What Is Design for Six Sigma?

Design for Six Sigma (DFSS) is *a business philosophy, a forecasting and planning tool…it's a project management framework, and a tight structural model for designing products, processes and experiments.* It's [Company Name's] commitment to innovation through disciplined thinking. By defining what is critical to meeting our customer's needs and continuing to apply six sigma principles throughout the design-to-manufacture continuum, we can take our innovative spirit and turn it into products that meet our customer's highest expectations.

Our Goal: To move in a measurable fashion toward being a six sigma company and to help our customers develop processes which reduce their variances, helping them move toward six sigma results.

As a business philosophy…

Six Sigma enables us to turn what used to be *business risks* into validated, deliberate *business decisions*. The intuition, the vision, even the educated hunch, are still critical to pay attention to, but with DFSS, we can process, define, distill and develop these until they become measureable business decisions with understood and acceptable risk/reward ratios.

As a forecasting and planning tool….

The steps and questions inherent in the six sigma framework "force" an identification of the best direction the company can take by validating ideas through exhaustive research and analysis. Does this result in "paralysis by analysis"? Paradoxically, the opposite is true. Using the six sigma thought generation and filtering process allows for the best ideas to more quickly rise to visibility.

As a project management framework…

The specificity of the requirements under six sigma makes project timelines more foolproof. Missing a milestone because of one person's failure is no longer the risk it once was.

As a structural model for the design and manufacture of products and processes…

Keeping it simple, Design for Six Sigma starts with defining the features that customers want and the problems customers do not want. Final quality depends on the quality of each step in the process; how tightly variation in the process steps is controlled determines the robustness of the final product.

As a research catalyst…

When six sigma methodology is applied to a high throughput experimental system, the door is opened for an exponentially higher number of trials of new product ideas and solutions to customer problems. Because quality is built into each process step, data points do not have to be checked individually, freeing staff time away from the mundane, to more productive and innovative roles.

Extending DFSS to our customers' operations:

As our products approach six sigma quality, our customers' operations benefit tremendously. But helping our customers move toward higher quality processes, products and services go beyond supplying quality [Company Name] products.

The Global Technologies Group was formed to be a partner with our customers form the product and process design stage on, and we are committed to applying our knowledge of six sigma principles to everything we do as part of that partnership.