Data Visualization

What is Data Visualization?

Data visualization is a graphical representation of quantitative information and data by using visual elements like graphs, charts, and maps.

Data visualization convert large and small data sets into visuals, which is easy to understand and process for humans.

Data visualization tools provide accessible ways to understand outliers, patterns, and trends in the data.

In the world of Big Data, the data visualization tools and technologies are required to analyze vast amounts of information.

Why Use Data Visualization?

To make easier in understand and remember.

To discover unknown facts, outliers, and trends.

To visualize relationships and patterns quickly.
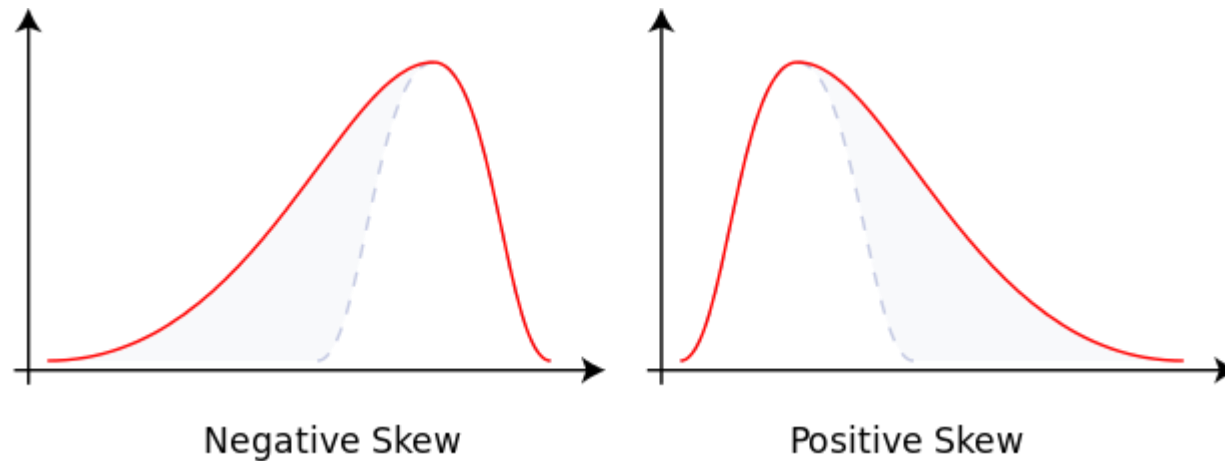
To ask a better question and make better decisions.

To competitive analyze.

To improve insights.

Skewness

Skewness

Skewness is a distortion (an asymmetry) from the bell curve (normal distribution).


Negative Skew   Positive Skew

Kurtosis

What is Excess Kurtosis?

Excess kurtosis is a metric that compares the kurtosis of a distribution against the kurtosis of a normal distribution. The kurtosis of a normal distribution equals 3.

1. Mesokurtic

Data that follows a mesokurtic distribution shows an excess kurtosis of zero or close to zero. This means that if the data follows a normal distribution, it follows a mesokurtic distribution.
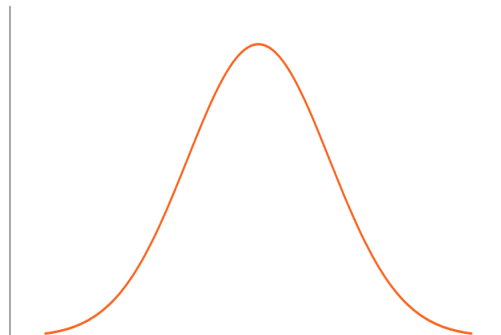
2. Leptokurtic

Leptokurtic indicates a positive excess kurtosis. The leptokurtic distribution shows heavy tails on either side, indicating large outliers. In finance, a leptokurtic distribution shows that the investment returns may be prone to extreme values on either side. Therefore, an investment whose returns follow a leptokurtic distribution is considered to be risky.
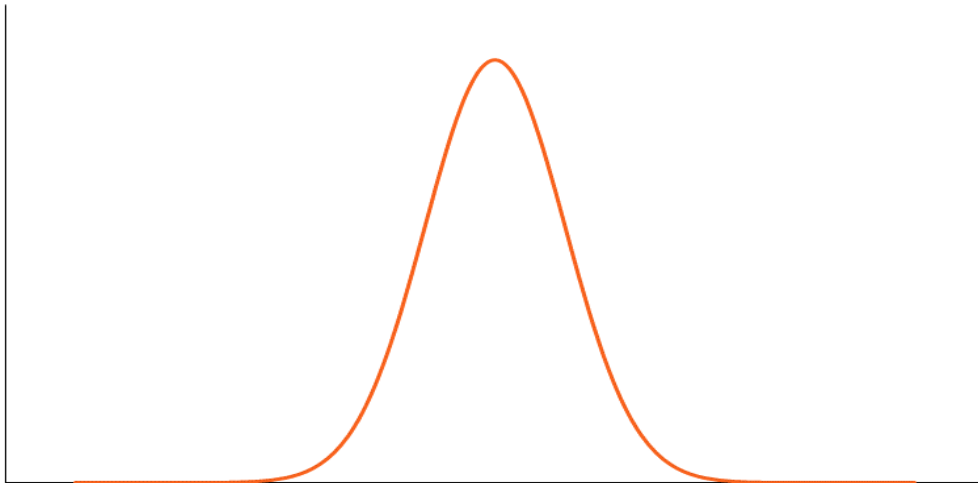
3. Platykurtic

A platykurtic distribution shows a negative excess kurtosis. The kurtosis reveals a distribution with flat tails. The flat tails indicate the small outliers in a distribution. In the finance context, the platykurtic distribution of the investment returns is desirable for investors because there is a small probability that the investment would experience extreme returns.