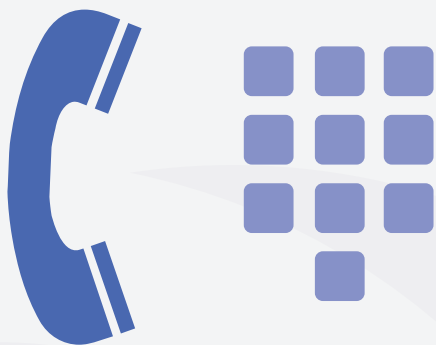


White Paper

Can Lean Practices Transform Call Management?



See how this proven, 60-year-old manufacturing methodology can boost customer satisfaction and bring new efficiency to your healthcare organization.

by **Mark Bedard**
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You may know the terms **Lean Manufacturing**, **Lean Production**, or simply **Lean**. At its core, this management philosophy aims to create more customer value by using fewer resources. But what can Japanese methodologies embraced by manufacturers around the world do for your healthcare organization and its call center? Find out what Lean can mean to you.

What is Lean?

It's hard to argue with efficiency. Particularly when it results in a better product or experience for customers. The story of how Lean practices originated in Japan and took hold in worldwide manufacturing is remarkable (see Appendix A: "Efficiency Knows No Boundaries," page 9). But what they mean for healthcare organizations is just as impressive, if not as widely known. Here we'll explore the potential impact that Lean brings to healthcare organizations of all sizes. And we'll see how innovative caller self-service solutions are automating and improving the customer experience and raising satisfaction – the bottom line of Lean.

Lean includes some very applicable and actionable principles, even if the Japanese terms may be unfamiliar:

- **Muda (Waste)**. Identifying and reducing waste is the primary principle behind all Lean processes.
- **Kaizan (Improvement)**. Constant improvement, enabling better processes, is probably Lean's best-known concept.
- **Kanban (Control/Queue)**. Clear signals enable organizations to respond to customer demand in real-time.
- **Takt Time (Intervals)**. Measuring production intervals helps meet customer demand by knowing how much time is required to achieve excellent results.

We'll take a closer look at these abstract principles and how they apply to you and your healthcare organization after we explore Lean's relevance to healthcare.

Improving Patient Experiences and Outcomes

Lean practices have already improved many critical areas within today's successful health networks.

For example, Lean practices have helped develop the ideal manner in which to diagnose, treat, and interact with patients – down to the smallest detail. You'll find Lean innovations throughout hospitals, from the uniforms worn by hospital staff, to emergency room triage protocols, to the layout of exam rooms within medical practices.

As we see in Figure 1, a Lean Healthcare System process is built on a foundation of improving value through reducing waste. At a basic level, applying Lean to healthcare means ensuring that all contributing resources, services, products, and interactions are conducted or provided as efficiently as possible – with the least waste. That's the foundation. Next come the pillars of process and quality improvement, which help drive the central pillar of standardization, consistency, and service flow. Together, these foundations and pillars help contribute to better patient experiences, as well as better outcomes for patients and families.

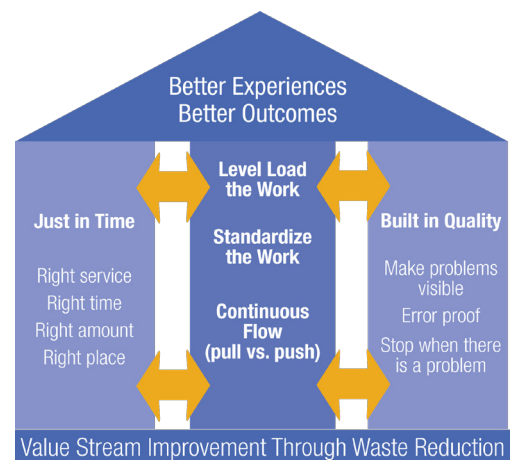


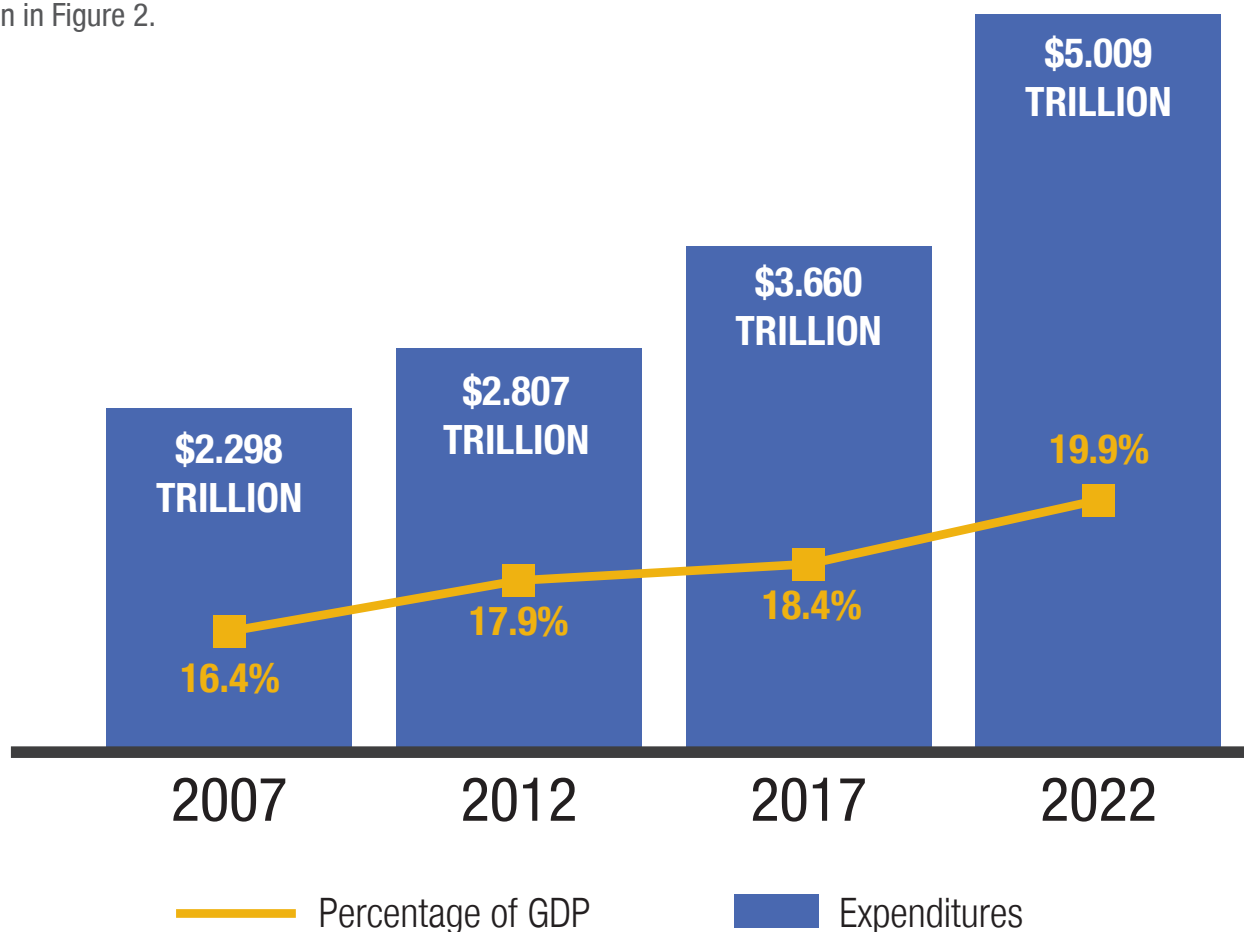
Figure 1. Sample Lean healthcare processes.

Applying Lean to Healthcare Communications

Lean practices are also playing a critical role in healthcare communications by improving the way organizations handle the often high volume of calls from patients, families, doctors, and the general public. The major metrics often measured in this area – first call resolution, service level/response time, handle time, schedule adherence – are all intended to reduce waste or assess and increase quality, and are in sync with the goals of Lean. Using Lean, managers can identify problem areas, make improvements, and boost quality — then continually reassess to ensure that these gains are sustainable and ongoing.

Is your call center ready for growth?

Efficient processes are more important than ever, thanks to the remarkable growth of the U.S. healthcare industry. Experts estimate that by 2022, total spending will amount to more than \$5 trillion, or roughly 20% of GDP as seen in Figure 2.

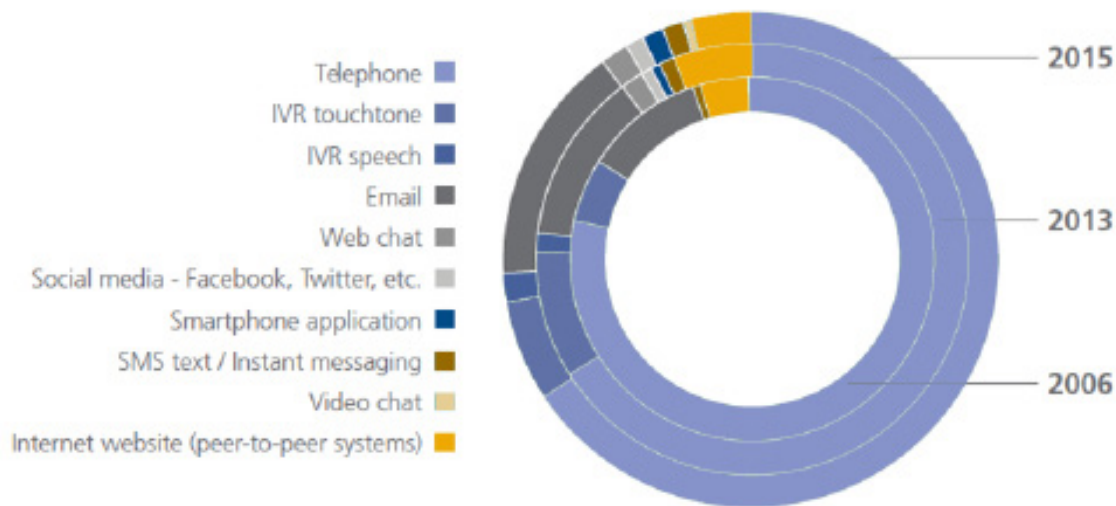


Source: Griffin American Healthcare Reit III; Healthcare Opportunities, November 2016

Figure 2. The healthcare industry's growth will require scaling to meet new demands and challenges.

Scaling to address this growth means handling an ever-increasing number of patient interactions. And despite wildly exaggerated estimates on the impact of new inbound channels (e.g. chat), voice calls remain the dominant interaction channel, as seen in Figure 3.

Customer Service Interactions by Channel



Source: Dimension Data; 2016 Global Contact Centre Benchmarking Report, May 2016

Figure 3. Despite emerging channels, the telephone still remains the most popular way for patients and others to communicate with their healthcare organizations.

Old approaches no longer work.

So what can healthcare organizations do to address today's fluctuating but rising call volumes – and the anticipated growth on the horizon? The default approach is to add staff, which is impractical and expensive. And it fails to address the underlying issue: most organizations have become complacently accustomed to the familiar but outmoded system of handling calls. They continue to rely on the unpopular but ubiquitous phone tree – push button automated attendants and menu-driven IVRs that offer never-ending options, frustrate callers (who often abandon calls), and slow response times – reducing customer satisfaction. In short, these outmoded legacy solutions are both inefficient and unpopular with customers, failing two key Lean goals.

Affordable and pleasing caller self-service is within reach.

There are proven alternatives available for healthcare organizations looking to be efficient internally by reducing waste and responsive externally by delivering more value to their customers. Today's advanced caller self-service solutions let callers get where they want to go or get what they need – quickly and easily, 24/7, without phone-tree frustration – and avoid the challenge of adding extra staff. Innovations in natural language technology put affordable, advanced automation at the fingertips of all healthcare organizations. These solutions make calling a healthcare facility a pleasant experience again. They let callers speak their request in their own words and direct them quickly to the right destination – or to a live operator or agent, if necessary. Since these solutions can be outsourced to experienced caller self-service providers, they reduce the massive call queues of over-worked operators and agents and enable call centers to do more with less – a hallmark of Lean.

When combined with a core staff of experienced and dedicated agents, healthcare organizations can now give callers a powerful and cost-effective dual punch – quick and easy caller self-service backed up by live agents who are always available to help.

So why wait?

If these solutions are available and affordable, and if outsourcing seems like a smart, affordable approach, why are healthcare organizations relatively slow to adopt them? Why not embrace Lean-friendly solutions that raise efficiency and customer satisfaction? There are two main reasons – finances and familiarity. Healthcare organizations often have constrained budgets, particularly for areas of the hospital that aren't directly related to patient care, even though they impact patient satisfaction. And also, call centers and the healthcare organizations they serve have acclimated to the status quo, making them unwilling to chop down the phone tree since it's familiar.

Bringing Lean to Caller Self-Service

With the many benefits of caller self-service in mind, let's take a look at those four core Lean principles that we highlighted earlier, which all resonate strongly with the benefits of call automation. Here we'll look at the traditional Japanese term, its principle, its definition, and how caller self-service meets each principle:

Muda (Waste)

def. *The amount of time and other valuable resources that are spent in a way that prevents us from optimizing the patient's care.*

Waste can take a variety of forms. Wasted time, capacity, labor, effort, space, opportunity, and more. Caller self-service can help eliminate a number of different types of waste within healthcare call management:

- **Wasted Time:** Caller self-service reduces handle time by not requiring agents to verify identities, request account numbers, or conduct other easily automated transactional processes.
- **Wasted Capacity:** With automation, your call center doesn't have to rely on staffing alone (or over-staffing) to meet existing or projected call volumes.
- **Wasted Budget:** Purchasing licenses for consoles or other products prior to assessing the impact of automation on call loads
- **Wasted Labor:** Outsourced caller self-service eliminates the need to use valuable live agent resources to field general information questions or other routine requests, including internal employee-to-employee connections.
- **Wasted Effort:** Automation does away with the unnecessary work, inefficiency, and agent effort required to triage and hand off callers who have dialed into the wrong service line – and outsourcing eliminates spending resources on caller self-service management and maintenance.
- **Wasted Opportunity:** More efficient call handling reduces call abandonment due to unavailable agents or operators – or due to frustrating, slow IVRs or automated attendants.

Kaizan (Improvement)

def. *Incremental improvements to a system or process step to create more value with less waste.*

In a Lean process, identification of waste is followed by the implementation of Kaizan – incremental improvement steps that will help reduce waste. And while the typical Lean process recommends small steps, analysis, and refinement of one Kaizan before moving on to the next one, advanced call automation solutions allow you to mitigate many types of waste immediately:

- **Decrease Time:** More efficient, call handling reduces handle time by automating routine transactions and processes, such as ID verification, and account lookup – while providing initial triage of the call.
- **Accurately Scale Capacity:** Minimize overstaffing with a 24/7 agent/operator solution that can mitigate call volume spikes and offload as much as 50% of calls.
- **Reduce Budget Needs:** Purchase only the required number of product/solution licenses for agent consoles and applications since many may not be needed due to the reduced call loads.
- **Optimize Labor:** Reserve your valuable live agent resources for the calls with complex service needs that require expertise and empathy, while improving staff morale by removing the onus of mundane and routine calls.
- **Focus Effort:** Focus agent effort where it is most needed during customer interactions by automating transactional call processes prior to connecting to agents. Automatically connect calls dialing into the wrong service line to their appropriate destination, deflecting these metric-degrading requests from agents.
- **Reduce Space:** Lower staffing requirements reduce the space required for your contact center or switchboard operators.
- **Take Back Opportunities:** Decrease abandonment rates by eliminating hold times and hang-ups caused by frustrating IVR and auto attendant menus. Use staff for other crucial duties (answering service functions for instance). Give managers back time they had spent on staffing, scheduling, training (and fielding complaints). And gain an advantage over competitors through better caller experiences, which boost your brand.

Kanban (Control/Queue)

def. *Signals to order relevant supplies in response to real-time demand for end products.*

Kanban was one of the main goals of the just in time manufacturing process pioneered by Sakichi Toyoda. The concept proposes that overstocking supplies is wasteful, and can be potentially harmful if demand for the end product never materializes. Today's advanced call automation solutions give you scalable control over your call queues and deliver the right service to the right person at the right time:

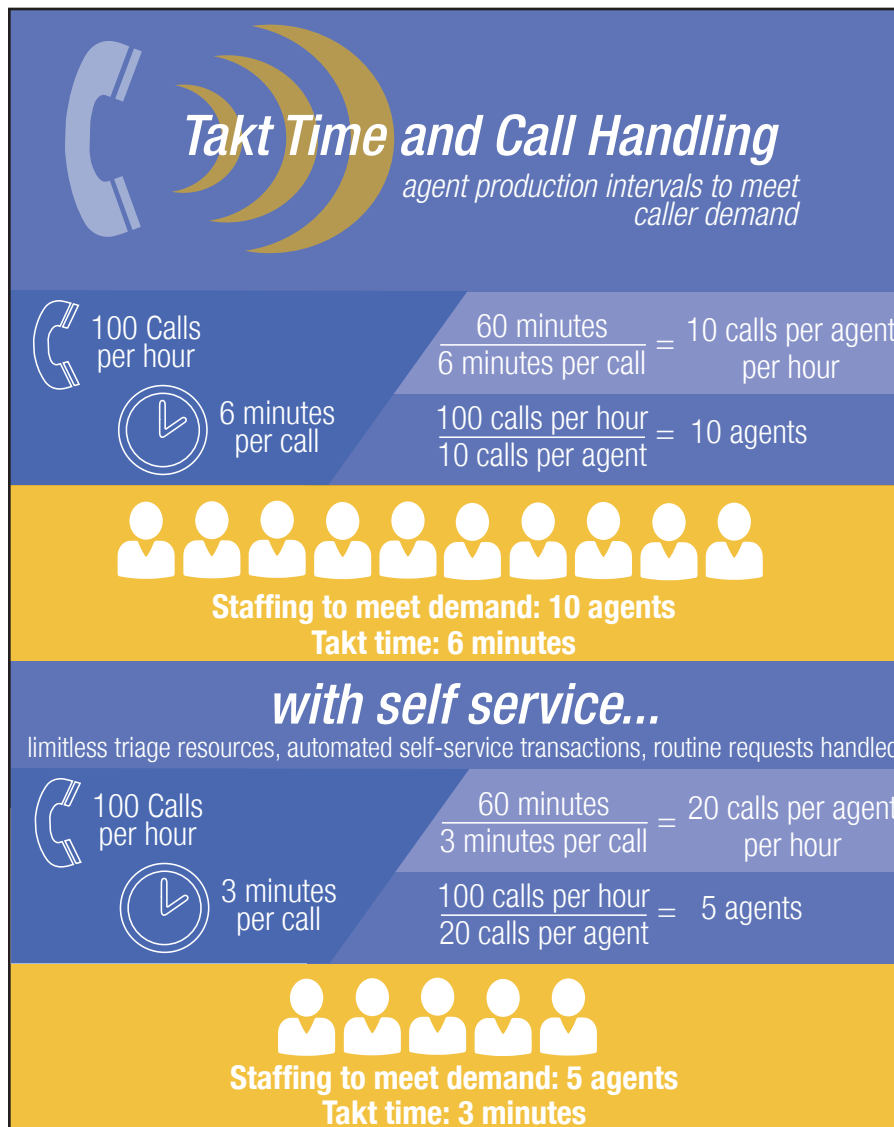
- **Meet Demand:** Efficient, 24/7 call management makes it easy to keep pace with any call load.
- **Maximize Live Operators/Agents:** By automating part or all of the caller experience, you can ensure that live agent resources are only pulled in when needed. Routine caller requests are quickly and easily connected to their destination, resource, or information. And more complex caller requests are immediately recognized and connected to an ever-available operator or agent for personalized assistance.

Takt Time (Intervals)

def. A measurement of production intervals required to meet customer demand.

Takt Time refers to the average time between the start of production of one unit and the start of production of the next unit, when these production starts are set to match customer demand. For example, if 10 units are needed to meet demand, and assuming a 40-hour work week, the average Takt Time must be no more than 4 hours.

Figure 4 below places the concept of Takt Time in the context of contact center call management:



With caller self-service on your side, the number of resources available to greet and triage calls is much more flexible in ramping capacity, due to the lower cost vs. human labor and much faster expansion of resources vs. recruiting and training. Routine calls or calls coming into the incorrect service line are managed without agent assistance, and automated caller self-service transactions (scheduling an appointment, paying a bill, etc.) can reduce the time an agent needs to be on the call when they are connected.

Takt Time efficiencies can be calculated and projected by looking at each step in the caller interaction, and isolating those areas where automation can be used to query or guide the caller. Subtracting those times from your average handle time can give you a better sense of the potential advanced call automation holds in terms of staffing levels.

Figure 4. Knowing Takt Time helps you meet the needs of callers by measuring how much time agents require to provide exceptional service.

What Can We Learn From Lean?

Lean manufacturing has proven, over and over, that continuous focus on waste reduction, process improvement, and quality yields a better product, reduces costs, and streamlines operations. Most manufacturers have embraced Lean concepts in one form or another. And your healthcare organization has probably implemented Lean practices, whether they're called Lean or not, throughout the enterprise. Given the rise of demand and increased competition, the time is right to apply these principles and processes to the call center – and the use of advanced caller self-service.

These recommendations are by no means the complete set of Lean principles for caller self-service in healthcare. But they can help your organization begin its journey towards more efficient, Lean-focused call management.

Lean makes a strong case for advanced call automation, whether your organization uses only live agents and operators or IVRs and automated attendants. Combining your valuable live resources with advanced call automation solutions not only eliminates the need to employ unpopular, outmoded phone trees, but also optimizes your live agents and operators. At the switchboard, in the contact center, and even at the departmental level, today's caller self-service solutions align well with the proven benefits of Lean principles.

To learn more about the benefits of outsourced caller self-service for your hospital, medical group, or healthcare network, contact Parlance at 1-888-700-6263, visit www.parlancecorp.com, or email info@parlancecorp.com.

About the Author

Mark Bedard is Director of Marketing at Parlance — caller advocates on a mission to make it easier for callers to engage with healthcare organizations and other businesses.

Lean in Action

Envisioning a Better Way

The bricklaying improvements implemented by Frank Gilbreth in the 1880s represent an early example of Lean in action, one that predates the coining of Lean by almost a century. Gilbreth, a young laborer for a construction company, noticed that their brick masons bent all the way over to pick up each five-pound brick from the ground. He found this approach to be wasteful and inefficient, so he designed and patented a new type of scaffolding that delivered and held the bricks at waist level for the mason. The new scaffolding allowed masons to lay each brick three times faster than before, and with less waste.

This example shows all 4 Lean principles in action. Muda/waste (bending over to pick up bricks), Kaizan/improvement (raising the bricks to waist level), Kanban/control (ensuring bricks are readily available and convenient when needed by the mason), and Takt Time (3x less time to lay each brick). Gilbreth went on to pioneer the field of motion efficiency.

Appendix A:

Efficiency Knows No Boundaries

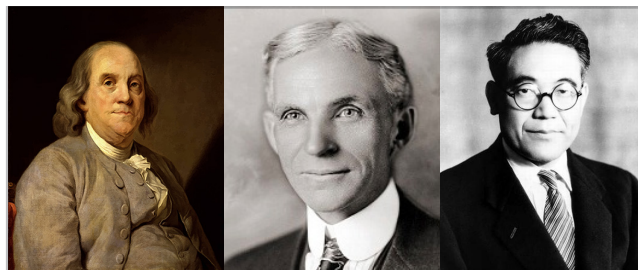
From Benjamin Franklin to Toyota

While Lean is thought of as a Japanese philosophy/methodology, we can attribute some of the earliest thinking about waste reduction to America's own Benjamin Franklin. His popular Poor Richard's Almanack series is a veritable treasure trove of waste reduction adages, including the remarkably apt "A penny saved is two pence cleared" – which suggests that avoiding unnecessary costs can be more profitable than increasing sales.

Although many waste-reducing innovations followed Franklin's folksy recommendations – including Henry Ford's mass assembly line ideas – it wasn't until post-World War II Japan that nascent Lean concepts started to take shape. Kiichiro Toyoda, son of forward-thinking manufacturer Sakichi Toyoda, embraced his father's philosophy of "just in time" manufacturing as he moved the family business from textiles to what would become the Toyota Motor Corporation, now the largest automotive manufacturer in the world. With low demand for goods in the post-war Japanese economy, manufacturers shifted their focus from meeting sales goals or production projections to avoiding overproduction and waste. The goal? Manufacturing the exact number of items the market required at a specific moment. Eventually the terms and methodologies Toyoda developed became known as the Toyota Production System, or TPS.

These terms and methodologies were later standardized and made applicable to other industries and processes in the 1980's by John Krafcik (an engineer/visionary/auto executive) who officially coined the new term Lean in his 1988 article, "Triumph of the Lean Production System."

Today, virtually every industry has embraced Lean and other waste reduction/process improvement methodologies, such as Six Sigma. Major universities offer degrees on the subject. Lean experts are in high demand. New fields, such as ergonomics and human factors engineering, have been spawned by the Lean revolution and efforts to reduce waste and improve processes. Why? Because every company benefits from lower costs, more accurate and timely availability of products and services, happier customers, and higher revenue.



Ben Franklin, Henry Ford, and Kiichiro Toyoda were all highly successful advocates of waste reduction.



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