

VALUE STREAM MAPPING

(Following a Production Path from Beginning to End)

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Value Stream Mapping is a method of recording a product's production path (materials and information) from **door to door**. It can serve as a starting point for management, engineers, production associates, schedulers, suppliers, and customers to recognize identify waste and its causes. The VSM process involves physically mapping the **current state** while focusing on the desired goals, or the **future state** map, that can serve as the starting point for other Lean improvement strategies.

What is Value Stream Mapping?

A value stream is all the actions (value-added and non-value added) required to take a product from raw material to the customer, the design flow from concept to completion. Taking a value stream view means looking at the whole picture, not just individual processes, and improving the whole, not just individual parts. Value Stream Mapping is a pencil and paper tool that helps to see and understand the flow of material and information as a product makes its way through the value stream. The meaning is simple: Follow a product's production path from customer to supplier, and draw a visual picture of every process in the material and information flow. Within the **production flow**, the movement of material through the factory is the flow that usually comes to mind. But the **information flow** must also be considered since it tells each process what to make or do next; both flows must be mapped.

VSM a Planning Tool

Value Stream Mapping can be a communication tool, a business-planning tool, and a tool to manage change in production processes. The first step is drawing the current state, done by gathering information on the plant floor. This provides the information needed to map a future state. The final step is to prepare and begin actively using an implementation plan that describes, on one page, how the future state can be achieved.

More organizations with successful plant Lean programs are also applying Value Stream Mapping methods and Lean principles to administrative areas. Value Stream Mapping provides a simple, yet thorough method that relies on current data analysis and display. It links reporting requirements, metrics, people, and Lean tools to continue improvement and promote process learning. It gives managers and employees the same tool and language to communicate.

What is Value Stream Management?

Value Stream Management is a orderly approach that allows plant personnel the opportunity to plan how and when they will make the improvements required to meet customer needs . VSM is not about making people **work harder**, but **working smarter**. It is setting up a system for material to flow smoothly through the various manufacturing processes at the speed required to meet customer demand.

Value Stream Management is a process that:

- Ties people, Lean tools, metrics, and reporting requirements together for a Lean enterprise.
- Requires a Lean coordinator to make the process go smoothly and ensures that Lean is continuous.
- Lets everyone understand and continuously improve the understanding of Lean concepts.
- Makes for a controlled process flow on the floor for an actual Lean implementation plan.

Value Stream Management Purpose

Value stream mapping is one of the latest trends to improve manufacturing processes, because value stream maps are an important part of what makes the storyboard an exceptional form of visual management. Without a good understanding of Lean manufacturing principles, mapping will not bring companies closer to reducing wastes and achieving excellence than early experimentations with Kaizen workshops. Many manufacturers recognize the many benefits of Lean manufacturing, only a few understand what must go into this effort to make it successful.

Experience has shown that a successful Lean program depends on four main factors:

- Make a true commitment to the success of the Lean program.
- Understand exactly the specifications of the customer's requirements.
- Illustrate the current state as accurately as possible.
- Effectively communicate to everyone involved on the team and involved in the program.

Make the Commitment Sincere

The Lean program is important enough to the financial health of any company for them to supply the resources required for its successful planning, implementation, and maintenance. In some companies the gains acquired through the savings in waste alone, wisely reinvested by the company in new technology can make the difference between being able to survive the

competition or slowly wasting away. It is impossible to have a successful Lean program without full support from everyone in the company; the management and plant floor workers. The true commitment and guidance to the Lean program must start with top management and when the workers recognize their commitment, they will have the desire to become partners in the program. Making and supporting the commitment to the Lean conversion is important throughout the Value Stream Mapping.

The Importance of Personnel

Involving people early in things such as continuous improvement (Kaizen) programs and value stream mapping will earn their cooperation and give the process a better chance of being a success. Organizations that involve people in the overall planning process will come closer to reaching world-class status than those that do not.

People, and their focus on eliminating waste, are very important to successfully implementing and maintaining a Lean system. Value Stream Management only works as well as management's skills in promoting people's well being.