

## What is Six Sigma!?

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This news letter is designed for Leaders in the Service Sector of our economy. Whether you are in Executive Management, Quality Improvement, Human Resources or a first or second level manager; if you are concerned with your company's capability to deliver cost effective quality services, this newsletter is intended for you. It will provide you with the critical knowledge and information that will empower you to:

1. design and deploy productive and cost effective management practices that drive the results you want to experience.
2. receive and understand the best practices for service sector companies.
3. guide and plan operational excellence in your area of accountability.

### What is Six Sigma!

In 1988, Bob Galvin – then CEO of Motorola - accepting the very first *Malcolm Baldrige National Quality Award*, briefly described something he called **Six Sigma**. The acceptance of this award was not only a significant accomplishment for Motorola, but it was also a hallmark in the history of Corporate America that ushered in a new style of American management.

During the late 1970's and early 1980's, Motorola faced the stiffest competition in its history. The Japanese began to compete head-to-head with Motorola, and with manufactured products with 1/20<sup>th</sup> the number of defects than their American counterparts. Motorola began to see its market share and profits diminish drastically; many executives thought the end of the company was near.

Today, however, Motorola is known globally as a world class manufacturer, and "Six Sigma" Quality is at the top of its list of key operational initiatives. They have practiced Six Sigma throughout their company and have documented hard dollar cost savings of over \$16 billion.

### Six Sigma at General Electric

GE enjoys the distinction of having the highest market capitalization of any public company in the world - \$321 billion. Former CEO, Jack Welch attributes much of this success to the company's Six Sigma program. Since 1995, GE has reaped more than \$14 billion in cost reductions alone from their investment in Six Sigma. Here are a couple of GE success stories:

\* By changing test & repair processes, a Six Sigma Team improved on-time delivery, increased productivity and saved \$4 million dollars for GE Appliances.

\*At a GE Plastics plant, a Six Sigma Team reduced lead time for matching colors of resins by 85% a distinct and real competitive advantage in the fast-paced global market for plastics.



**What exactly is Six Sigma?** In laymen's terms, Six Sigma performance is achieving perfection in the manufacturing of products and **delivery of services**. The mathematical symbol  $\sigma$  (sigma) is a Greek letter that represents variation. A sigma value, or standard deviation, indicates how well a process is performing. A process is performing at a  $6\sigma$  level if it achieves 3.4 errors out of every million opportunities (3.4 EPMO). This level of performance, in manufacturing and in service outcomes, implies the process is 99.9997 effective or "process perfect". What does that mean to every day working professionals? It means:

1. 10,800,000 mishandled healthcare claims would not be mishandled.
2. 18,900 US Savings bonds lost monthly would not be lost.
3. 54,000 checks lost nightly by a single large bank would not be lost.
4. 4,050 incorrect telephone bills sent out monthly by a modest sized telecommunications company would not be sent out.
5. 540,000 erroneous call details recorded daily by a regional telecom company would not be recorded.
6. 270,000,000 erroneous credit card transactions recorded each year would not be recorded.

With numbers like these, it's easy to see that the modern world of business demands extremely high levels of error free performance. Six Sigma rose in response to this realization.

### Six Sigma Means Freedom from Deficiencies

Products and services with deficiencies create customer dissatisfaction. They are also costly to a company because mistakes must be identified and corrected, and the customer must be appeased. What is more, the original work is wasted. In the world of Six Sigma these costs are referred to as the cost of poor quality (COPQ). For most companies, costs associated with wasted effort and corrected work is between 20 and 40 percent of total operating expenses. These costs can be found in all operational and administrative areas. All these costs can be trimmed when quality is improved by reducing deficiencies. Here are just a few examples:

- \* By cutting defects in work out processes by 96%, GE Capital was able to offer borrowers quicker solutions while reducing claims payments by \$8 million.
- \* Prudential Financial estimates that Bank of America will save nearly \$1.2 billion, by reducing deficiencies, in its first year of deploying Six Sigma.
- \* In its first year of limited deployment of Six Sigma, Phelps Dodge saved over \$80 million.

These are many reasons why investing in Six Sigma programs is increasingly considered a mission-critical business strategy, even among mid-sized and smaller firms. **Next issue: How does Six Sigma Work?**

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