

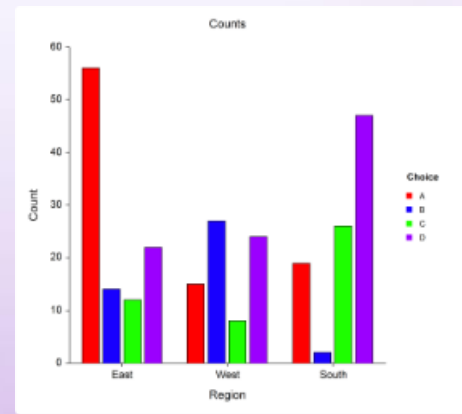


# Hands-on Descriptive Analytics in SCM

Descriptive analytics is crucial for gaining insights into supply chain performance. It helps businesses identify trends, patterns, and anomalies in their data, leading to better decision-making and optimization.

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# Recap of Previous Presentation

## Introduction to Supply Chain

Understanding the core components and functions of a supply chain.

## Types of Supply Chain Analytics

Exploring different types of analytics, including descriptive, predictive, and prescriptive.

1

2

3

## Importance of Analytics

The role of data and analytics in driving efficiency and profitability.



# Guess the Topic

?

What is the average delivery time for a particular product?

This question can be answered using descriptive analytics.



What are the top 5 suppliers with the highest on-time delivery rate?

Descriptive analytics can help identify top performers based on key metrics.



What are the inventory levels for different product categories?

Descriptive analytics provides insights into inventory status and trends.





# Real Life Cases in SCM

## Walmart

Walmart uses descriptive analytics to monitor inventory levels, optimize store layouts, and track customer demand patterns.

## Amazon

Amazon leverages descriptive analytics to analyze customer reviews, identify product trends, and optimize warehouse operations.

## Nike

Nike uses descriptive analytics to track supply chain performance, analyze sales data, and identify areas for improvement.



# Descriptive Analytics Techniques

## 1 Trend Analysis

Identifying patterns and trends in data over time, such as increasing sales or decreasing inventory.

## 3 Correlation Analysis

Exploring relationships between different variables, such as the correlation between demand and production capacity.

## 2 Distribution Analysis

Understanding the distribution of data, such as the range of delivery times or the frequency of supplier delays.

## 4 Outlier Detection

Identifying unusual data points that may indicate errors, anomalies, or significant events.





# Hands-on Exercises

Scenario	Task	Technique
Analyze sales data for the past year.	Identify seasonal trends in sales.	Trend Analysis
Review delivery time data for a specific product.	Calculate the average delivery time and identify outliers.	Distribution Analysis, Outlier Detection
Compare the performance of different suppliers.	Analyze on-time delivery rates and identify top performers.	Correlation Analysis, Distribution Analysis



# Testing the Learning

1

What is the purpose of descriptive analytics?

To gain insights into supply chain performance, identify trends, and make informed decisions.

2

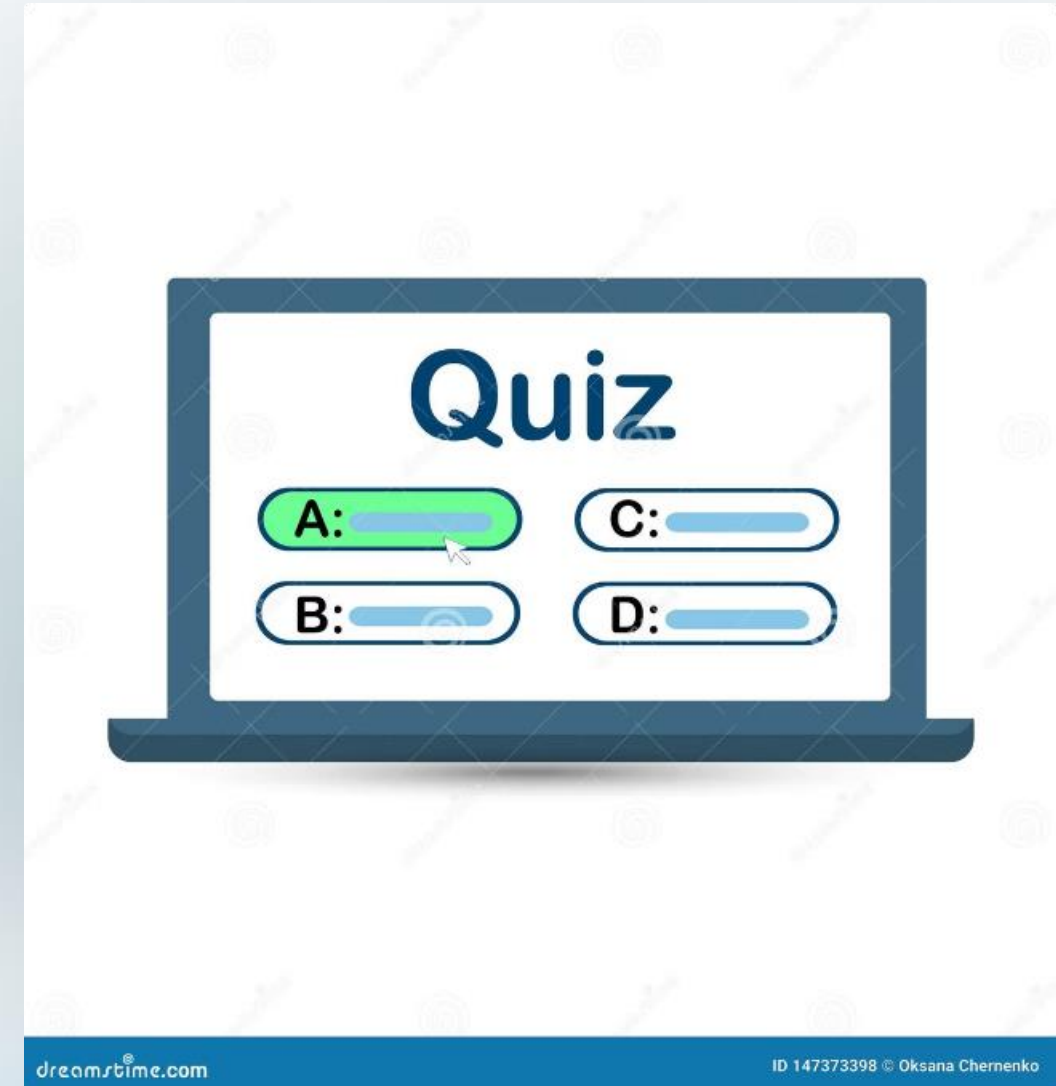
Which technique is used to identify outliers in data?

Outlier Detection.

3

Give an example of a real-life case where descriptive analytics is used in SCM.

Walmart uses descriptive analytics to monitor inventory levels and optimize store layouts.





# Summary and Key Takeaways



## Data-Driven Decisions

Descriptive analytics empowers businesses to make data-driven decisions, leading to improved efficiency and profitability.

## Identify Trends and Patterns

Descriptive analytics helps uncover trends and patterns in supply chain data, leading to proactive decision-making.

## Optimize Operations

Insights from descriptive analytics can be used to optimize various aspects of the supply chain, such as inventory management and supplier selection.







# Online References

- [Investopedia: Descriptive Analytics](#)
- [Gartner: Descriptive Analytics](#)
- SAS: Descriptive Analytics



# Recommended Textbooks

- Supply Chain Management by Sunil Chopra and Peter Meindl
- Business Analytics: Data Analysis and Decision Making by David R. Anderson, Dennis J. Sweeney, and Thomas A. Williams
- Data Mining: Practical Machine Learning Tools and Techniques by Ian H. Witten and Eibe Frank

