

## **Six Sigma for Small Businesses**

The six sigma system became all the craze when General Electric gave the process partial credit for its amazing turnaround and subsequent growth. A somewhat complicated (and expensive) process, six sigma has, until now, been practical for large companies only. Today there are methods of the process that can realistically be applied to small businesses, providing them with some of the focus, organization, insight, and operational infrastructure that has served some larger companies so well. This article will share the application of Six Sigma to the small business, keeping in mind that just as the process was not suitable for every large company, so too is it not uniformly compatible with every small business.

### **Defining Six Sigma for the Small Business**

In its most successful application Six Sigma is a way for companies to resolve internal operational challenges while simultaneously improving upon products or services that better meet customer needs. The increased operational efficiencies, together with the improved customer service, are what essentially drive the growth.

A more narrow definition, while somewhat intimidating, is the use of statistics, internal measurements, and other data to decrease waste while raising customer satisfaction. The application of Six Sigma requires the interaction with data and not strategic thinking.

In the past small businesses have not had the internal know how to gather and analyze the statistics needed to execute Six Sigma. Moreover, it was argued that small businesses do not have operations on a sufficiently enough complex level to warrant a process as large-scale and expensive as Six Sigma.

Recently, however, the notion that small businesses – the engine that drives the economy – should also be actively engaging in ways to reduce waste and improve operations has gained momentum, and the Six Sigma model has been one of the options advocated to drive this process.

### **Benefits**

The attractiveness of Six Sigma stems from the way the process works on both the internal operational and external customer sides of the business equation. The process assists in the determination of wasteful operational elements, while also serving to identify quality improvement mechanisms. The notion of quality – as introduced by Total Quality Management (TQM) – is a primary competitive issue and serves to establish, maintain, and grow customer bases.

Beyond the quality and operational issues, the Six Sigma process also delivers the following benefits:

- Motivation of Employees – it incorporates employees into real business issues, improving communications and providing a greater sense of employee responsibility.
- Empowers the Company – the process creates an atmosphere of change and the dynamic for improvement. The new mood allows employees and

management to make obviously needed (but sometimes hard to mention) changes, while also identifying less apparent changes required.

- Educates the Company – perhaps most importantly, the Six Sigma process delivers a great deal of insight into the good, bad, and ugly of the company's operations. The information learned, if handled honestly and appropriately, can serve to drive major changes in a company's operational perspective.

## **Implementation**

The implementation of Six Sigma is comprised of the execution of the components and phases of the process, along with the gathering and accumulation of the necessary data and statistics. The components for Small Business Six Sigma are:

- Process – process is fundamental to Six Sigma, and for the purposes of the program is defined as any set of operational steps that are repetitive in nature and designed to output the same, consistent result. In most businesses processes include the way products or services are delivered, the way the company interacts with customers, the way billing and payments are issued, and the way orders are received and fulfilled.
- Defects – Six Sigma seeks to identify lapses in operational processes that either waste time or money, or diminish quality or service. The primary objective is to determine the least expensive way to meet or exceed customer expectations through standardized, highly efficient, quality oriented processes.
- Variation – there is a need to identify and correct inconsistencies in the production or service delivery processes in use so as to ensure the same outcome each time the company interacts with customers. These inconsistencies are referred to as variations (as in variations in process and not consistencies in process).

The Six Sigma execution phases are:

- Defining Metrics
- Assigning Players
- Selecting a Project

### 1. Defining Metrics

The purpose behind identifying metrics is so that the company has units of measurement from which it can objectively determine the quality of performance and track performance improvement. Some areas where metrics can be established include:

- Percentage of Products with Defects
- Production Times
- Customer Satisfaction Levels
- Costs of Good
- Profitability Levels

### 2. Assigning Players

There are six roles in the Six Sigma process and each role should be assigned to someone with the communication skills and dedication to the process necessary to sufficiently motivate others to comply with process demands. The six roles are:

- Executive Leader – the CEO or other company executives that demonstrate their commitment to the Six Sigma process by mandating its implementation.
- Champions – the influencers within the company that oversee implementation.
- Black Belt – employees that have completed Six Sigma training and have mastered the methods and tools.
- Master Black Belt – employees with advanced training.
- Green Belt - employees who have completed a short introductory course.
- Yellow Belt – employees who have received an overview of Six Sigma, its methods and tools.

The initial focus is on training and gathering the external expertise to train your staff and bring employees up to the levels necessary for successful execution. Once training is completed and the company has people with the varying degrees of mastery of the process, it will have the internal expertise needed to populate each phase of execution.

### 3. Selecting a Project

The initial phase of Six Sigma will assist in the identification of problem areas and sectors of company operations that can be improved in order to improve revenues and increase customer satisfaction. The selection of which of the problems to initially undertake to improve is a function of the severity of the problem and the position it holds in hindering growth and satisfaction. The development of a priority list of problems to be confronted and resolved through the Six Sigma process will allow your company to systematically evolve into a higher performing entity.

Once a company has trained its staff, assigned black and green belts to certain critical tasks and selected its first project, the Six Sigma analysis of metrics and discovery of solutions process can begin.

### **The Downside**

To proclaim Six Sigma as the answer to all the issues confronting small businesses is absurd. The process does not address critical challenges that many small companies confront daily, such as cash flow issues, marketing and other competitive challenges, and product development issues. Other aspects of the downside of the process is that it requires both absolute commitment – because a failure to see the process through to the end will result in zero benefit, and operational disruption – as some of the operational processes will need to be slowed or ceased while they are being studied. Perhaps most challenging is the cost associated with the training for Six Sigma. The development of highly qualified employees (black belts) can take a number of months of training, all of which is provided by external experts at substantial fees.

Having pointed out the downside, the upside still remains the improvement of operations with the resulting increases in profitability, and the increasing of customer satisfaction for an increase in revenue. It is always a good thing when a company can earn more profit *and* generate more income.

Six Sigma is an option that is available to small businesses just as it has been a tool for many large businesses. For small businesses to compete, they need the ability to understand their performance parameters and discover ways to establish and maintain

operations at high levels. Six Sigma is one such tool available, and although it has been used exclusively by large companies to date, the time has come for small businesses to learn how the process can be applied for the average SME.

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