



Pareto Analysis

Pareto analysis is a quality management technique for identifying the most impactful defects, issues, or causes to prioritize for correction. It utilizes the Pareto principle - that a large majority of problems are produced by a few key factors.

To conduct a Pareto analysis:

1. Collect data on the frequency or cost impact of various types of defects, issues, complaints, etc.
2. Rank the categories based on frequency or impact from largest to smallest.
3. Calculate the cumulative percentage of the total for each category.
4. Create a Pareto chart with the categories on the x-axis and the frequency or impact on the y-axis. The columns should be ordered largest to smallest.
5. Draw a line representing the cumulative percentage from the y-axis. This highlights the "vital few" categories causing most issues.
6. Focus efforts on the few factors above the 80% cumulative line, as they offer the greatest potential for improvement.

Key benefits of Pareto analysis:

- Objectively identifies the most impactful issues vs chasing many trivial problems
- Quantifies the opportunity size from correcting the vital few causes
- Focuses limited resources on the factors that matter most
- Simple and fast to perform with basic data
- Powerful visual communication and persuasion tool

Pareto analysis is invaluable for not getting distracted by less relevant problems. Fixing the few factors causing the vast majority of headaches will lead to major gains.