

NORTHWIND TRADERS DASHBOARD



Total Revenue

\$1.27M

Total Profit

\$1.06M

Total Sales

51,317

Total Customers

91

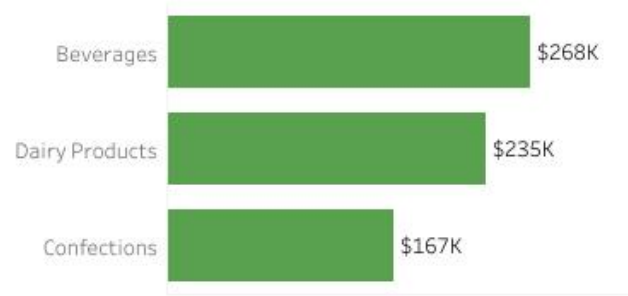
Total Employees

9

Total Orders

830

Top 3 Product Categories



Top 3 Product Names



Top 3 Customers by Revenue



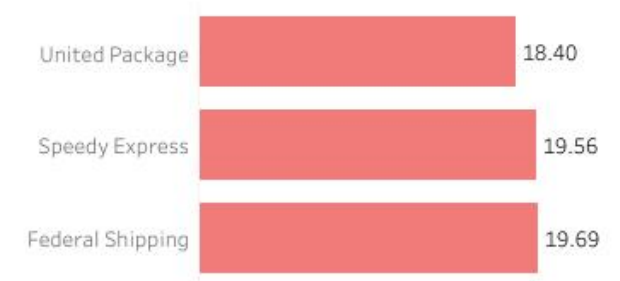
Top 3 Customers by Sales



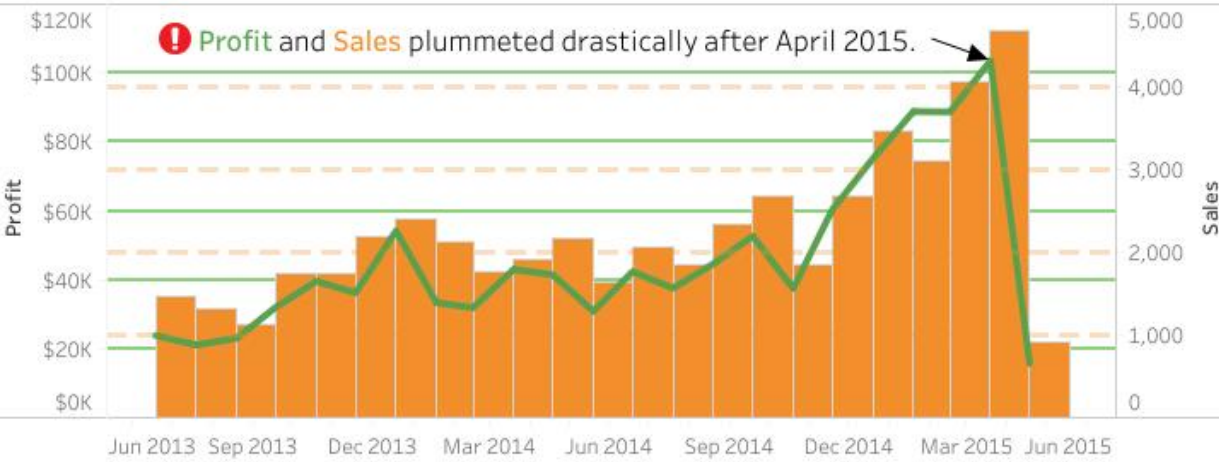
Average Freight



Average Shipping Days



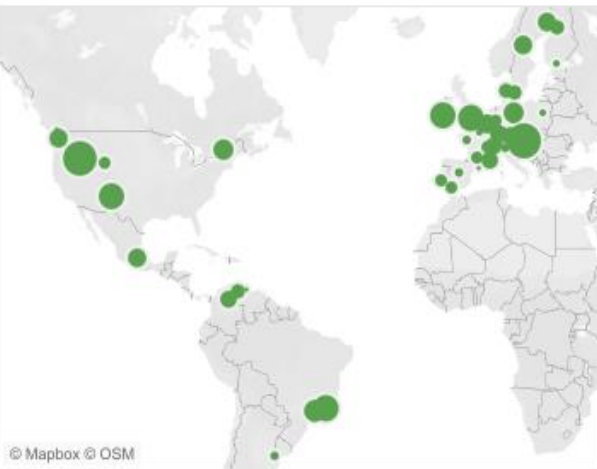
Profit and Sales Trends



Order Shipping Status



Profit per City



Abstract

- ▶ I assumed the role of a BI Developer for Northwind Traders.
 - ▶ Northwind Traders is a fictitious gourmet food supplier.
- ▶ I built a top-level KPI dashboard for the executive team.
 - ▶ The dashboard provides insights into these key areas of the business:
 - ▶ sales trends
 - ▶ product performance
 - ▶ key customers
 - ▶ shipping costs
- ▶ I used Excel and Tableau for this project.
 - ▶ I cleaned the tables and built a relational data model in Excel.
 - ▶ I exported the cleaned tables to Tableau to conduct my analysis.
- ▶ I have uploaded all the files for this project onto my [GitHub](#).

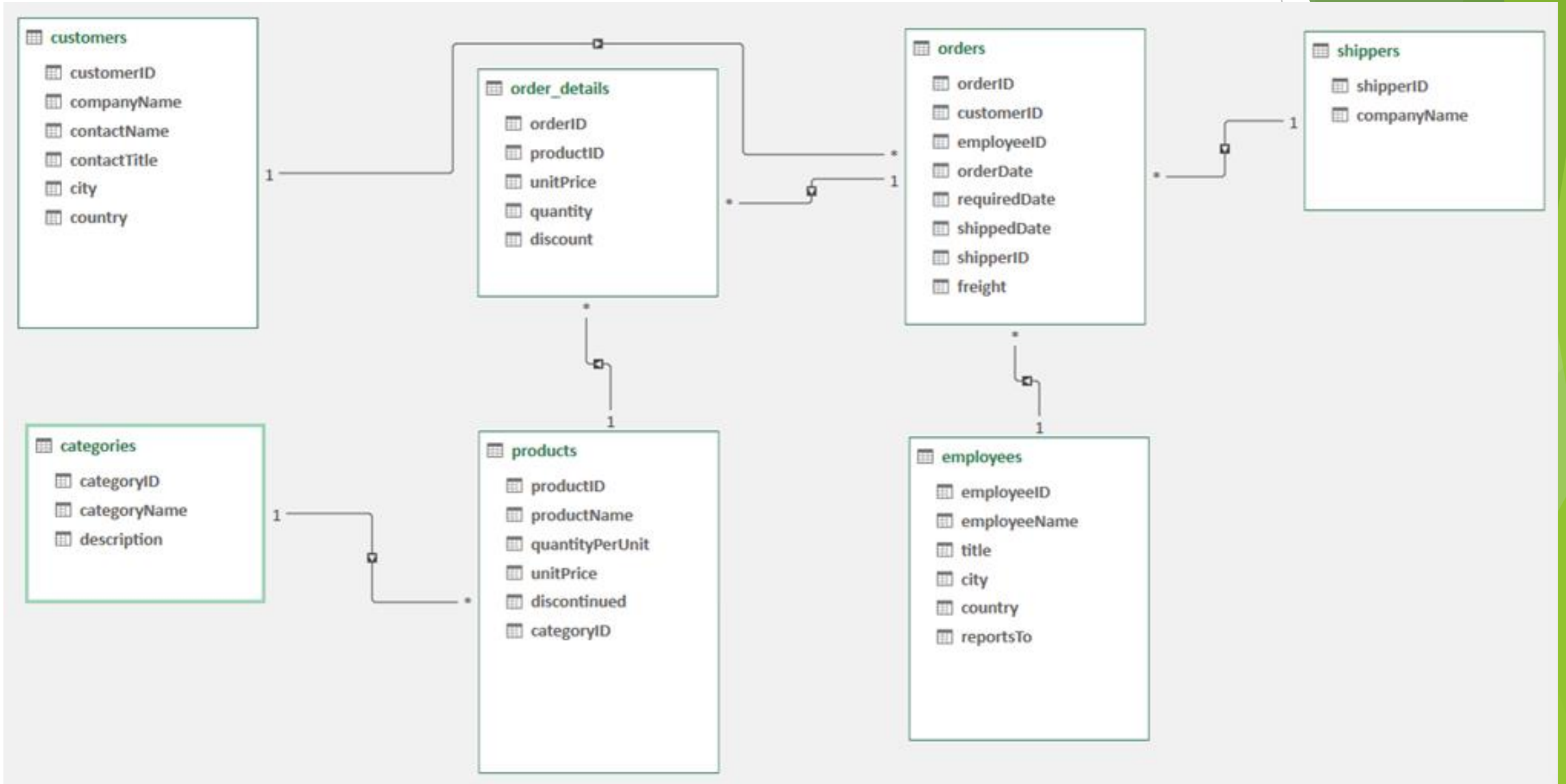
Data Cleaning Strategy

- ▶ I am working with structured data.
 - ▶ The data consists of sales and order data.
 - ▶ Therefore, my data cleaning strategy was not very involved.
- ▶ I changed the currency metrics to currency data types.
- ▶ I made the following changes to the “products” table:
 - ▶ I changed the “1” values to “Yes” values in the “discontinued” column.
 - ▶ I changed the “0” values to “No” values in the “discontinued” column.
- ▶ I assumed that the product prices remained fixed when the orders were placed.
 - ▶ My analysis did not factor in any supply and demand factors that might have caused any price fluctuations.
- ▶ I assumed that orders that were delayed or not shipped had no shipping days.

Key Questions

- ▶ Product Sales Analysis
 - ▶ What were the top 3 product categories and names in terms of revenue?
 - ▶ How have profit and sales changed over time?
 - ▶ Which areas of the world were the most profitable for the business?
- ▶ Customer Analysis
 - ▶ Who were the top 3 most valuable customers in terms of revenue and sales?
 - ▶ How many orders have been shipped, delayed, or not shipped?
- ▶ Shipping Analysis
 - ▶ Which shipper had the cheapest shipping cost on average?
 - ▶ Which shipper shipped out orders the earliest on average?

Data Model



Product Sales Insights

- ▶ These product categories drove the most revenue for the business:
 - ▶ Beverages
 - ▶ Dairy Products
 - ▶ Confections
- ▶ These product names drove the most revenue for the business:
 - ▶ Côte de Blaye
 - ▶ Thüringer Rostbratwurst
 - ▶ Raciette Courdavault
- ▶ Profit and Sales saw a steep decline from April 2015 to May 2015.
 - ▶ Profit fell from a maximum of \$104K in April to a minimum of \$16K in May. (a staggering 84.61% drop)
 - ▶ Sales fell from a maximum of 4,680 in April to a minimum of 921 in May. (a staggering 80.32% drop)
- ▶ Profits were heavily concentrated in European cities.
 - ▶ These European cities were driving the most profit:
 - ▶ Graz, Austria
 - ▶ London, UK
 - ▶ Cork, Ireland

Customer Insights

- ▶ These were the most valuable customers for the business in terms of revenue and sales:
 - ▶ Horst Kloss
 - ▶ Roland Mendel
 - ▶ Jose Pavarotti
- ▶ Most orders were shipped to customers at or before the requested delivery date.
 - ▶ There were only a handful of orders that were either delayed or not shipped.

Shipping Insights

- ▶ Speedy Express had the cheapest shipping cost of \$65.00 on average.
- ▶ United Package shipped out orders the earliest at 18.40 days on average.

Recommendations

- ▶ I recommend the following guidelines for recovering from the profit and sales losses:
 - ▶ Upsell on the top 3 product categories and names.
 - ▶ This will likely ensure that revenue and profit are maximized in the future.
 - ▶ Maintain great relationships with ALL customers, especially the top 3.
 - ▶ Maintain the high ratio of orders shipped to delayed and not shipped orders.
 - ▶ Hire more employees to meet the demands of customer orders.
 - ▶ This will likely minimize the number of orders that are delayed or not shipped.
 - ▶ Concentrate marketing campaigns in European cities.
 - ▶ This strategy will likely attract new customers because most of the profit came from these cities.