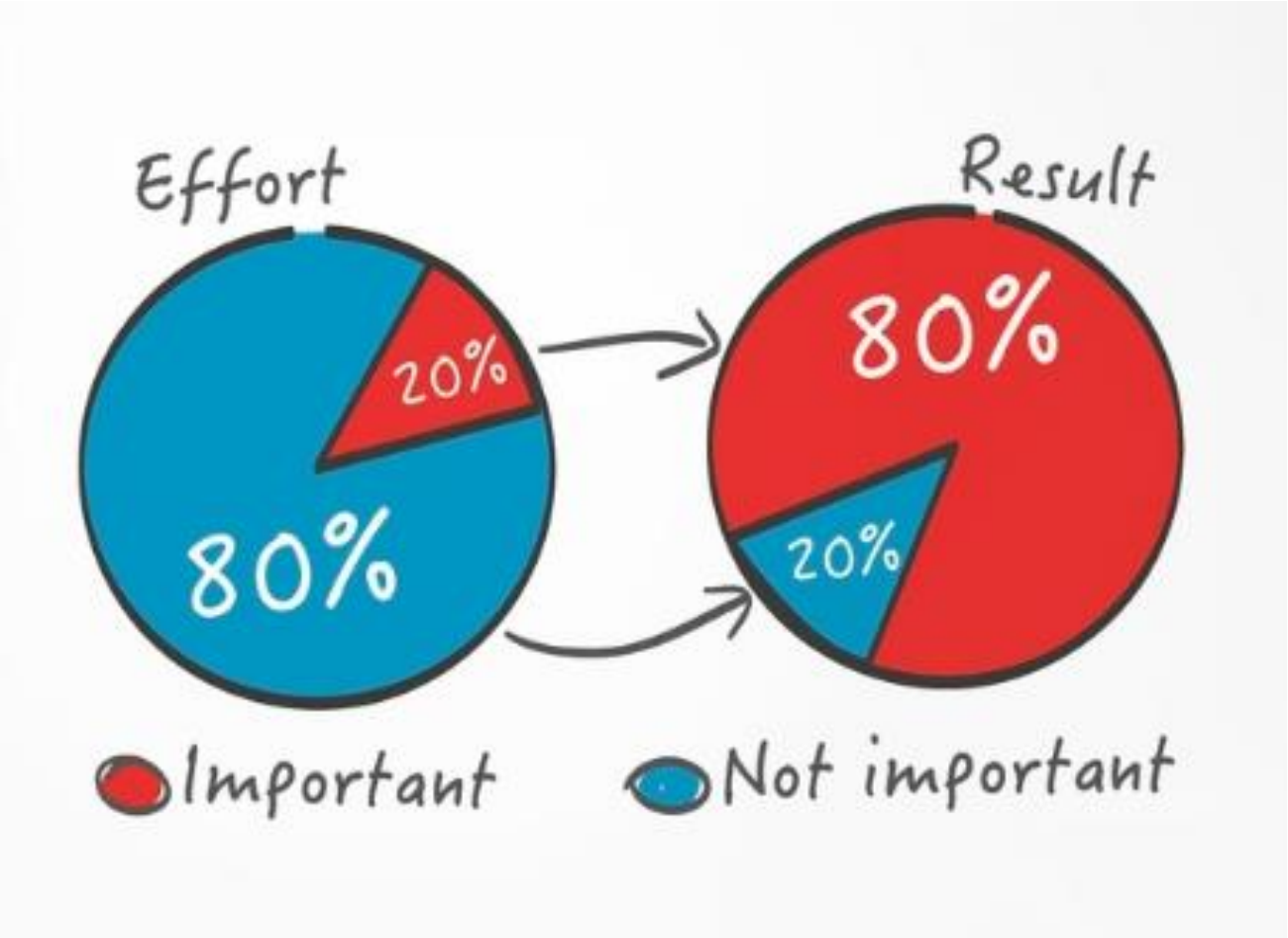
Study Guide: Pareto Analysis



This course provides a foundational understanding of Pareto Pareto Analysis and how to apply it to help prioritize improvement activity.

What is Pareto Analysis?

Pareto Analysis is a frequently used tool for driving quality and Continuous Improvement

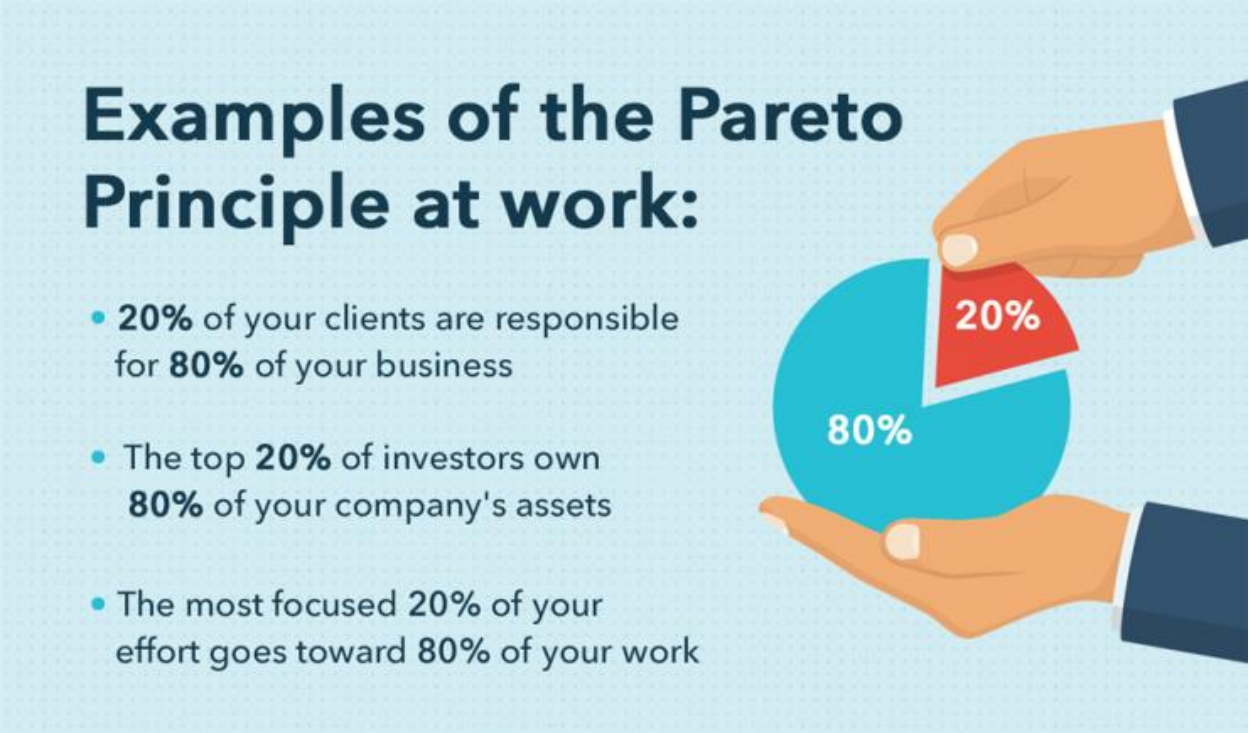
Pareto's law was developed by Vilfredo Pareto, a sociologist and economist in Italy in the late 1800's

The Pareto Principle is also known as the 80/20 rule, meaning that 80% of the outcomes of a process is caused by 20% of the inputs

For example, in Italy, 80% of the wealth in Italy is owned by 20% of the people

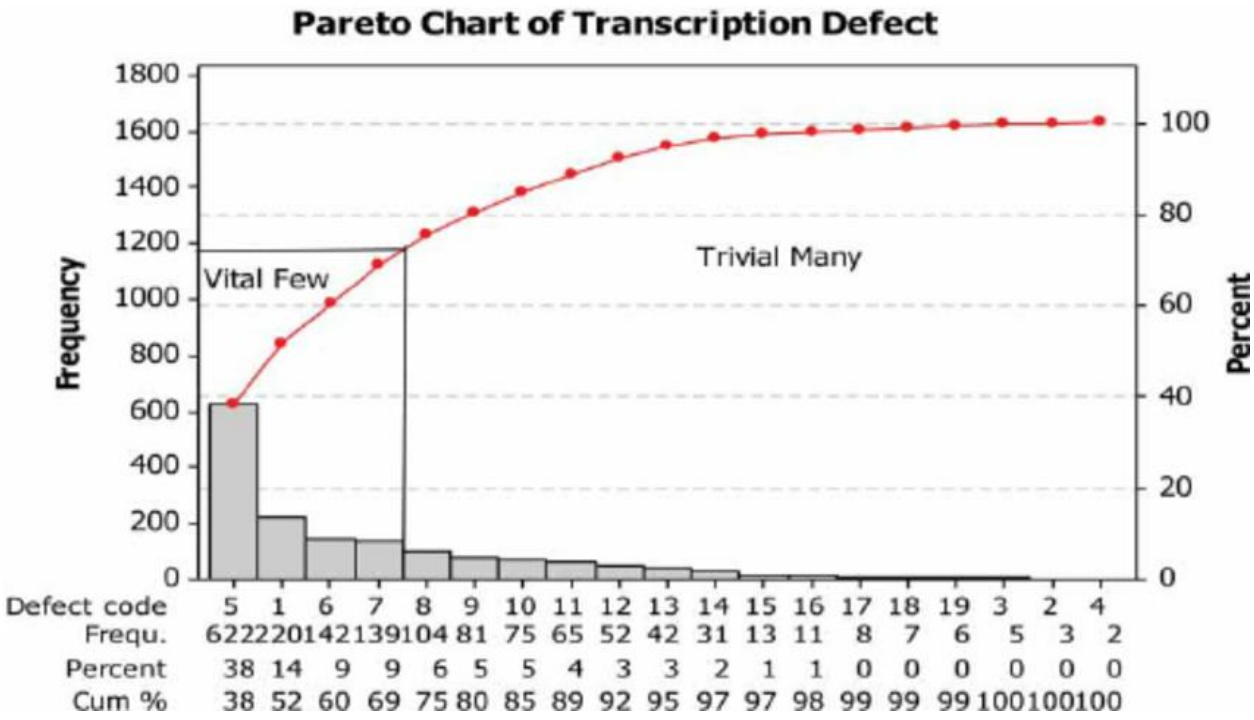
Pareto Analysis helps you distinguish between the "vital few" and the "trivial many"

The vital few represents the 20% of factors that cause 80% of outcomes. The remaining 80% of factors is known as the trivial many



How a Pareto Chart Works

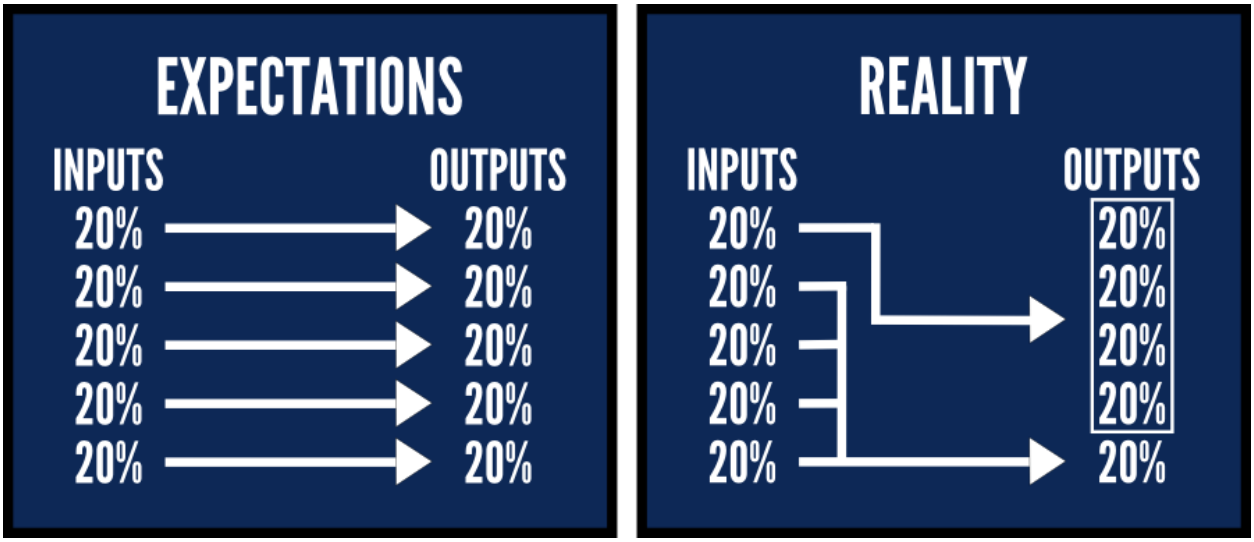
A Pareto Chart has 2 y-axis. On the left axis shows the number or frequency of issue occurrences. On the right y-axis is the cumulative percentage of each issue or contributing factor.



Along the x-axis is the list of categories or factors causing the observed outcome. The chart is arranged in a rank order decreasing array with the leading factor on the far left and the least significant factor on the far right.

There are four steps to performing Pareto Analysis

1. For each occurrence of the outcome being observed, capture the reason or contributing factor
2. Plot the frequency of each contributing factor from greatest to least along the x-axis
3. Calculate the cumulative percentage that each contributing factor makes up of the total. Plot these values as a line on the chart
4. Identify the 80% threshold for the cumulative percentage line and drop a vertical line down to separate the critical few from the trivial many


EXPECTATIONS
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