

Northwind Database

By Arseniy Tyurin

Problem Statement

Generate analytical insights to improve business understanding and increase revenue

Business Value



Improvement of discount system



Performance evaluation



Market demand understanding

Methodology

Hypothesis Test

Welch's T-test - ANOVA Test - Cohen's d

Does discount increase order quantity?

On average customers order 27% more product if they receive 5-25% discount

Discount amount is approximately the same across all product categories

There is no seasonal demand on produce



Employees Performance

Employees from USA sold more product with less discount.

Order size is approximately the same for USA and UK employees.

Shipping Companies Performance

All shipping companies deliver order in approximately 20 days

"Federal Shipping" has the fastest order processing



Further Research

- Find out why employees from US had much more orders than from UK
- Research further what clients responded better to discount
- Find out optimal level of discount for products according to their price and possible seasonal demand
- Find a way to improve logistics