What is Six Sigma?

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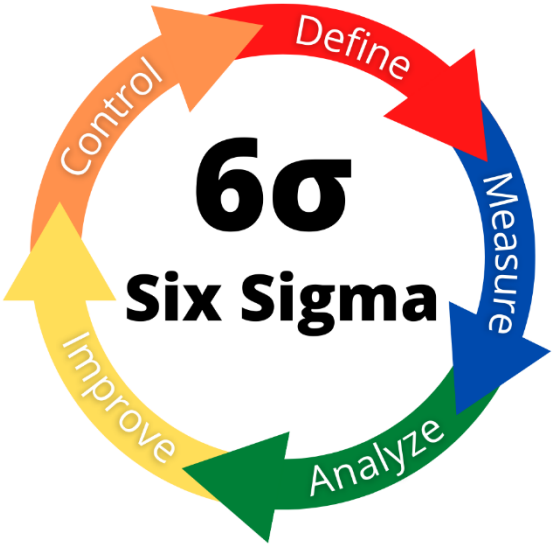
Six Sigma is a methodology utilized by managers to reduce defects and inconsistencies in business processes. Focused on statistical analysis rather than guesswork, Six Sigma enables leadership to better control intricacies within their operations. The goal of Six Sigma is to optimize processes. Optimization is considered less than 3.4 defects per one million cycles.

Six Sigma methodology is utilized by manufacturers to improve product quality and production efficiency within their facilities. This leads to more accurate lead times and consistency, resulting in higher customer satisfaction

There are five **DMAIC** steps within Six Sigma:

1. **D**efine – What is important?
2. **M**easure – How is the company doing?
3. **A**nalyze – What is wrong?
4. **I**mprove – What needs to be implemented?
5. **C**ontrol – How does the company guarantee performance?



A substantial amount of time should be dedicated to the Analyze phase of the Six Sigma methodology. In this phase, team members utilize a fishbone diagram, also called an Ishikawa diagram, to identify issues and problems. At first glance, issues within a process may not have correlation. However, many times multiple problems can be traced back to one root cause that a single solution can fix. This methodology helps teams avoid multiple "quick fix" scenarios that will need to be revisited in the future.

Professionals in leadership, managerial, continuous improvement, or quality assurance roles can further their education and understanding of Six Sigma through certification courses. Certification levels include White, Yellow, Green, Black and Master Black Belt. These certifications distinguish individuals throughout the manufacturing industry as experts on the Six Sigma methodology.

Companies and individuals looking to improve operational efficiency should consider implementing Six Sigma, given its success stories with companies such as Ford, Frito Lay, Honeywell and Hewlett Packard.