



Manufacturing Improvement Specialists

Solution Source:

Building the Approach to a Lean Transformation:
How to Get Started and How to Sustain

WHITE PAPER

OVERVIEW

Today's successful companies are flexible, efficient, and responsive to change. They deliver what their customers need, precisely when they need it. They eliminate wasteful, non-value-added activities in production and administrative processes. Lean manufacturing is a proven method to reduce lead time and eliminate wastes wherever possible. This is a never-ending journey of continuous improvement as an organization responds to its customers with new products, opens new channels and markets, and introduces new technologies in both its products and processes.

Successful lean transformations require a multi-faceted approach – it's NOT just about the “tools”. The four main components of this approach are:

Strategy

1

What's the condition of the business today? What is the desired condition of the business? Where do you want to go and how will you get there?

Value Stream Mapping

2

A current state value stream map is the result of an intense effort to gain a deep understanding of the current state of the operations of a business. Then, the team creates a future state value stream map and an action plan to get there. This becomes the “blueprint” for improvements.

Behaviors and Culture

3

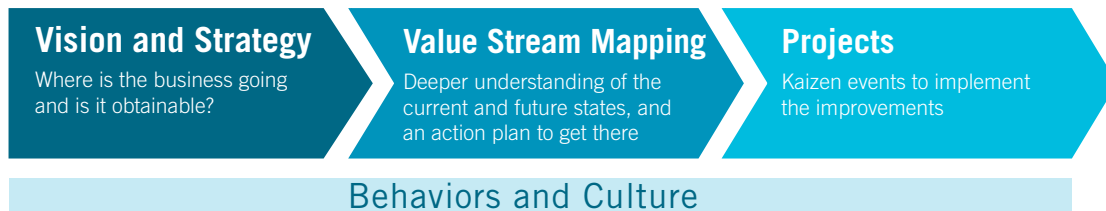
Businesses are people, and any group of people has their own culture. Culture is the collection of habits and behaviors of this group of people. This culture may need to change in order for the business to get where it wants to go. Visual displays, daily accountability meetings, leadership standard work, and gemba walks are some ways to change an organization's culture.

Projects

4

To improve a business, things need to change. These changes are often made through kaizen events or other improvement projects.

Does your business have a sound strategy? If so, does it have a blueprint for improvement, and a culture to get there? If so, you are probably ready to dive into some improvement projects. If not, work to build the strategy and culture into the business, and then create the blueprint for improvement (value stream map).



DETAILED APPROACH

The process to begin a Lean Transformation can be customized depending on what stage(s) the organization already has in place. For instance, a manufacturer may have a strategy and a value stream map, but does not have the culture or the buy in from the entire team; the process would begin by creating a Lean culture. Far too many companies want to jump into a Lean Transformation by completing projects such as 5S without having a solid strategy, a value stream map or buy in from the entire organization. Without taking the necessary prerequisite steps a Lean Transformation is bound to fail.

VISION AND STRATEGY

Our approach balances strategic “planning” with strategic “doing.” It’s a customized process that results in a well-defined action plan, plus implementation and follow-up to keep you on track. Appropriate planning ensures that employees are able to effectively implement the improvements without disrupting ongoing work activities. It starts by clearly identifying the objective you want to reach. Is it reduced set-ups, improved delivery, shortened lead time, overall efficiency? We lay out a timeline in which implementation is rapid enough so that employees see it working and generating measurable results.

VALUE STREAM MAPPING

Value Stream Mapping enables a company to identify waste in manufacturing and administrative processes and develops a plan to reduce or eliminate it, by streamlining work processes and cutting lead times. This often results in reduced costs and increased quality. IMEC can assist you through concept training (workshop), application (value stream map development), and value stream improvement implementation (kaizen events). Through Value Stream Mapping, a team of employees can map the current state from customer back to raw material including all steps, both value-added and non-value-added, and both manufacturing and administrative to develop a future state vision to act as a blueprint for Lean activities. The Future State often represents a significant change compared to the way the company currently operates. The VSM team will develop an implementation strategy to make the Future State a reality. The most urgent needs will be addressed first, and can typically be accomplished in a very short time frame with the appropriate resources applied.

CULTURE

In order for a Lean Transformation to occur, the company's culture must be addressed. Culture is key for not only the short term transformation but also for the long term sustainability of Lean. A Lean culture is committed to continuous improvement. ALL employees must be involved in the improvement process. This means maintaining enthusiasm about the process and creating a safe environment for employees to make suggestions and take risks while getting total buy-in from the leadership.

We work with designated Lean champions to make the Lean journey visible throughout the company. The Champions are typically process/value-stream managers who will become internal facilitators and actively lead Lean projects. They are equipped with "tools" for decision-making, communication, and tracking Lean deployment progress and results.

The hallmark of IMEC's approach is a Train-to-Sustain model – overview preparation on the key Lean methodologies. Our simulations and hands-on exercises drive home the power of Lean to a cross-section of employees from different levels of responsibility/authority and operating units within the facility. Soon, the champions will be ready to take over facilitation without the need for continued Lean implementer support or mentoring.

LEAN TOOLS

Lean Simulation - Work in a "mock" company, assemble a product on a simulated factory floor and learn how to use half the manufacturing space and half the investment in tools to produce products in half the time with fewer defects.

5S/Workplace Organization - Reduce waste and cost by implementing visual controls to organize the workplace, sending clear/simple signals to employees, reducing inventory, and increasing work flow, quality and safety.

Quick Changeover - Change tooling and fixtures quickly and efficiently allowing smaller batch sizes, more frequent changes, quicker customer response time, and better machine utilization.

Cellular/Flow Manufacturing - Link and balance manufacturing operations to reduce lead times, minimize work in process, optimize floor space.

Pull/Kanban Systems - Control shop floor inventory and production scheduling by implementing pull systems. Develop a visually driven, employee controlled material replenishment system.

Total Productive Maintenance - Maintain machines and equipment at peak productivity. Increase equipment effectiveness and avoid production interruptions.

Kaizen Event Facilitation - Rapid improvement process focused on waste elimination or problem solving in a work cell or process. An intense 2 - 5 day event aimed at achieving a specific objective such as dramatically reducing setup time.

Facilities Layout - Strategically locate key assets to minimize wasted movement, handling and travel distance of work and labor.

TYPICAL RESULTS FROM IMEC'S LEAN PROJECTS

- Work in Process reduction up to 90%
- Space utilization reduction up to 70%
- Lead time reduction up to 95%
- Productivity improvement 10-40%
- Quality improvement 25-75%
- Enhanced teamwork, communication
- Multiple other benefits related to improved product flow

For more information call 888.806.4632, or visit www.imec.org