

## Northwind Traders sample dataset

### Sales Analysis

Sales Analysis	Revenue Contribution	Order value Distribution	Payment & Shipping Performance
1. Analyze order volume and revenue over time 2. Identify growth, decline and seasonality.	Identify top-selling products and categories by revenue	Distribution of order values. Detect high value orders and outliers	Average shipping duration. Impact of freight and shipping methods on order fulfillment

### Customer Analysis

Customer Value & Behavior	Customer Segmentation	Geographic Patterns	Ordering Frequency
Average number of orders per customer. Identification of repeat and high-value customers	Cluster customers by total spend, order count, and preferred categories. Segment customers into low, medium, and high value	Customer distribution by country and city. Correlation between customer location and order frequency	How often different customer segments place orders.

### Product & Inventory Analysis

Product Performance	Pricing Analysis	Inventory Health	Demand Patterns
Products and categories contributing most to sales volume and revenue	Distribution of product prices Price comparison across suppliers and categories	Stock levels vs sales performance Identify slow-moving, fast-moving, and overstocked products	Monthly and seasonal demand trends Identify demand spikes and drops

### Supplier Analysis

Supplier Distribution	Category Coverage	Pricing & Regional Trends
Geographic distribution of suppliers. Supplier presence across regions.	Number of products supplied by each supplier Supplier contribution across product categories.	Supplier pricing patterns by region. Relationship between supplier location, pricing, and category.

## Employee Analysis

Workforce Distribution	Tenure & Hiring Trends	Organizational Structure	Title & Courtesy Patterns
Employee count by job title and region	Distribution of employee tenure Hiring trends over time by title	Reporting hierarchy and manager–employee relationships	Distribution of employee titles and courtesy titles

## Operational & Strategic Insights

Business Performance Drivers	Risk & Opportunity Identification	Decision Enablement
Key revenue drivers (products, customers, regions). Cost and pricing optimization opportunities.	Inventory risks (overstock/stockout) Dependency on specific suppliers or customers	Target high-value customers Optimize inventory and supplier mix Improve shipping efficiency