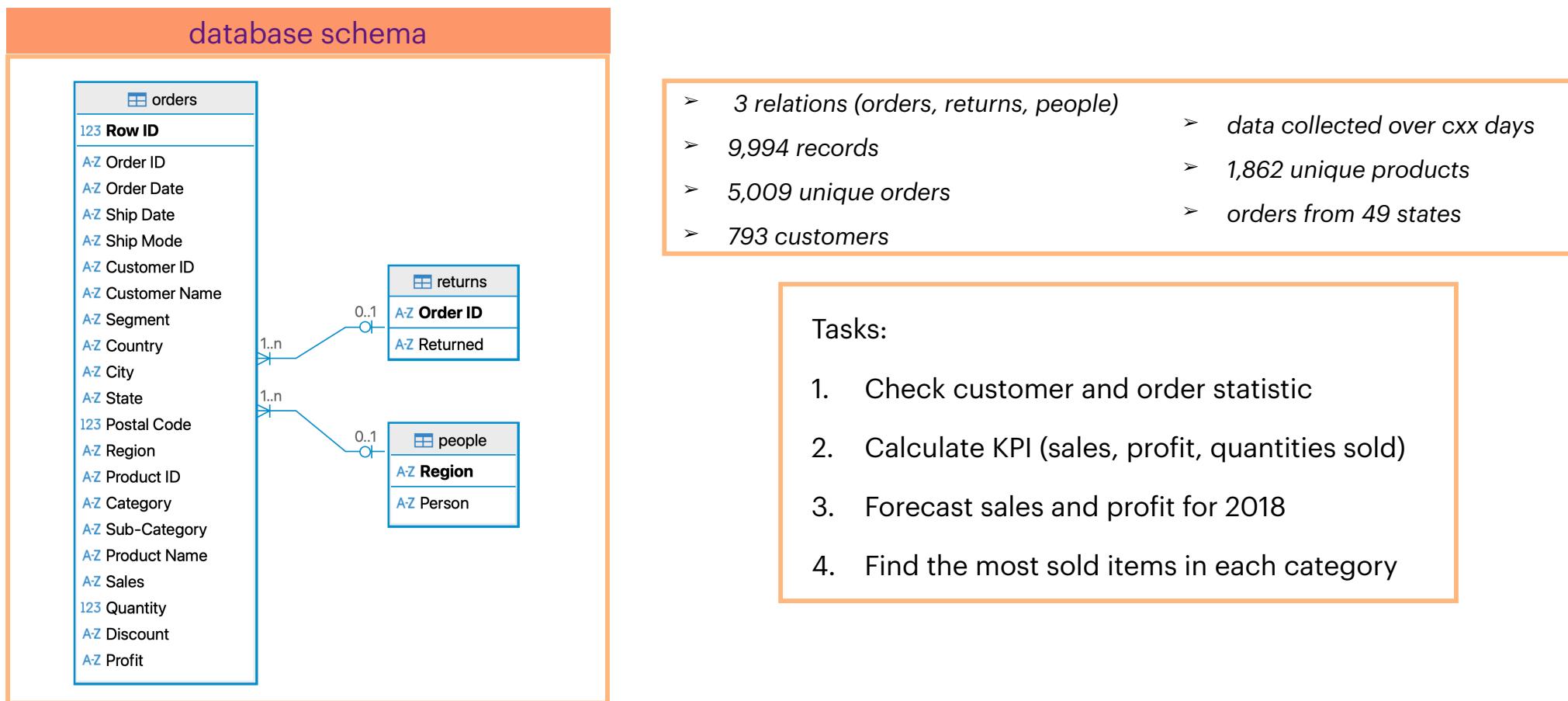


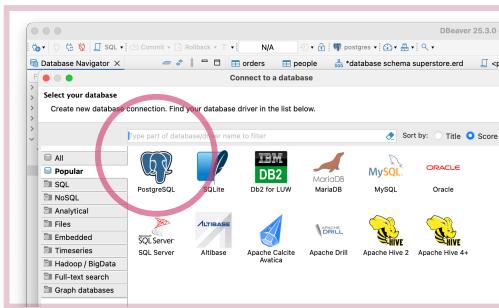
EU Superstore Sales Dataset*

Contains information about products, sales and profits that you can use to identify key areas of improvement within this fictitious company.

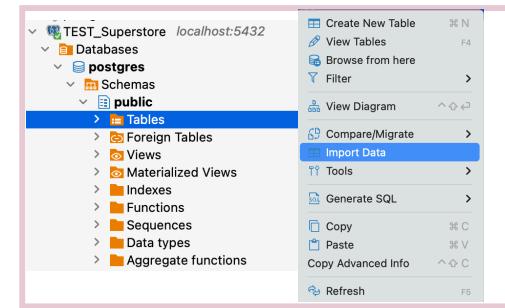


* <https://public.tableau.com/app/learn/sample-data>

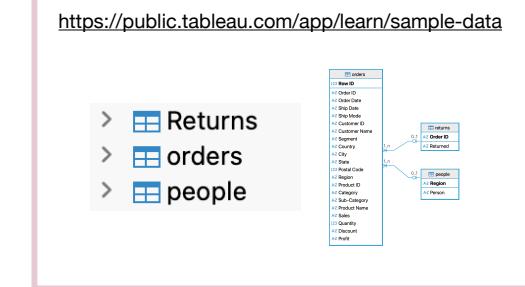
Preprocessing Steps in DBeaver



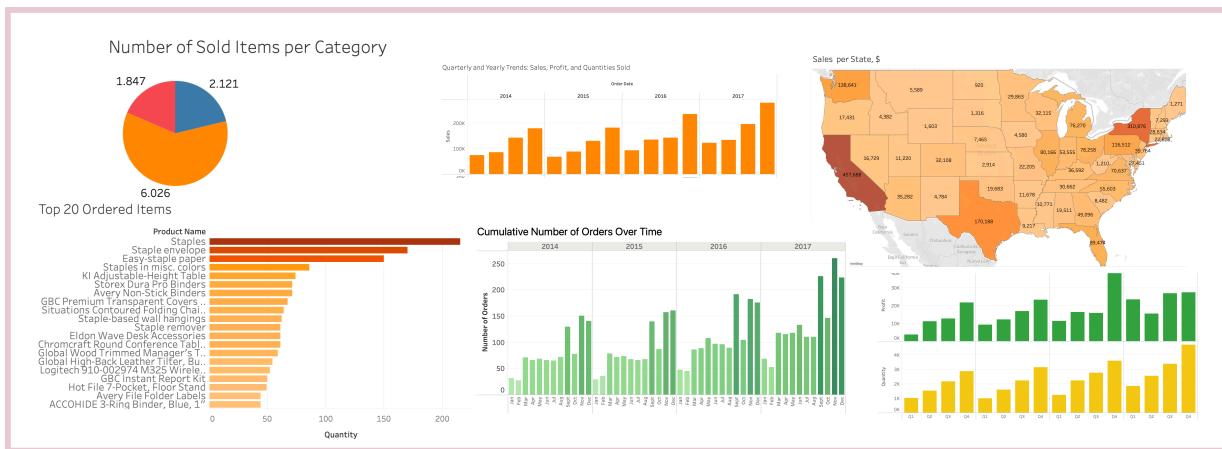
connect to a database



import data



setting primary and foreign keys
and building database schema

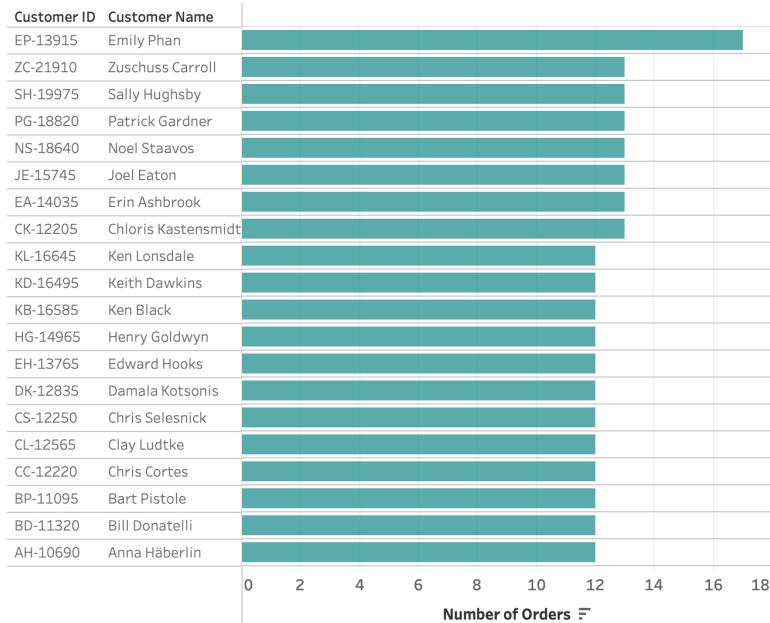


querying and analysis

data types check

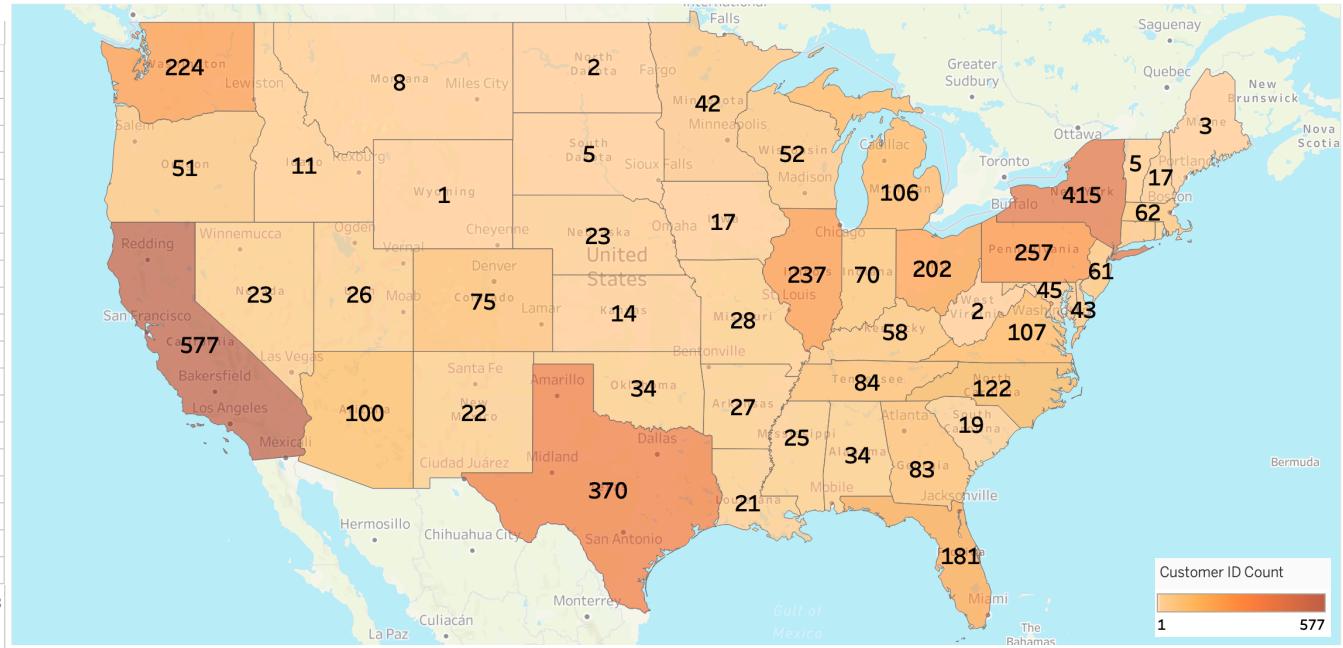
Customer Statistics

Orders per Customer: Top 20



Emily Phan has the highest number of orders: 17

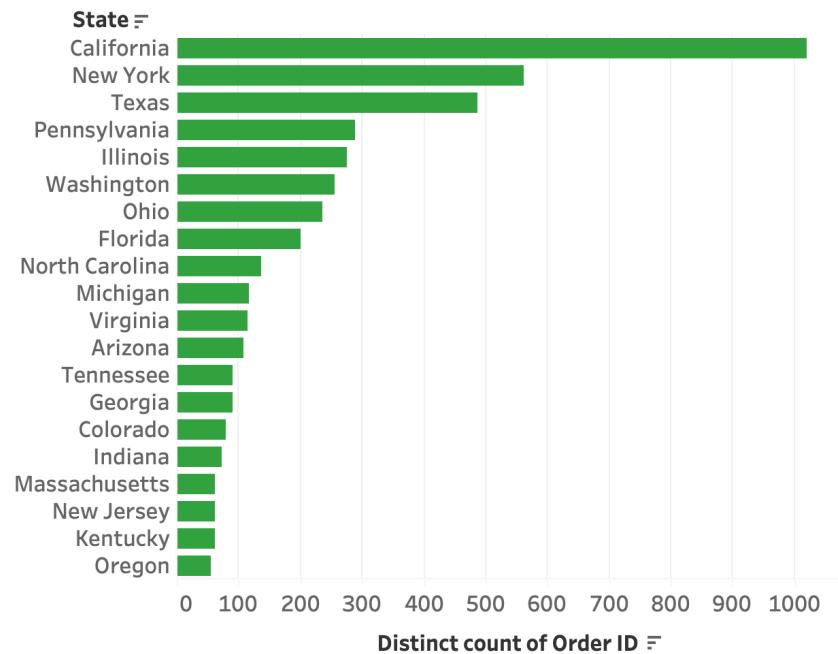
Number of Customers per State



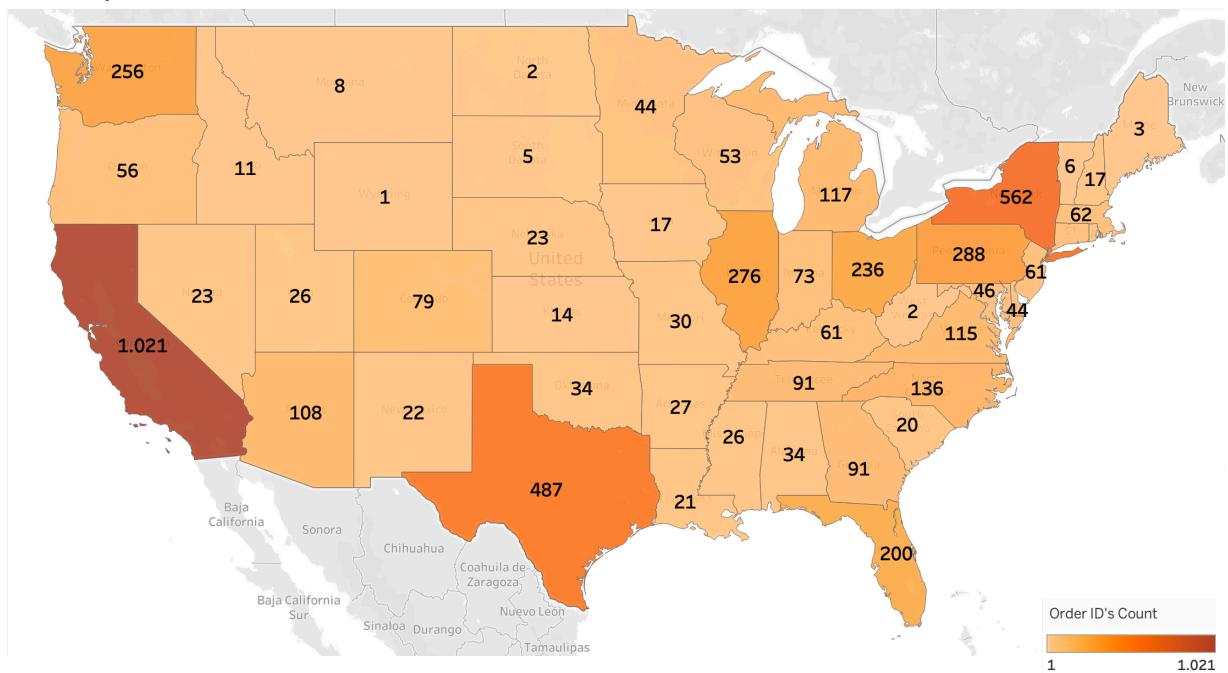
Total number of customers is 793, but many customers made orders from different states

Orders Statistics

Numer of Orders per State: Top 20



Orders per State



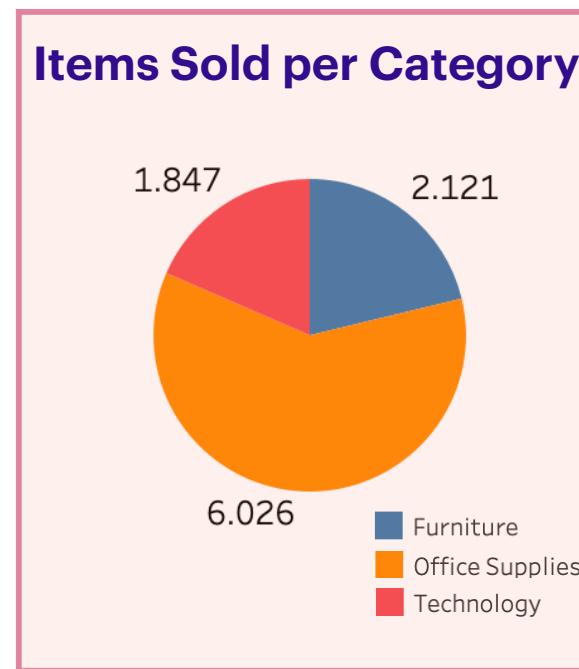
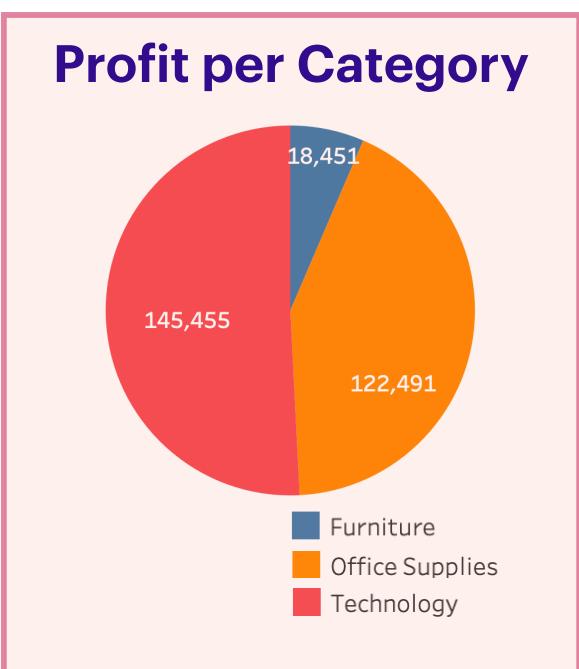
California, New York, and Texas Rank Highest in Orders

Key Performance Indicators

Total Profit
~ 286 397 \$

Total Sales
~ 2 297 200 \$

Quantities Sold
37 873 units



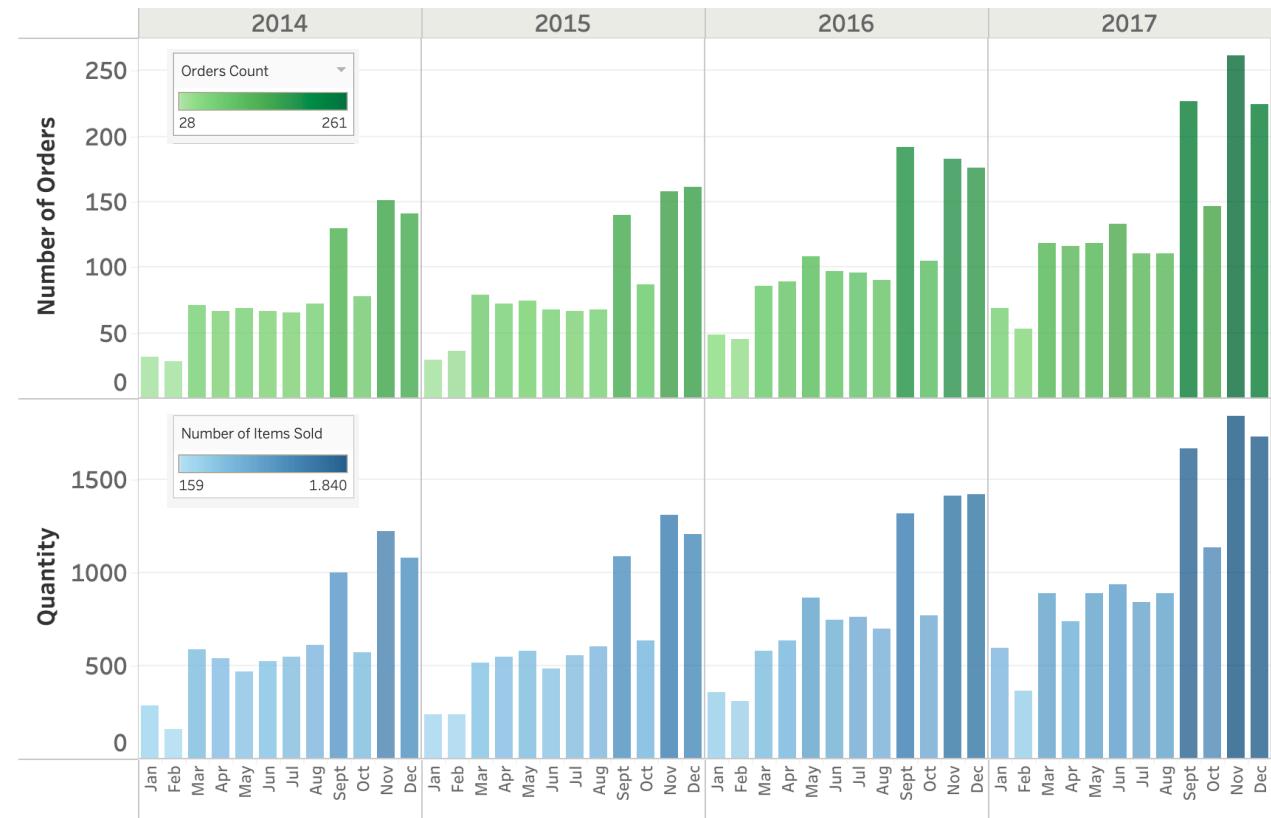
KPI: Number of Orders and Quantities Sold

We can observe a continuous increase in the number of orders, both monthly and year-over-year.

Number of orders grew from 969 in 2014 to 1,687 in 2017 — a **74% increase**.

Number of items sold grew from 7,581 in 2017 to 12,476 in 2017 — a approximately **65% increase**.

Cumulative Number of Orders and Quantities Sold Over Time



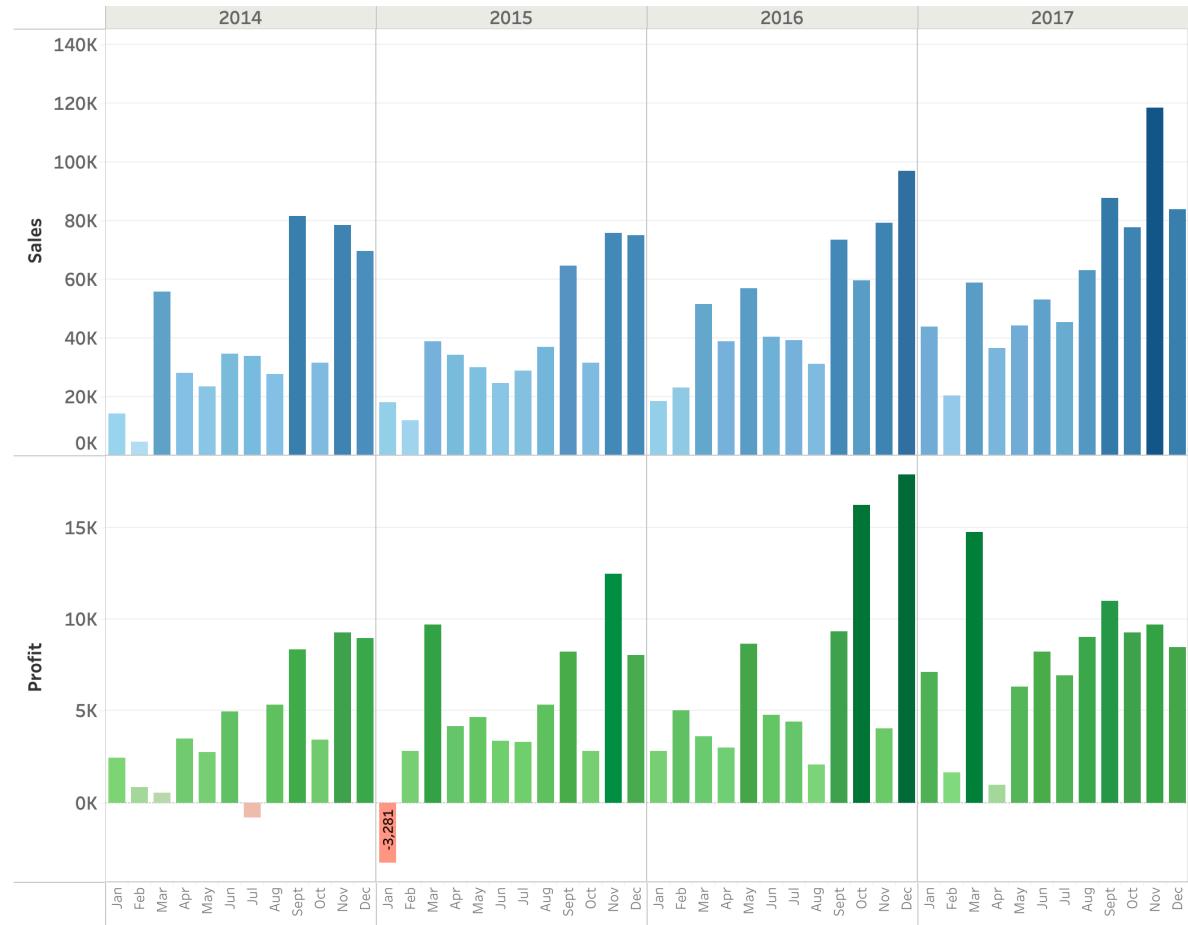
KPI: Sales and Profit

Seasonal trends are evident:
Sales consistently increase in the final quarter
of each year and also show year-over-year
growth.

Revenue grew from 484,247 in 2014 to
733,215 in 2017 — a **51% increase**.

Profit grew from 49,544 in 2017 to 93,439 in
2017 — an approximately **88% increase**.

Sales and Profit Over Time



Forecast: Sales and Profit (Tableau)

Options Used to Create Forecasts

Time series: Year of Order Date
 Measures: Sum of Profit, Sum of Sales
 Forecast forward: 12 months (January 2018 – December 2018)
 Forecast based on: January 2014 – December 2017
 Ignore last: No periods ignored
 Seasonal pattern: 12 month cycle

Sum of Profit

| Initial | Change From Initial | Seasonal Effect | Contribution |
|---------------|------------------------------|-----------------|--------------|
| January 2018 | January 2018 – December 2018 | High Low | Trend Season |
| 8,195 ± 7,655 | 1,445 | None | 100.0% 0.0% |

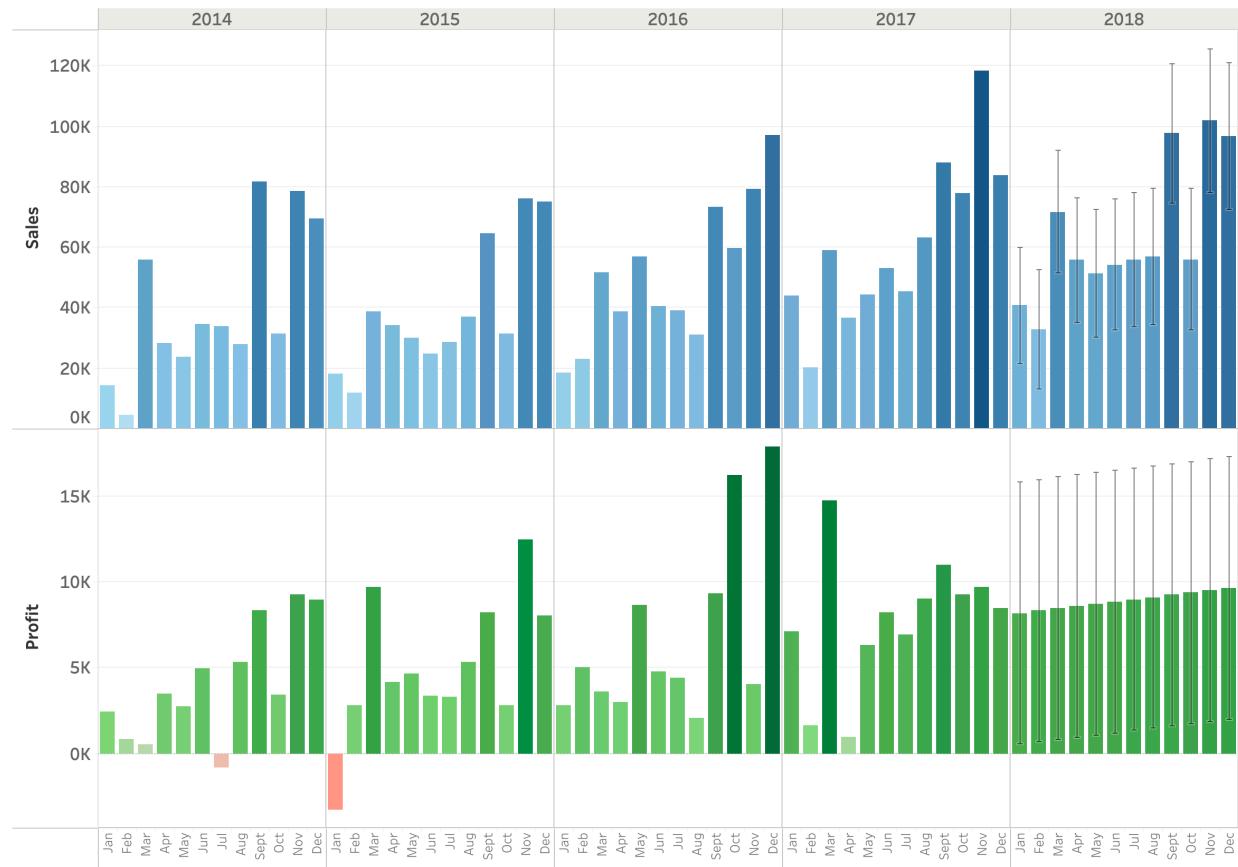
Sum of Sales

| Initial | Change From Initial | Seasonal Effect | Contribution |
|-----------------|------------------------------|-----------------|------------------------------|
| January 2018 | January 2018 – December 2018 | High | Low |
| 40,724 ± 19,175 | 56,027 | November 2018 | 37,518 February 2018 -31,547 |

Revenue grew from 733,215 in 2017 to 771,616 in 2018 — a **5% increase**.

Profit grew from 93,439 in 2017 to 107,007 in 2018 — an approximately **15% increase**.

Sales and Profit Forecast for 2018

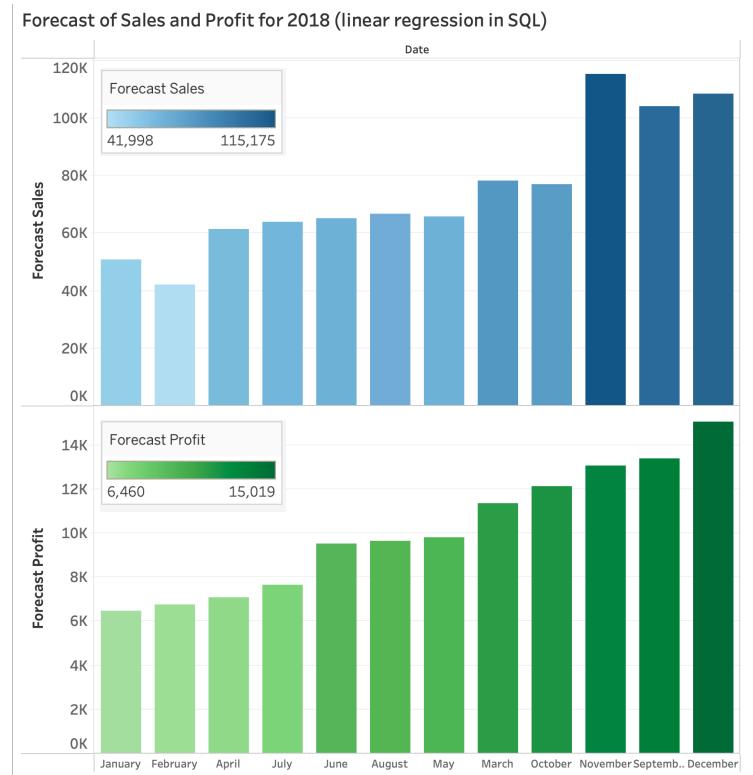


Rough Forecast: Sales and Profit (PostgreSQL)

- *aggregation of data by months*
- *linear fitting*
- *projection onto the next 12 months*

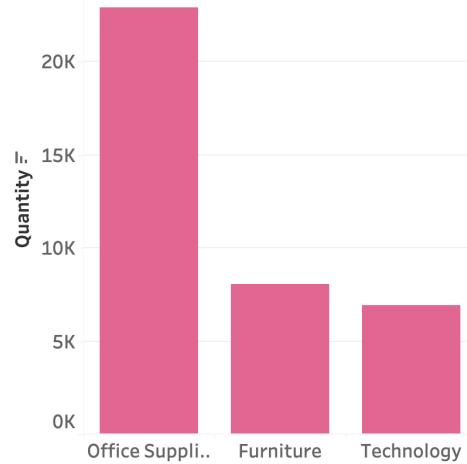
Revenue grew from 733,215 in 2017 to 899,023 in 2018 — a **22% increase**.

Profit grew from 93,439 in 2017 to 121,715 in 2017 — an approximately **30% increase**.



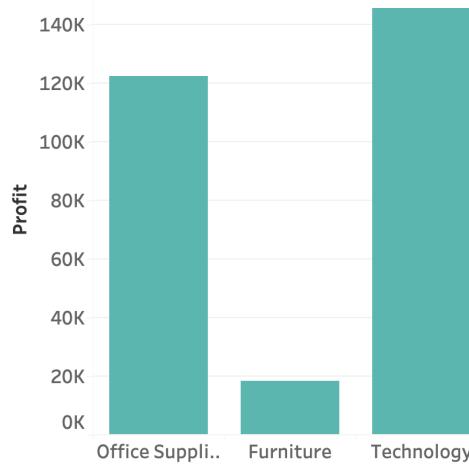
Items and Category Statistics

Total Quantity Sold per Category



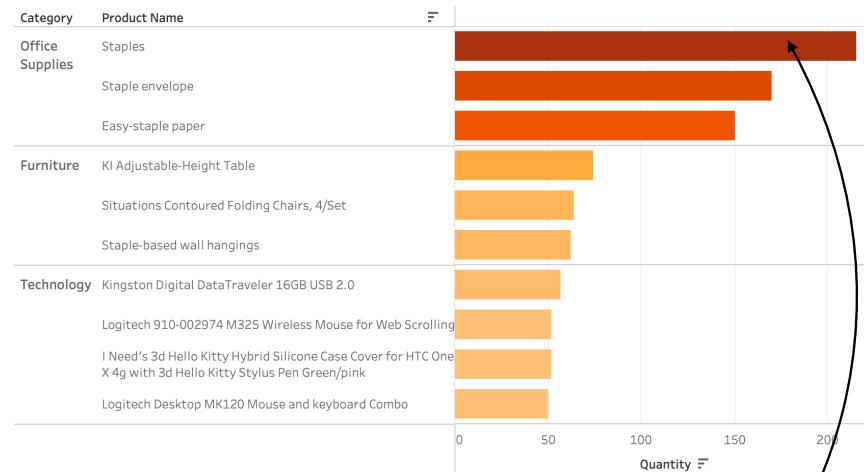
Office supplies is the most popular category

Profit per Category



Technology brought the highest profit overall

Top 3 Sold Items in Each Category



Staples were the most sold items

Overview

- The maximum number of orders per customer is 17.
- ~ 40% of all the orders are coming from California, New York, and Texas.
- Total sales over 4 years is ~ **2,297,200 \$**
- Total profit over 4 years is ~ **286,397 \$**
- Total quantity of items sold is **37,873**
- Number of orders grew from 969 in 2014 to 1,687 in 2017 (a **74%** increase).
- Number of items sold grew from 7,581 in 2017 to 12,476 in 2017 (an approximately **65%** increase)
- 3 top sold items from each category are: staples (215 items), KI Adjustable-Height Table (74 items), and Kingston Digital DataTraveler 16GB USB 2.0 (57 items)