Six Sigma's Strategies and Secrets for Success

In any organization/industry/institution we experiment and innovate to develop new products, processes, and practices to improvise existing ones or to develop a new one. Improvements and implementations are very common in any industry. The key 'X' factor which drives an organization to come up with new kindling ideas is **'CUSTOMER'**. The organization delivers products, dedicates its services to the customer and is ready to analyze and accept feedback from them.

The common goal is to improve the core idea and make it accessible and affordable to everyone. In this process, many of us continue to be idle in performing improvements. To be in the game we need to acquire a few tools, techniques, technologies and methodologies in providing better services and products to our customers which leads in adding a great footprint to the bottom line. For this, we have **'Six Sigma' - The Secret Mantra for Success**.

Without any further delay, let's get started!

What is Six Sigma (6σ)?

It's a project-based approach for ameliorating effectiveness and efficiency and it is a customer-driven, disciplined and data-driven approach to upgrade the performance of products, services, and processes. It strives for excellence, especially in meeting customer's requirements.

Six Sigma is used as a production benchmark that is margined and measured by the threshold limit not more than 3.4 parts per million (ppm). 'Sigma' is a letter in the Greek alphabet that represents standard deviation, which is a measure of variation. This process is very consistent, compatible and comfortable with very little variation, and hence has a very small standard deviation.

Lesser the distance from the mean, or the average, to the nearest specification limit, is equivalent to six standard deviations, or six sigmas. As a result, only 3.4 ppm or less are out of specification. It refers to DMAIC, a methodology for improvement.

Using this prescriptive approach, a team can focus on improving what's important to customers and use data analysis to determine the performance. But the most important thing to observe is that it is a project methodology for improvement.

Key roles of executives and the champions:

Within Six Sigma, there are terms such as Executives and Champions. Let's see who they are and what their roles are.

Executives: These are the CEO, and his or her direct reports. It includes the C suite - the COO, CFO, CTO, CXO, CIO and so on, and senior management such as vice presidents and directors. Once the decision has been made to implement Six Sigma, the roles of executives and senior management are to deploy Six Sigma projects as a means to achieve the organizations' strategic goals, establish project selection criteria, review and select projects, assign Project Champions, review updates from Champions and provide resources as needed.

Champion: A champion is the executive teams' point person who is tasked with ensuring project success. Normally, the Champion is an executive or senior manager who has enough respect to ensure that the project has the right resources, time, and priority it needs. He selects a project leader and is someone who plans, leads, and executes the project with the help of a designated project team.

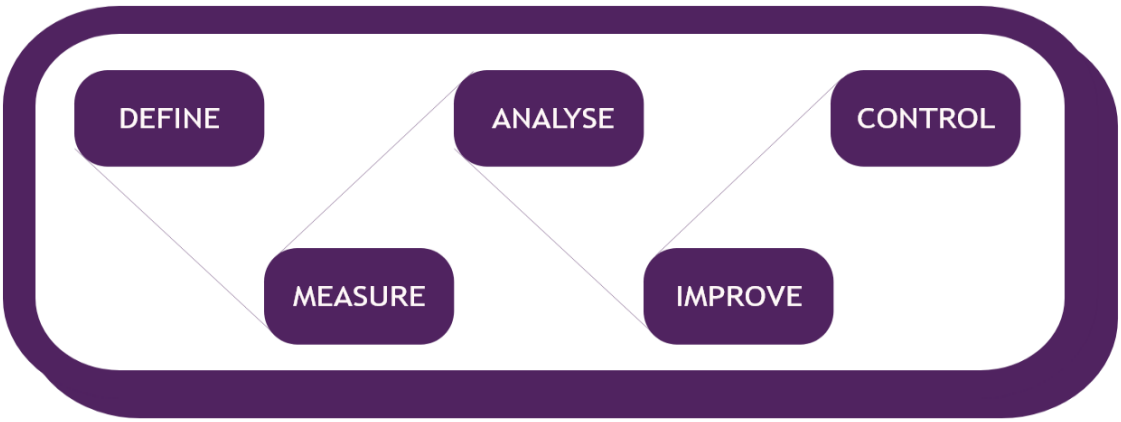
Levels of expertise:

Let's dive in and explore the different belts in the implementation of Six Sigma.

The belts in order of expertise scale up from the White Belt, Yellow Belt, Green Belt, Black Belt, and Master Black Belt.

Overview of DMAIC:

Every Six Sigma project has five phases, which are as Define, Measure, Analyse, Improve and Control (DMAIC).



Define Phase:

- In this, the project is defined, the project team is selected, and management launches the Six Sigma project.

- The team is tasked with understanding what is important to customers and determines the performance outcome to be improved. In Six Sigma, the performance outcome to be improved is known as the Y, as in Y is a function of x.
- Executing the define phase correctly will help us provide clear direction and focus to the project team. The team will know what a specific problem is, the goal to be accomplished by when and by whom, what is in scope and what is out of scope. This way, the project is focused on success.

Measure Phase:

- The size and the scope of the problem are understood and performance on Y is measured.
- We collect data and measure how long it takes and how consistently the technician shows up as promised. The process steps are understood and include the time taken if there are any delays due to rework.
- Involves developing a data collection plan, mapping the relevant processes, validating the measurement system and measuring Y. Often, project teams waste time going in circles, trying to measure everything in this phase.

Analyze Phase:

- The sole purpose of this phase is to answer the W-word, Why. Why is there a problem?
- We must determine which X's are the key factors that impact the problem Y in the equation Y = f(x).
- Generate a list of potential X's that impact Y and organize them. Shortlist and select the likely key X's and develop a data collection plan for the analysis. Prove the key X's in Y = f(X) and list as many potential X's as possible.

Improve Phase:

- It addresses the proven key X's and comes up with solutions to improve Y.
- Evaluate solution alternatives, select the right set of solutions and implement. Understanding the purpose and steps involved in this phase will help us develop effective solutions for the proven key X's to improve Y for your project.

Control Phase:

- The main purpose of this phase is to build controls. It's the key X factor that ensures the improved Y is maintained on an ongoing basis.
- First, develop a control plan for monitoring, controlling, and regulating performance. This tells when to leave a process alone and when to act and what action needs to be taken. The next step is to work with process owners to update procedures, which incorporates the controls and implements communication and training plans. Then, implement with the process owners and monitor performance. Once the project improvement goals have been achieved, the financer will validate the actual financial impact. Finally, project completion is signed off by the project champion.

Conclusion:

Six Sigma is a powerful project methodology for improvement. It is customer-focused and data-driven. The power of Six Sigma comes from knowing what the key X factors are, that drive the Y in the equation, Y is a function of x.

Adopting Six Sigma allows the organization to take charge and address process breakdowns before they become critical errors. The application of Six Sigma is a natural approach to solve many of the problems and it seeks to enhance customer satisfaction, cut-down costs, minimize cycle times, and upgrade quality.

Duplicating the improvements, distributing your success and greeting your team helps for future DMAIC.

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