A Detailed First Look at Lean's Building Blocks

Defining and explaining the true meaning of Lean

What is Lean?

Lean is a term used to describe a process of analysis and creative problem solving

- Lean shifts an organization's focus to creating value for the consumer by:
  - Shortening production cycles
  - Eliminating waste
  - Emphasizing efficiency

Employed the world over by business, healthcare, and government organizations, Lean's principles and practices can revolutionize the way any organization operates

Lean Defined

Lean is a systematic approach used to identify and eliminate wasteful activities within an organization through continuous improvement by finding ways to flow product at the true demand of the customer

For a relatively short statement, it has many different elements

- The parts can be broken down and examined

Waste Breakdown

Lean is a systematic approach used to identify and eliminate wasteful activities within an organization…

- Waste is considered anything that doesn't add value to a good or service in the eyes of a consumer
- So when is value added to a product?

Example

Imagine a customer looking over your shoulder while you work

- From their point of view, what actions you perform would they find valuable?

They would find value in actions that **change or enhance** the product

- Would they value you:
  - Putting on protective coverings?
  - Cleaning and checking the equipment?
  - Measuring and marking before you modify a product?
  - Storing the good in a warehouse?

Quote

Fujio Cho, chairman of Toyota Motor Corporation defines waste as:

- "Anything other than the minimum amount of equipment, materials, parts, space, and workers' time, which are absolutely necessary to add value to a product or service."

Tangible Value

A customer finds value in typically only 10% of work
- This work may be necessary to you, however it doesn't give **them** anything tangible
- The customer really only wants to pay for work in which they find value

If a customer buys a computer, they are buying the machine and the work it took to tangibly make that machine
- They don't factor in all the other costs associated

If you look at all work as work the customer would be **willing to pay for** and which work the customer **wouldn't** be willing to pay for, it is easy to distinguish between **Value-Added** and **Non Value-Added activities**

Value Example

If you're a welder, the customer pays you when the electrode is melting metal

- All of the activity before and after that single moment in time does not add tangible value to the finished product
- Think of yourself as the customer, would you want to pay for a welder to gather parts or would you consider that his cost of doing business?

Value Example 2

If you're a family doctor, the customer is paying you for the time you spend with them face to face

- In their minds, they are not paying you or your staff for writing chart notes, researching new medication, cleaning your instrument, etc

Think

Consider all the activities you do as part of your day-to-day duties and assess which ones add tangible value to the final product or service

- Estimate what percentage of your workday you actually generate value from the customer's point of view

The value-generating steps are dependant on the non value-generating steps, but can some of the procedures that do not add value be condensed or eliminated altogether?

Through Continuous Improvement

In lean, continuous improvement is called kaizen, a Japanese word meaning “change for the better”

- Part of this means to never be satisfied with status quo, and always looking for a new, better way of operating

Small, incremental improvements can lead to revolutionary changes overtime

Execution

- Next time you perform a task, even a small one, pay attention to the details
  - Is there something you can change about the process that will make your job easier or faster?
- Select simple, obvious changes, rather than complicated ones

…By Finding Ways to Flow Product…

Unlike batch and queue processing Lean flow is known for One-Piece Flow

- Instead of several pieces moving along the production line together, just one piece at a time moves through
  - This piece moves from process to process continuously, never having to wait in a queue to go through the next process

One-Piece Flow:

- Speeds up manufacturing
- Cuts down on storage and transportation

At the True Demand of the Customer

- Lean practitioners create only what is ordered by the customer
  - In this way, the customer pulls the product from the producer
  - The producer creates only what is needed and transports it straight to the customer
  - They ship more frequently, but there is little inventory

The Pull System

Lean organization cuts down on the costs of:

- Storage
- Transportation
- Maintenance
- Tracking and managing the waste of inventory
- Product loss due to damage in transport

Allowing consumer demand to pull a product from your organization provides a more balanced approach to supply and demand

The Push System

A company, mistakenly believing they will save money, manufactures large batches of products and stores them, using aggressive marketing techniques to try and empty their warehouses

This way of doing business is a costly gamble that has brought many organizations to financial hardship

Summary

Lean is a way of thinking, a way of approaching management that promotes efficiency by **reducing inventory**, **de-cluttering the work area**, eliminating wait times and queuing, and which focuses all of its energies on giving **added value to the customer**

In Lean, getting the customer what they need right when they need it is of the utmost importance