

What is Six Sigma?



KEY LEARNINGS: WHAT IS SIX SIGMA?

1. Introduction to Six Sigma

- Welcome to Six Sigma, a powerful system designed to improve business processes and solve problems.
- Every day, businesses struggle with errors, delays, and inefficiencies that cost time, money, and customer trust.
- Six Sigma is the solution to eliminate defects, reduce waste, and improve efficiency.

2. The Everyday Struggle of Imperfect Processes

- Example 1: A Factory Setting A small defect in a product might seem minor but can lead to shipment delays, lost revenue, and unhappy customers.
- Example 2: A Hospital Emergency Room A nurse struggling to find patient records could lead to life-threatening delays.
- Key Takeaway: Small inefficiencies exist everywhere—factories, offices, restaurants, and hospitals.
- These inefficiencies pile up over time, costing businesses money, customers, and reputation.
- This is where Six Sigma steps in to create order and efficiency.

3. What Exactly is Six Sigma?

- A structured method to: Identify problems
- Fix errors
- Ensure mistakes don't happen again
- Goal: Reduce defects to near zero—just 3.4 defects per million opportunities.
 - Example: A company makes 100,000 products per year.
 - A 2% defect rate means 2,000 faulty items—costing money and resources.
 - Six Sigma aims to bring this number down to almost nothing.

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4. The Meaning Behind "Six Sigma"

- Sigma (σ) is a statistical term measuring process variation.
 - Simple analogy: Throwing darts at a bullseye. Low variation = Darts hit close to the center consistently (high accuracy).
 - High variation = Darts land all over the board (inconsistent results).
- Six Sigma ensures that processes hit the bullseye nearly every time.
- Key statistic: A Six Sigma process allows for only 3.4 defects per million opportunities (DPMO).

5. How Does Six Sigma Work in Real Life?

- Example: Customer Service Improvement A customer service team struggles with slow systems and incorrect information.
- This leads to delays, frustrated customers, and inefficiency.
 - Using Six Sigma: Analyze the entire process.
 - Identify bottlenecks (slow software, lack of training).
 - Implement solutions (system upgrades, better training).
 - Results: Faster service
 - Happier customers
 - Increased efficiency

6. Why Should You Care About Six Sigma?

- Inefficiencies exist everywhere—whether you work in an office, a hospital, or a factory.
- Mistakes, waste, and delays cost businesses time, money, and productivity.
- Six Sigma gives you the tools to:
 - Identify problems before they happen
 - Solve issues permanently
 - Build systems that run smoothly

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7. Cliffhanger: The Origins of Six Sigma

- Where did this bold vision originate?
- Who first believed that perfection could be measured and achieved?
- The answer lies in Six Sigma's history....