



# Understanding Central Tendency in Statistical Techniques

In this presentation, we will explore the concept of central tendency in statistics and its crucial role in analysing data. Let's dive in!

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# Defining Central Tendency

## 1 Definition

Central tendency refers to a statistical measure that represents the central or typical value of a dataset.

## 2 Importance

Understanding central tendency helps in summarizing data, making predictions, and identifying patterns.

# Types of Central Tendency Measures

## Mean

The mean calculates the average value by summing all data points and dividing by the total count.

## Median

The median represents the middle value in a sorted dataset and is less prone to outliers.

## Mode

The mode is the most frequently occurring value, revealing the highest point of concentration within the data.

# Calculating Central Tendency

1

## Mean

To calculate the mean, sum up all values and divide by the total count.

2

## Median

To find the median, arrange all values and determine the middle one or average the two middle values.

3

## Mode

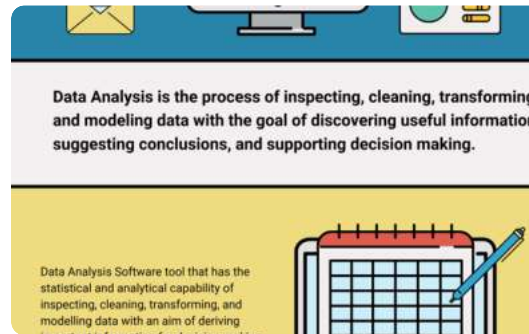
Identify the value(s) with the highest frequency to determine the mode.

# Interpretation and Application



## Interpretation

Central tendency measures help us understand typical values and central patterns within the data.



## Applications

From business decisions to scientific research, central tendency aids in making informed conclusions.



## Financial Analysis

Central tendency assists in analysing financial data for budgeting, forecasting, and investment decisions.

# Limitations and Considerations

## 1 Pitfalls

Central tendency measures may oversimplify complex datasets or fail to capture extreme values.

## 2 Considerations

Outliers, skewed distributions, and sample size can impact the appropriateness of each measure.

# Conclusion and Summary

