

Lean Six Sigma in Plain English—Part 1

The stark reality is that Six Sigma has been around for about twenty-five years, and many business leaders still don't really understand this incredibly powerful body of knowledge. This four-part article is intended to demystify Lean Six Sigma (LSS), and to answer the most frequently asked questions of our firm. Simply put, large or small, manufacturing, service or public sector, all can benefit financially from LSS.

Some of the questions that will be answered are: What is Lean Six Sigma? What does the term Sigma refer to? What is the history of Six Sigma? Where are most companies operating today in terms of sigma performance? Is "operational excellence" the primary focus for Lean Six Sigma? What are the roles of Champions, Master Black Belts, Black Belts, and Green Belts? What steps are there in a typical Six Sigma deployment approach?

What is Lean Six Sigma?

Lean Six Sigma combines two extraordinary improvement methodologies: producing work faster (using Lean principles), and producing work better (using Six Sigma). Lean Six Sigma is a proven business strategy for driving out waste and inefficiency and increasing customer loyalty—by orders of magnitude. In less than two decades Lean Six Sigma has become the gold standard for creating world-class organizations.

Six Sigma is the pinnacle of quality performance—the virtual elimination of errors, mistakes and defects from every product, process, and/or transaction in an enterprise. Six Sigma is a management process and business metric. It is an overall strategy to improve growth and productivity, and a measurement of quality performance.

As a strategy, Six Sigma is a way to achieve performance breakthroughs—top and bottom-line results. As a business metric, Sigma is a statistical unit of measure that reflects process capability. A six sigma company operates at only 3.4 defects or errors per million opportunities—or 99.9997% error-free. Six Sigma is the gold standard because it is widely understood in the business world as a quest for "process perfection."

What does the term "Sigma" refer to?

Taken from the Greek alphabet, the term "sigma" is used in statistics as a measure of variation. The sigma scale correlates to such characteristics as defects per unit, parts per million defective, and the probability of failure/error.

You can easily determine the sigma level for a process if you know the process yield or the "defects per million opportunities" (DPMO). In manufacturing, for example, sigma could be used to measure the number of sub-standard products, or late shipments. In a service organization, it could quantify call center performance (wait times), or errors in billing.

Sigma Conversation Table		
Sigma	DPMO	Yield %
1	691,462	30.9
2	308,537	69.1
3	66,807	93.3
4	6,210	99.38
5	233	99.977
6	3.4	99.99966
Distribution shifted +/- 1.5 sigma		

An organization’s sigma level indicates the performance of a process against some set specification. So, the sigma level (one, two, three, and so on) represents how well a process is performing. In the past, customers were happy with a 99.5 percent quality level. That is no longer acceptable today. Winning and keeping customers requires near perfect performance.

About the Author



Stanley Cherkasky is the Managing Partner of Change Management Consulting, Inc. Founder of the firm, Stan is the principal architect of the *Performance Improvement Breakthrough*[™] methodology, and the *Six Sigma Lean Advantage*[™]—innovative and proven strategies that accelerate ROI and net income improvement, build customer loyalty, and create world-class recognition.

Stan has more than three decades of business and consulting experience, in both the private and public sectors, in the United States and abroad. Stan specializes in building high-performance teams, and working closely with senior leaders to achieve breakthrough financial, organizational, and operating improvement. He has been quoted in many business publications, including Fortune, Business Week and the Wall Street Journal.

About Change Management Consulting, Inc. (CMC)

Founded in 1993, Change Management Consulting is a global management consulting and training company, dedicated to helping organizations of all sizes improve performance, achieve goals and advance leadership capability. As a full-service organizational improvement firm, CMC focuses on organizational and leadership development, compliance management (ISO 9001 and it’s derivatives), strategic planning and Lean Six Sigma initiatives.

Headquartered in Wayne, NJ with offices in San Diego, Dallas and Detroit, CMC has a proven track record in helping public and private sector clients implement pragmatic continual improvement initiatives that drive financially measurable results. CMC also has extensive experience in obtaining grants and funding assistance for its clients. Learn more at www.cmc-changemanagement.com or contact CMC at (877) 268-2440 or (973) 696-7878.