# **Quality Management Foundations**

with Steven Brown



## The Six Sigma DMAIC Process

Over the years, Six Sigma has progressed from simply a way to measure defects to a major strategy for managing quality across the entire organization. The key process of Six Sigma is the five-step DMAIC method:

#### **Define**

What are your business objectives?

Who are your customers and what is important to them?

What do your customers think is most important to achieving high quality?

Define a quality-improvement project based on these answers.

#### Measure

What are the key processes related to this project?

How do you measure defects within the process?

Measure the defects currently created in each key process.

### **Analyze**

What are the typical causes of these defects?

What is causing variations within the process?

What is an acceptable range of variation?

#### **Improve**

How can the causes of defects and unacceptable variations be eliminated?

How will this acceptable range of variation impact the customer's view of quality?

Improve the processes to stay within the acceptable range.

#### Control

How can these improvements be maintained?

Put systems, practices, and procedures in place to ensure the new process stays in place.

The control step is very important because it is the foundation for continuous improvement. Once completed, you can improve the process even more by applying the DMAIC method again, and again, and again.