

Six Sigma Lean Operations Process Improvement

Six Sigma Development and Results

It has been 19 years since Bob Galvin first announced to the world his new strategy to help Motorola achieve market excellence and fend off the incredible quality coming from Japan. His new and unique vision was Six Sigma Quality. Over the past two decades, companies in virtually every industry have taken on Six Sigma initiatives with various twists and strategies and, of course, with various levels of success. Today, after thousands of deployments in companies around the world, you will find many Six Sigma companies who have enjoyed significant bottom line results.

There is no question that any company sincerely attempting to reduce variation in their processes can benefit from the Six Sigma DMAIC strategy. Any company that truly deploys Six Sigma on their most critical business processes and attempts to reduce associated error will see bottom line benefits within six months of deployment. This has been proven by GE, Dupont, Samsung, Honeywell, Glaxo Smith Kline and numerous other companies both large and small.

Six Sigma and Lean focus on the improvement of internal metrics, creating short term bottom line returns. Listening to the Voice of the Process (VOP), whether it be factory or front office, it focuses on minimizing variation, defects, waste, delays and Cost of Poor quality ultimately improving the bottom line. The same well proven 'factory' road map with slightly modified tools is used to create efficient business transactional processes. Individual departments are able to improve their individual bottom lines, improving flow by reducing errors, duplication, waste, and optimizing resources. Six Sigma and Lean are a powerful, complementary combination.

Six Sigma Practitioners

Black Belts are at the core of every Six Sigma implementation. Every corporate deployment of Six Sigma methods has utilized focused, highly motivated and well-trained personnel to attack critical business issues using the structured roadmap of Six Sigma tools to achieve success. These individuals continually work towards institutionalizing the effective use of these tools throughout the corporation, its customers, and its suppliers.

Green Belts are a valuable asset in the deployment of Six Sigma. From assisting with coordinated aspects of Black Belt projects to running focused, functional area projects in their area of expertise, Green Belts drive the internalization of the Six Sigma methods into the process areas.

Black Belt training follows the industry standard model of four weeks of training spread over four months. Participants learn the DMAIC (Define, Measure, Analyze,

Length	Black Belt: 20 days Class room over 4 months 4 – 7 months Coaching Green Belt: 10 days Class room over 2 months 2-4 months Coaching Project Completion
Key Participants * 1st week	Operations, Finance, Purchasing, Marketing, Service, Sales, Distribution, IT, Engineering, Supplier Quality, etc.
Requirements	Approved Project, Minitab 14 on laptop for weeks 2+
Key Learning Outcomes: At the end of class, participants will be able to:	
<ul style="list-style-type: none"> • Understand Six Sigma and the DMAIC roadmap (D) • Identify Key Internal and External Customers, Stakeholders and Influencers (D) • Scope, define, and lead the Six Sigma Project (D) • Identify Key metrics for process success (D) • Lead and Manage the Six Sigma team (D) • Apply Six Sigma methods to define the real process flow, inputs and outputs (M) • Assess the risk of key process input variables and prioritize these input variables (A) • Use statistical methods to baseline the process performance – measurement system, process stability, and process capability (M) • Passively observe and then conduct experiments to identify and optimize the functional relationships $y=f(x)$ (A and I) • Analyze process flow for opportunities to reduce waste and identify future state process flow (A and I) • Verify process performance capability improvement (C) • Implement controls to sustain improvement gains (C) 	
Certification	Successful: <ul style="list-style-type: none"> • Completion of course work, phased exams, Final exam • Demonstration of knowledge and application of key tools • Project completion and defense Next project started

Improve, Control) roadmap and the appropriate subjective and objective tools to improve their processes. Between one-week sessions, Black Belt candidates return to their business to apply the methods studied in class. Uniworld Consulting provides on-site or web-enabled consulting support to Black Belts between sessions to assist each team in realizing success.

Green Belts receive two weeks of training over a two-month period in the application of the DMAIC methods and tools just as a Black Belt but with more focus in functional project areas.

While Uniworld offers Business Process Black Belt and Green Belt DMAIC training, we have found through our experience that [Process Design for Six Sigma](#) offers increased value to the Belt and to the company as its foundation is rooted in Voice of the Customer and Value.