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Six Sigma: Implementation

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So, you want to implement Six Sigma in your company? Where do you start? What is your first step? Many executives worry about a false start, failure or the cost of implementation. I witnessed companies where executives thought for a long time about implementing Six Sigma initiatives, but each company was unable to act. Those companies no longer exist, and many other companies are currently facing a similar situation.


To successfully implement the Six Sigma initiative, one should first understand a company's performance. Six Sigma initiatives focus on improving profitability, rather than simply improving quality. However, knowing the cost of poor quality is a starting point. Knowing how much money is wasted in a company can be surprising to many executives. Most companies do not even have measurements for tracking cost of poor quality (COPQ). The components of COPQ are internal failures (scrap, rework and lost capacity), external failures (field failures, warranty cost, complaints, returned material and lost business), appraisal (inspection, testing and audit) and prevention (quality planning, process control, improvement and training).

Understanding waste streams in the system can help identify areas that have direct bearing on profitability and margins to attack. Then, executives must plan to eliminate or dramatically reduce waste streams and to recognize competitive advantages. Six Sigma initiatives are for companies that want to be profitable and to be best in their market. A typical company, managed by executives looking at averages and satisfactory performance, would achieve average results.

How can you determine if your company can benefit from Six Sigma implementation? Look for these characteristics:

- Quality focus and objectives are not clearly defined and communicated.
- Executives think quality has nothing to do with business and profitability.
- Measurements (levels and trends) to track operations performance, including reject rate, rolled yield, COPQ, design effectiveness, cycle time, inventory levels, employee skills development and financial performance, are not in place.
- Lack of measurements lead to centralized decision-making (executives making the decisions).
- Executives are busy fighting fires, making an effort to "look busy" and badgering employees.
- Employees are afraid of management—reluctant to take the initiative to improve performance—and feel no one is listening to concerns.

To overcome such bottlenecks to higher profitability, a company must establish focus, a business initiative and implement measurements. To benefit from Six Sigma



implementation, loss in profitability must be made visible throughout the company. All staff must recognize the value of improving profitability, and have passion to achieve improved results, to become committed to improving business performance.

After implementing the correct performance measurements, establishing dramatic improvement objectives and committing necessary resources, executives need to reward and recognize employees' success through profit sharing and promotions. Identifying an area or division for piloting the Six Sigma initiative is a good way to develop a successful program. Having in-house success stories can be a great way to gain interest in other departments, divisions and management sectors.


To implement Six Sigma methodology in a selected area, the plan must include, first and foremost, training of executives in Six Sigma methodology. Company executives must understand the concept, steps, requirements, expectations and management to actively participate and contribute to the success of the project. Employees should never have reason to doubt executives' priority to improve profitability, passion for methodology and staff contribution. Employees must understand the consequences associated with applying or ignoring Six Sigma methodology. The entire company—executives and employees—must have a common goal, a common objective and a common priority to make the Six Sigma initiative successful.

Executives must select employees to champion various initiatives. These employees must have a passion for improvement, be success oriented, have a positive attitude and be people of action. The concept of a committee, where one works and others watch, would not work. Instead, a concept of team, where each player plays one role to its fullest, is preferred.

Employees should receive champion training to ensure successful implementation. Those who can apply statistics and new tools, who are keen observers and experimenters, who have a curiosity to investigate and solve problems and who could be trainers and facilitators should be selected for additional training to achieve Black Belt or Green Belt levels of competency. Black Belts will eventually become team leaders and messengers to implement Six Sigma methodology. Green Belts work as team members, under the guidance of Black Belts, to learn advanced skills and to expand the care of in-house Six Sigma experts. The estimated number of Black Belts in a company should be equal to revenue divided by 1,000,000. For each Black Belt, approximately 10 employees are trained as Green Belts.

The following steps are needed to implement the Six Sigma initiative:

- Perform financial analysis to understand profitability, COPQ and key contributors.
- Establish profitability objectives.
- Measure contributors to profitability.
- Establish business objectives and define values.
- Recruit a firm for Six Sigma training and implementation guidance.
- Select a pilot project or area for "small wins."
- Define projects and develop plans to realize improvement.
- Conduct executive, champion, Black Belt and Green Belt training.
- Solve problems and develop solutions to reduce waste.
- Monitor progress of projects and provide support as needed.
- Celebrate and publicize successes.

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- Learn lessons from small wins and optimize approach.
 - Institutionalize the Six Sigma initiative company-wide.

Six Sigma initiatives can be perceived as expensive unless implemented correctly. The objective must be to maximize value by achieving the Six Sigma initiative—not to save on the cost of implementation by risking the cost of higher profitability. The benefits of implementing Six Sigma initiatives are too attractive to overlook: increased revenues; improved operating margins; higher turns; and increased earnings.