Kaizen

Problem
How to improve a product or process?

Difficulty
Work with an SME

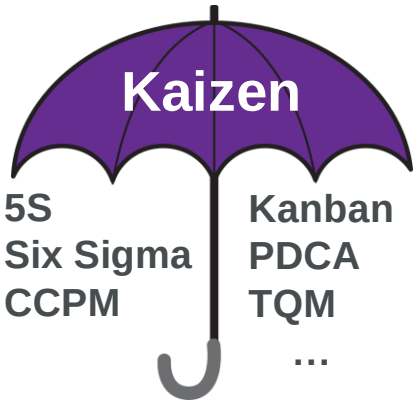
- **Kaizen** is a Japanese term meaning change for the better or continuous improvement.
- **Kaizen** can be implemented by many methods: 5S, Six Sigma, CCPM (Critical Chain Project Management), Kanban, PDCA (Plan / Do / Check / Act), TQM (total quality management), …
- A **Kaizen event** or **blitz** is different, it creates a large change in a fixed time period.

- Teamwork
- Discipline
- Leadership

→ **Kaizen Approach** →

Improved product or process

1. Train and motivate employees.
2. Identify an improvement opportunity.
3. Explore new ideas, leveraging employee knowledge and experience.
4. Define an objective and decompose it into components (e.g., sub-objectives).
5. Plan the tasks for each sub-objective.
6. Execute the plan: monitor progress and test results
7. Start again at step 1.



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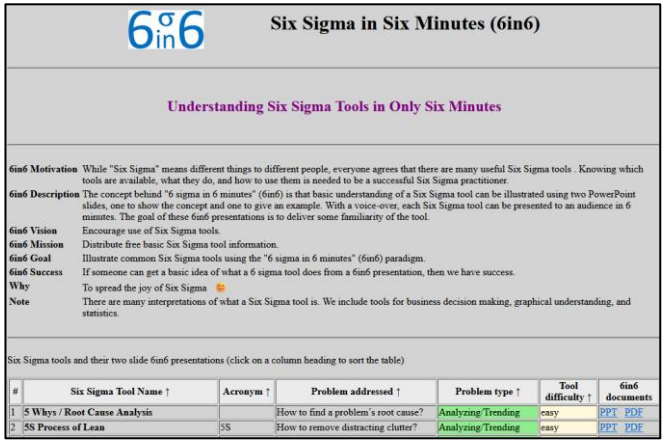
Kaizen – Example – Improve 6in6 web site

2. Every month look at some part of 6in6 to improve.
   - July 2023 → How to improve the “6in6 mission”?
3. Explore new ideas
   - Improve the 6in6 website distributing 6in6 info
4. Define objective
   - Update 6in6 website to current user expectations
5. Plan the tasks
   - Ask friend to critique 6in6 website
   - Hire GUI expert to critique 6in6 website
   - Implement changes
6. Execute the plan
   - Friend: “Why aren’t there YouTube videos?”
   - Hired GUI expert using upwork.com
   - Received report which included:
     - At the top: too much text
     - At the top: reinforce the word “free”
     - At the top: give an example deliverable
     - Make it look less like a blog
     - Didn’t like logo …
   - Implemented most of the suggested changes
7. Repeat
   - Aug 2023 → How to make 6in6 info more useful?
     - Create “book version” with index …



6in6 Six Sigma in Six Minutes (6in6)

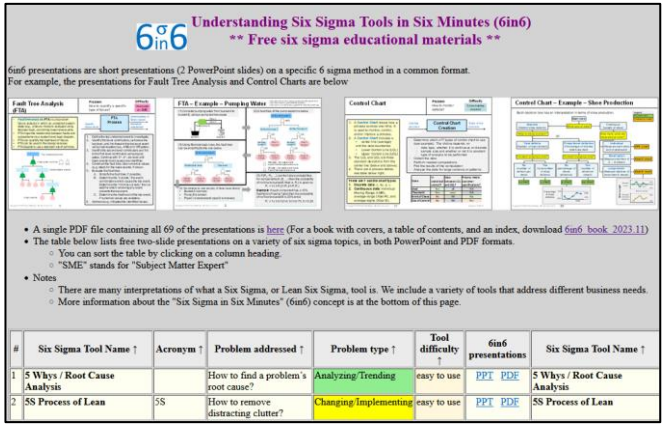
Understanding Six Sigma Tools in Only Six Minutes

6in6 Motivation	While "Six Sigma" means different things to different people, everyone agrees that there are many useful Six Sigma tools . Knowing which tools are available, what they do, and how to use them is needed to be a successful Six Sigma practitioner.
6in6 Description	The concept behind "6 sigma in 6 minutes" (6in6) is that basic understanding of a Six Sigma tool can be illustrated using two PowerPoint slides, one to show the concept and one to give an example. With a voice-over, each Six Sigma tool can be presented to an audience in 6 minutes. The goal of these 6in6 presentations is to deliver some familiarity of the tool.
6in6 Vision	Encourage use of Six Sigma tools.
6in6 Mission	Distribute free basic Six Sigma tool information.
6in6 Goal	Illustrate common Six Sigma tools using the "6 sigma in 6 minutes" (6in6) paradigm.
6in6 Success	If someone can get a basic idea of what a 6 sigma tool does from a 6in6 presentation, then we have success.
Why	To spread the joy of Six Sigma
Note	There are many interpretations of what a Six Sigma tool is. We include tools for business decision making, graphical understanding, and statistics.

Six Sigma tools and their two slide 6in6 presentations (click on a column heading to sort the table)

#	Six Sigma Tool Name ↑	Acronym ↑	Problem addressed ↑	Problem type ↑	Tool difficulty ↑	6in6 documents
1	5 Whys / Root Cause Analysis		How to find a problem’s root cause?	Analyzing/Trending	easy	PPT PDF
2	5S Process of Lean	5S	How to remove distracting clutter?	Analyzing/Trending	easy	PPT PDF

6in6 web page in June 2022



6in6 Understanding Six Sigma Tools in Six Minutes (6in6)
** Free six sigma educational materials **

6in6 presentations are short presentations (2 PowerPoint slides) on a specific 6 sigma method in a common format.
For example, the presentations for Fault Tree Analysis and Control Charts are below

- A single PDF file containing all 69 of the presentations is here (For a book with covers, a table of contents, and an index, download 6in6_book_2023.11)
- The table below lists free two-slide presentations on a variety of six sigma topics, in both PowerPoint and PDF formats.
  - You can sort the table by clicking on a column heading.
  - "SME" stands for "Subject Matter Expert"
- Notes
  - There are many interpretations of what a Six Sigma, or Lean Six Sigma, tool is. We include a variety of tools that address different business needs.
  - More information about the "Six Sigma in Six Minutes" (6in6) concept is at the bottom of this page.

#	Six Sigma Tool Name ↑	Acronym ↑	Problem addressed ↑	Problem type ↑	Tool difficulty ↑	6in6 presentations	Six Sigma Tool Name ↑
1	5 Whys / Root Cause Analysis		How to find a problem’s root cause?	Analyzing/Trending	easy to use	PPT PDF	5 Whys / Root Cause Analysis
2	5S Process of Lean	5S	How to remove distracting clutter?	Changing/Implementing	easy to use	PPT PDF	5S Process of Lean

6in6 web page in January 2024

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Kaizen – Notes

Slide 1

1. The Japanese words, kai 改, and zen 善 mean "change" and "good."
2. The Kaizen methodology is that small changes now can have big future impacts.
3. Kaizen can be applied in multiple ways:
   Point Kaizen (see a problem and fix it),
   System Kaizen (system level problems),
   Line Kaizen (upstream and downstream),
   Plane Kaizen (address entire value stream),
   Cube Kaizen (address entire organization).
4. Before Kaizen, ensure stable operations: machines are working, workers are present, jobs are repeatable, and material is available.
5. Kaizen involves everyone, from the CEO to the most recent hire.
6. The five kaizen *elements* are: know your customer, let it flow, go to Gemba, empower people, and be transparent.
7. Kaizen may be called lean or agile management.

Slide 2

1. A static product or process is likely to become less useful over time, continuous change is usually needed.
2. Things can always be improved. Taiichi Ohno (creator of the Toyota Production System) said *"Having no problems is the biggest problem of all."*

Recommended web sites for more information

- https://www.appvizer.com/magazine/operations/bpm/kaizen-approach
- https://www.investopedia.com/terms/k/kaizen.asp

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