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The Basics of Lean Six Sigma

Start your journey towards increased revenue, reduced costs and improved collaboration by using Lean Six Sigma Process Improvement.

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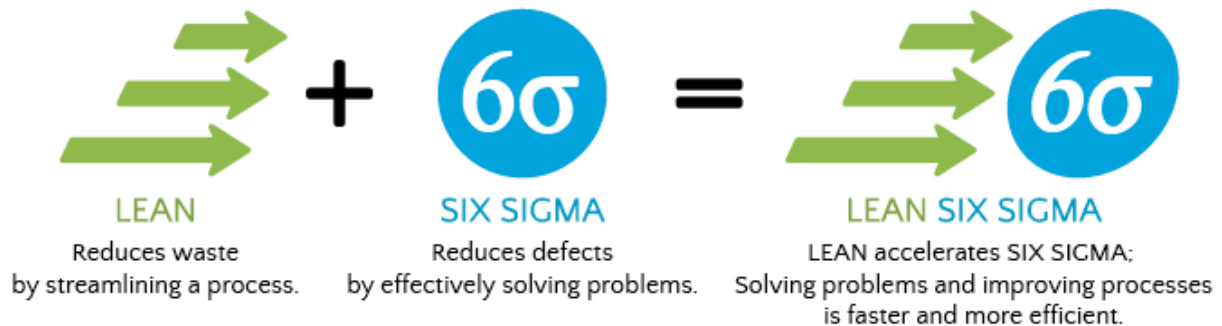
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The Basics of Lean Six Sigma

Lean Six Sigma is a combination of two powerful methods:
Lean and Six Sigma.

What Is Lean Six Sigma?



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Lean + Six Sigma = Lean Six Sigma

Lean and Six Sigma complement each other. Lean accelerates Six Sigma, delivering greater results than what would typically be achieved by Lean or Six Sigma individually.

Combining these two methods gives your improvement team a comprehensive tool set to increase the speed and effectiveness of any process within your organization – resulting in increased revenue, reduced costs and improved collaboration.

At Go Lean Six Sigma, our goal is to help you easily understand Lean Six Sigma so that you can apply it practically within your organization.

What is Lean?

Lean is simply a method of streamlining a process, resulting in increased revenue, reduced costs and improved customer satisfaction.

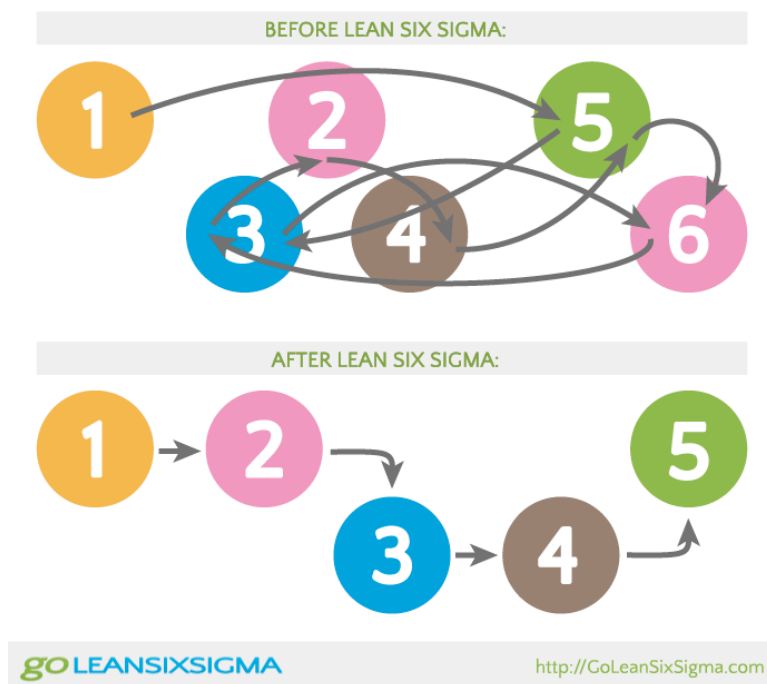
A Lean process:

- Is faster
- Is more efficient and economical
- Delivers satisfactory quality

Lean is achieved by removing “Waste“, which is activity not required to complete a process.

After removing Waste, only the steps required to produce a product or service that is satisfactory to a Customer will remain.

Lean Six Sigma: Process Before & After



What is Six Sigma?

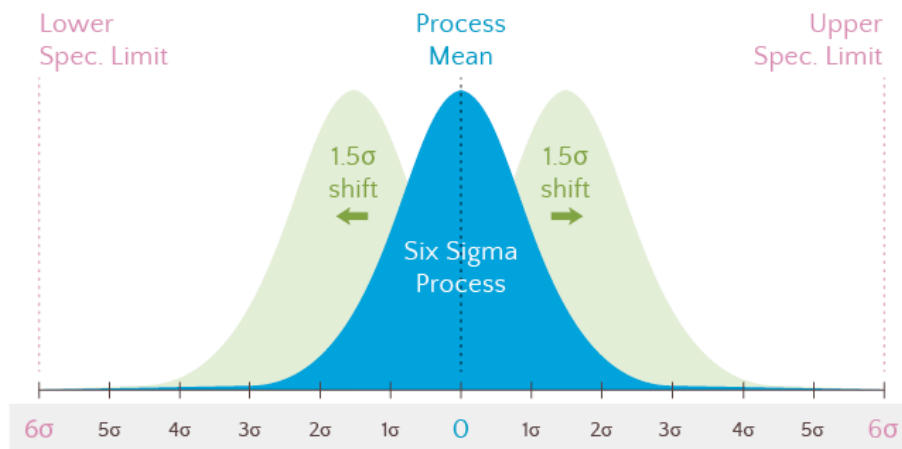
Six Sigma is simply a method of efficiently solving a problem. Using Six Sigma reduces the amount of defective products manufactured or services provided, resulting in increased revenue and greater customer satisfaction.

What exactly does “Six Sigma” mean?

Six Sigma is named after a statistical concept where a process only produces 3.4 defects per million opportunities (DPMO). Six Sigma can therefore be also thought of as a goal, where processes not only encounter less defects, but do so consistently (low variability).

Basically, Six Sigma reduces variation, so products or services can be delivered as expected reliably.

Six Sigma: Statistically Visualized



The term "Six Sigma" is based on a statistical concept: defective items can be minimized by maintaining 6 standard deviations (6 "sigmas") between the process mean (average) and its upper and lower specification limits.

Six Sigma also accounts for the tendency of processes to degrade over the long term: A Six Sigma process can tolerate a "shift" of 1.5 standard deviations (1.5σ shift) and still maintain a "safety cushion" between the process mean and its specification limits.

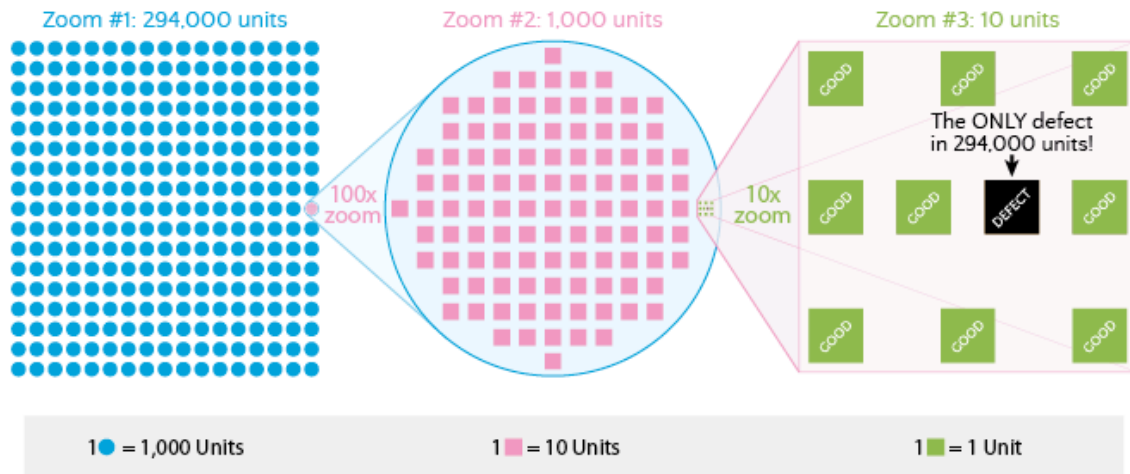
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Six Sigma: 3.4 DPMO Visualized

A Six Sigma process has a 99.99966% defect-free rate.

This is equivalent to 3.4 DPMO (defects per million opportunities), or a single defect for every 294,000 units. How small does this look? The chart below illustrates 1 defect in 294,000 units with powers of magnification:

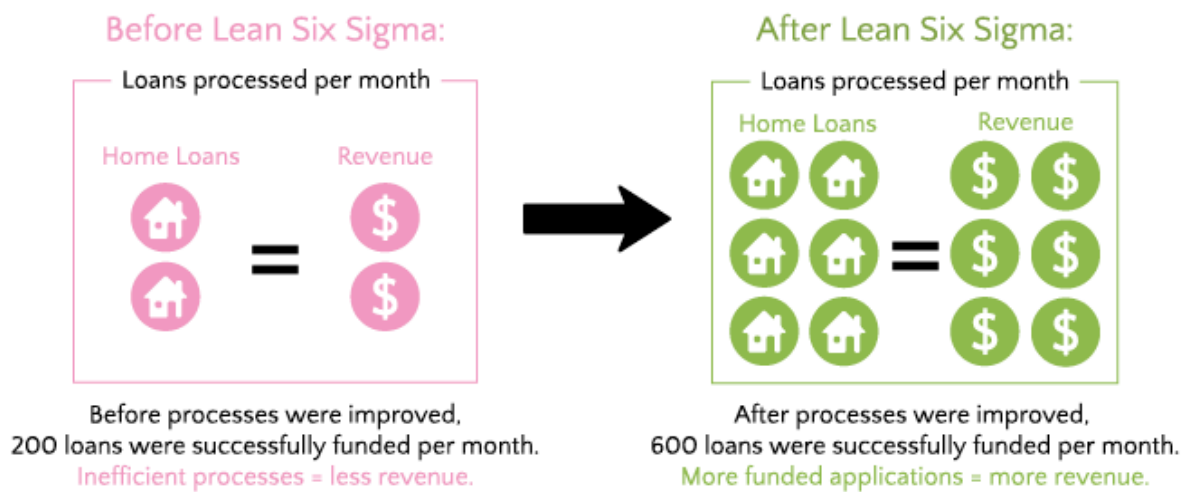


The Benefits of Using Lean Six Sigma

Organizations face rising costs and increasing competition every day. Lean Six Sigma allows you to combat these problems and grow their businesses the following ways:

Increases revenue

Lean Six Sigma Benefit: Increases Revenue



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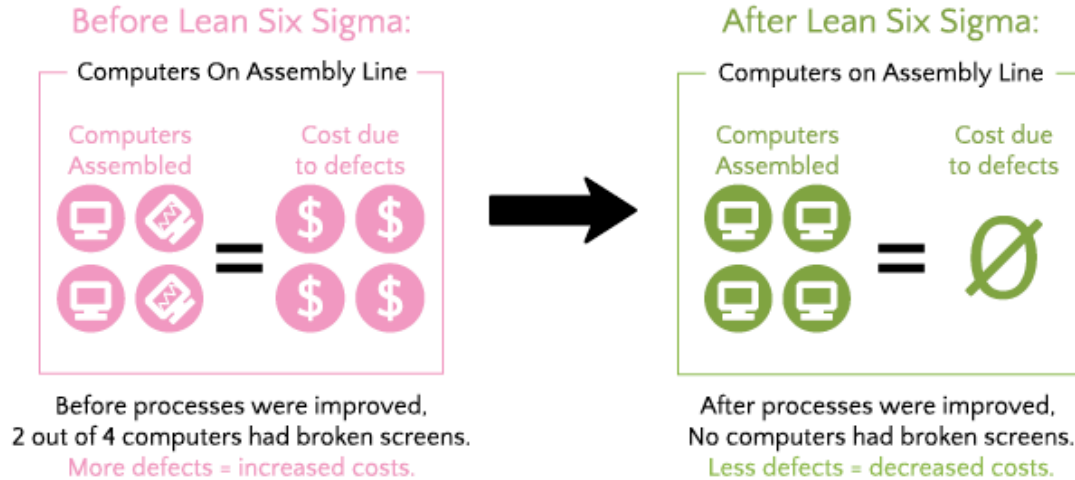
Lean Six Sigma increases your organization's revenue by streamlining processes.

Streamlined processes result in products or services that are completed faster and more efficiently at no cost to quality.

Simply put, Lean Six Sigma increases revenue by enabling your organization to do more with less – Sell, manufacture and provide more products or services using fewer resources.

Decreases costs

Lean Six Sigma Benefit: Decreases Costs



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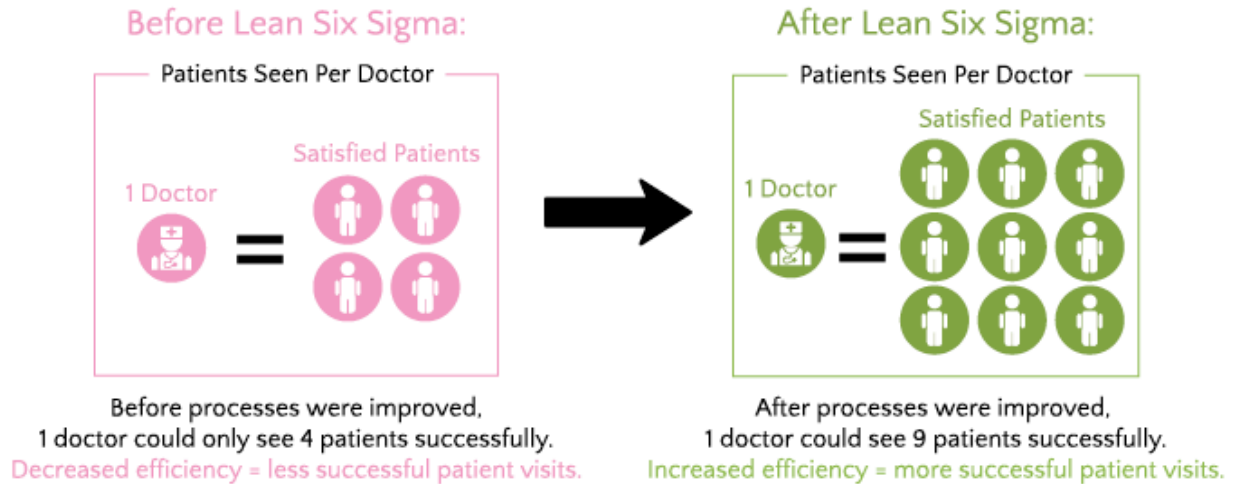
Lean Six Sigma decreases your organization's costs by:

- Removing "Waste" from a process. Waste is any activity within a process that isn't required to manufacture a product or provide a service that is up to specification.
- Solving problems caused by a process. Problems are defects in a product or service that cost your organization money.

Basically, Lean Six Sigma enables you to fix processes that cost your organization valuable resources.

Improves efficiency

Lean Six Sigma Benefit: Increases Efficiency



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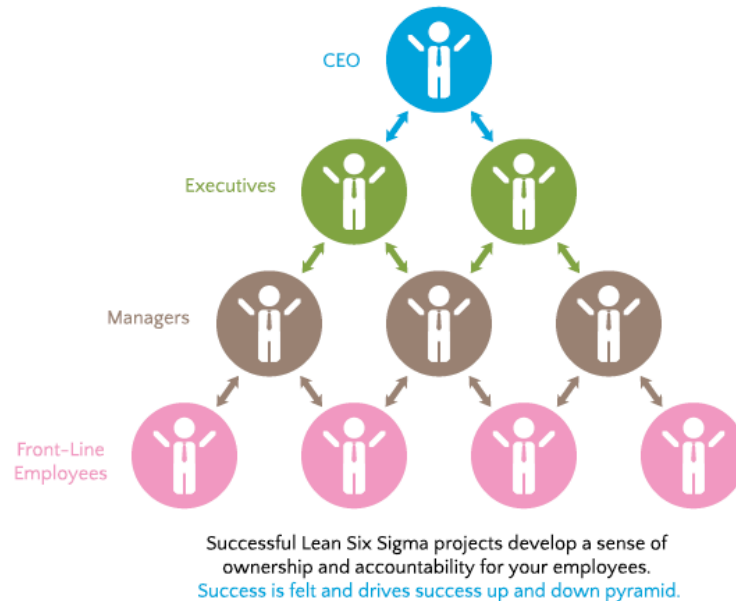
Lean Six Sigma improves the efficiency of your organization by:

- Maximizing your organization's efforts toward delivering a satisfactory* product or service to your customers
- Allowing your organization to allocate resources/revenue produced from your newly improved processes towards growing your business

Simply put, Lean Six Sigma enables you to create efficient processes so that your organization can deliver more products or services, with more satisfied customers than ever before.

Develops effective people/employees

Lean Six Sigma Benefit: Develops Effective People



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Lean Six Sigma develops effective employees within your organization by:

- Involving employees in the improvement process. This promotes active participation and results in an engaged, accountable team.
- Building trust. Transparency throughout all levels of the organization promotes a shared understanding of how each person is important to the organization's success.

Basically, Lean Six Sigma develops a sense of ownership and accountability for your employees. This increases their effectiveness at delivering results for any improvement project they are involved in. Quite often, this benefit is overlooked by organizations who implement Lean Six Sigma, but its underlying advantages dramatically increase the chances of continued success of Lean Six Sigma, and your business.

How Does Lean Six Sigma Work?

Lean Six Sigma is simply an effective methodology used to fix a problem. It is based on common sense practices and is completed in five phases:

Five Basic Phases

Lean Six Sigma: DMAIC



DEFINE

Define the problem.



MEASURE

Map out the current process.



ANALYZE

Identify the cause of the problem.



IMPROVE

Implement and verify the solution.



CONTROL

Maintain the solution.

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- **Define:** Define the problem and what is required to satisfy your customer.
- **Measure:** Map the current process to collect data.
- **Analyze:** Investigate and identify what causes the problem.
- **Improve:** Implement a fix that will solve the problem.
- **Control:** Sustain the improved results.

Simply put, Lean Six Sigma helps you identify the cause of a problem and implement a fix based on facts, rather than assumptions. This produces improved results and success that you and your team, managers and organization can be proud of.

Lean Six Sigma is easily utilized

Using Lean Six Sigma doesn't need to be difficult. Contrary to the often confusing and intimidating information most Lean Six Sigma resources provide, the methodology is quite understandable.

Lean Six Sigma is based on clear principles and can be implemented on any process within any industry – in manufacturing and service, and in companies small to large.

Who Benefits From Using Lean Six Sigma?

Small- and medium- sized businesses

Lean Six Sigma works for small and medium businesses (SMBs). In fact, often times, the same success that is achieved within large businesses can be achieved in small and medium businesses since smaller organizations can move faster because less people, fewer resources and lower levels of red-tape are involved.

The benefits are boundless, as Lean Six Sigma increases revenue and reduces costs, while freeing up resources that can be utilized toward any endeavor your organization wishes to pursue.

For example:

- A new product or service
- Other improvement projects
- Expanding your sales force

People & Morale

Lean Six Sigma not only increases revenue and reduces costs; it positively affects people by engaging them in improving the way they work. Since employees are the closest to the actual work (production of a product or delivery of a service) of any organization, they become the best resources to understand how to improve the efficiency and effectiveness of business processes.

By participating in successful Lean Six Sigma projects, employees are able to build the confidence and develop the capability to become your business' most important assets. Studies show that when employees feel that they have a positive affect on the organization, they perform better, are more accountable and live happier lives. And once your employees get comfortable with Lean Six Sigma skills, they can continue to find and remove problems and waste in your organization.

Industries

Healthcare

Healthcare costs are skyrocketing across the country and an aging population means increased stress on healthcare services. Lean Six Sigma can help you increase the amount

of time care providers are able to spend with patients, reduce the time spent on paperwork, and reduce the time people spend waiting for care, waiting for claims or waiting for a call.

Technology

As consumers increasingly rely on technology, Lean Six Sigma helps businesses by delivering products with fewer defects, decreasing returns and more.

Financial Services

Budgets continue to tighten and resources are more limited than usual. Lean Six Sigma shortens the time to sign up new customers, reduces the time to provide customer service and brings revenue in faster.

Your Industry

Lean Six Sigma has been applied successfully to virtually any industry.

[Connect with a Lean Six Sigma Expert](#) for a free initial consultation to learn more about how Lean Six Sigma can be easily applied within your organization.

About Go Lean Six Sigma



Go Lean Six Sigma is dedicated to helping small- and medium-sized businesses (SMBs) increase revenue, reduce costs and improve collaboration in today's increasingly competitive economy.

For more information, please contact us at contact@goleansixsigma.com.