

How Lean Manufacturing Principles Give Your Company A Competitive Advantage

Like all manufacturers, you confront the issue of waste on a daily basis. From underestimating worker capacities to underused materials and large inventories, waste can and does affect your bottom line. However, there's a school of thought in manufacturing that helps identify these inefficiencies and create new processes that help you save time, money, and better meet your customers' needs.

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It's called lean manufacturing, or lean thinking, and companies across the globe have adopted these practices to improve their workflow processes. Lean manufacturing is more of a philosophy than a step-by-step guide, and it's put into practice with management techniques that underscore five key principles: identifying value, mapping the value stream, creating flow, establishing pull, and seeking perfection.

Below are some of the benefits you can experience from adopting and implementing lean manufacturing principles on your production floor.

Meeting your customers' needs

Adopting lean manufacturing principles might pique your interest because of the cost savings opportunities mentioned above. However, lean manufacturing is a wholly consumer-focused methodology. Simply looking to cut fat in your factory won't do you much good. For a lean system to work as designed, you have to take the time to find out what your customers really want.

This is the first principle of lean manufacturing—known as the “value” principle—and it calls for manufacturers to determine what their customers value most about their product. In doing so, you can determine how your product meets or fails to meet those values. Once you have a strong understanding, you can remove or refine product features and manufacturing processes that don't align with the needs you've identified.

Reducing worker and material waste

Waste is inevitable in most production scenarios. Idle workers, unused or underused materials, slow or duplicative automated processes—these are all signs of an inefficient production flow. The second principle of lean manufacturing addresses this problem best. It's called “mapping the value stream” and it's a process that considers the full life cycle of your products—from product design and shipping to customer use and disposal.

Value stream mapping is the technique most often used with this principle and it helps manufacturers analyze their current production processes, identify any existing problems and/or inefficiencies, and create system-wide solutions. By visually mapping out your processes, you can pinpoint where you're wasting time, resources, and materials

and develop a plan to implement continuous process improvements.

Manufacturing product efficiently

Product flow is an integral component of any production floor. To appreciate this, just consider the conveyor belt. This very important invention came about in the late 1800s, revolutionizing the coal mining industry. Later, in 1913, Henry Ford took the conveyor belt and adapted it to meet his production goals, implementing the very first conveyor-belt assembly line in his Highland Park, Michigan, Ford factory and revolutionizing the automobile industry.

The important takeaway is that the conveyor belt spurred its users to rethink how space, technology, and human capital could be leveraged to create efficiencies. The next two principles of lean manufacturing—flow and pull—do the same. By strategically setting up every square foot, machine, and worker on your production floor to flow together, you can create a more seamless process. Furthermore, by letting consumer demand pull your manufacturing schedule into gear, you can reduce large product inventories and maximize the usable workspace on your production floor.

Improving production quality

Every manufacturing process can be improved. Even if your current production flow works for you right now, it can always be retooled to save you more time, more money, and better meet your customers' needs. We understand it can be nerve-racking to throw a wrench in the gears. However, the fifth and final principle of lean manufacturing—seeking perfection—calls for you to throw and keep throwing as many wrenches in the gears as necessary.

The best way to understand lean manufacturing is to consider it as “lean thinking.” In this context, adopting these principles never really ends because they become a lens through which you see the possibilities available to your production floor and your business. Furthermore, the values of your customers are everchanging and there's always a new process, material, or piece of machinery that can either make you more competitive or leave you behind.

Financing your infrastructure with lean manufacturing principles

Adopting lean manufacturing principles requires you to rethink your production process from end to end. By pinpointing inefficiencies and maximizing the flow of your processes, you may find that your factory floor is too large or too small, or that a new piece of equipment will help you save resources. If that's the case, be sure to give our [manufacturer lending team](#) a call at 866.762.8392 . Whether it's a real estate loan or a line of credit, we partner with manufacturers across Texas to help them finance the future of their business.