the eyes of the customer.
3. "Requisite Non- Value Add" relates to legal or mandatory requirements.



5S: A method for creating a clean, safe and orderly, high performance work environment that exposes waste and makes abnormalities immediately visible.

1. Sort (Seiri): " _____ "
- a. Holding Area & Red Tag Process
2. Set (Seiton): " _____ "
3. Shine (Seiso): " _____ "
4. Standardize (Seiketsu): " _____ "
5. Sustain (Shitsuke): " _____ "

Kaizen



Kai means _____ or take apart and **Zen** means _____. Combined they mean **Improvement**.

Everything Is A Process and Every Process Can Be Improved:



A *kaizen* "event" or "blitz" includes the following steps, (typically adapted to unique needs of an organization).

- **Phase 1: Planning and Preparation**
- **Phase 2: Implementation**
- **Phase 3: Follow-up**



Mapping a process provides a clear picture of waste that exists in a value stream.

- **The Current State:** Start at the furthest downstream point and map, working upstream.
- **Future State Map:** Includes the addition of metrics (Takt, queue & cycle time) as well as any notation of 5S and Kaizen implementation. Will include the integration of standardized processes, visual controls, space design, etc.

Simple Steps for Process Improvement: 1) Choose a value stream to improve. 2) Identify customer value. 3) Map the current state. 4) Study the Value Stream. 5) Map an Ideal Value Stream. 6) Create Improvement Plans. 7) Implement Improvement Plans. 8) Measure Improvements. 9) Standardize Processes. 10) Repeat

Three Fundamental Questions for Defining Value from The Customers Point of View: *Is the customer willing to pay a higher price or wait to receive the product, service or value? Is the step transforming the product, service or value? Is the step being done for the first time?*

1. Waste exists in all levels of an organization.
2. Waste can be identified and eliminated.
3. Everyone can (and should) be trained to recognize waste.

Why Visual?

- ✓ Information is absorbed faster, remembered longer.
- ✓ Visuals communicate quickly, cheaply, effectively.
- ✓ Reduces risk of confusion; are clear, unambiguous, open, and unbiased.

LEAN promotes an inclusive, team-centered, management-supported, bottom-up, cultural attitude of continual improvement.



Final Considerations:

1. Be clear on what constitutes customer value.
2. Measure time, waste, WIP or cost for each processing step and between each step.
3. Map current value stream & determine which process actions add value.
4. Find ways to do only what adds value; *with greatest speed, least waste, WIP or cost*
5. Find ways for work to flow most effectively; *Automate, mistake-proof, visual controls*
6. Celebrate along the way!



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