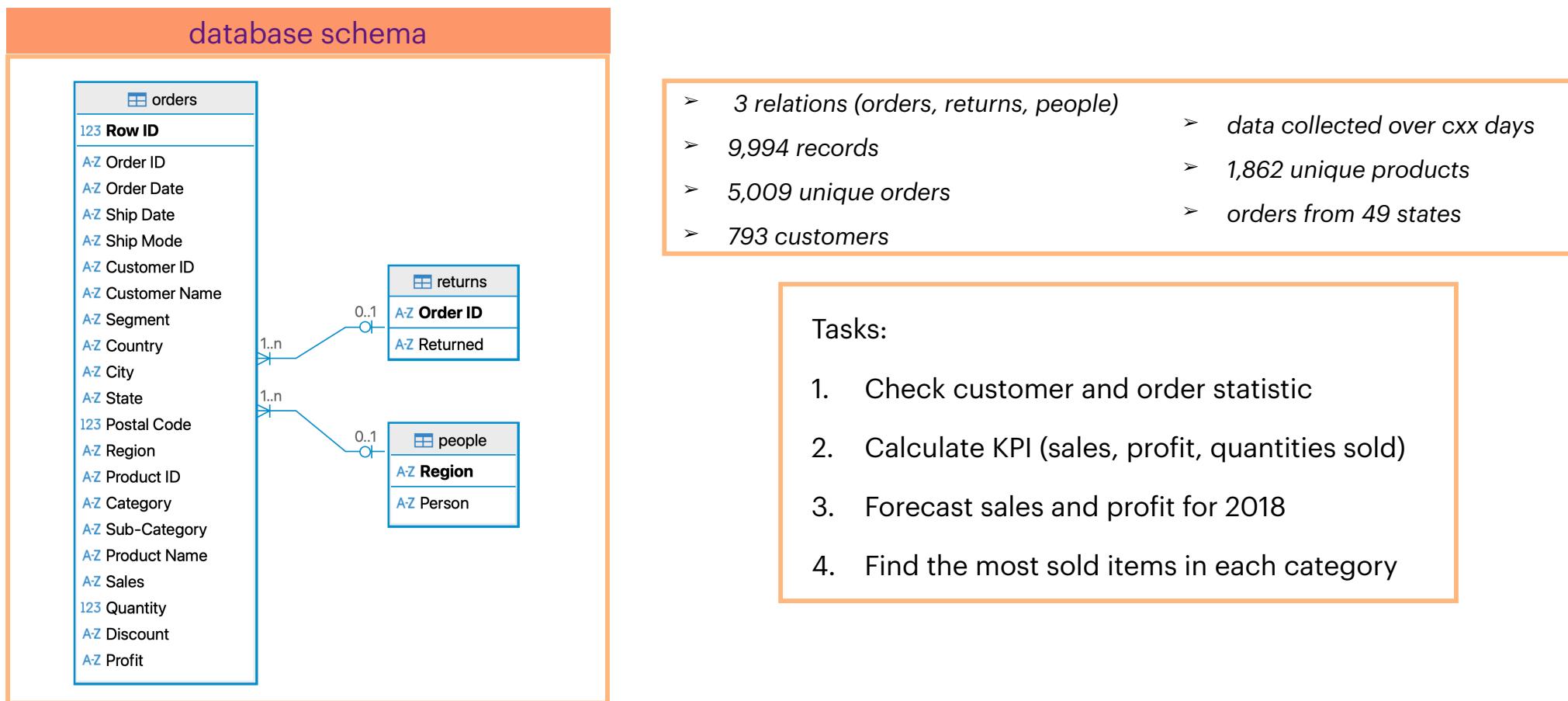


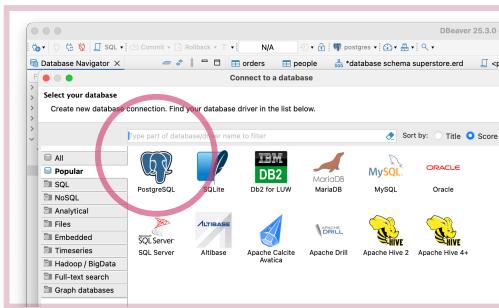
EU Superstore Sales Dataset*

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

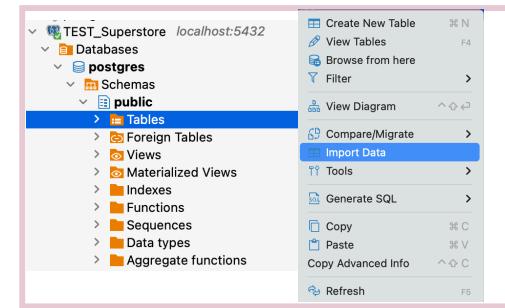


* <https://public.tableau.com/app/learn/sample-data>

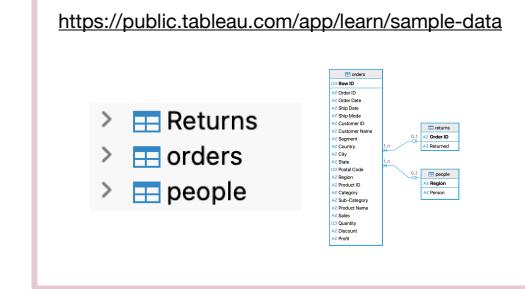
Preprocessing Steps in DBeaver



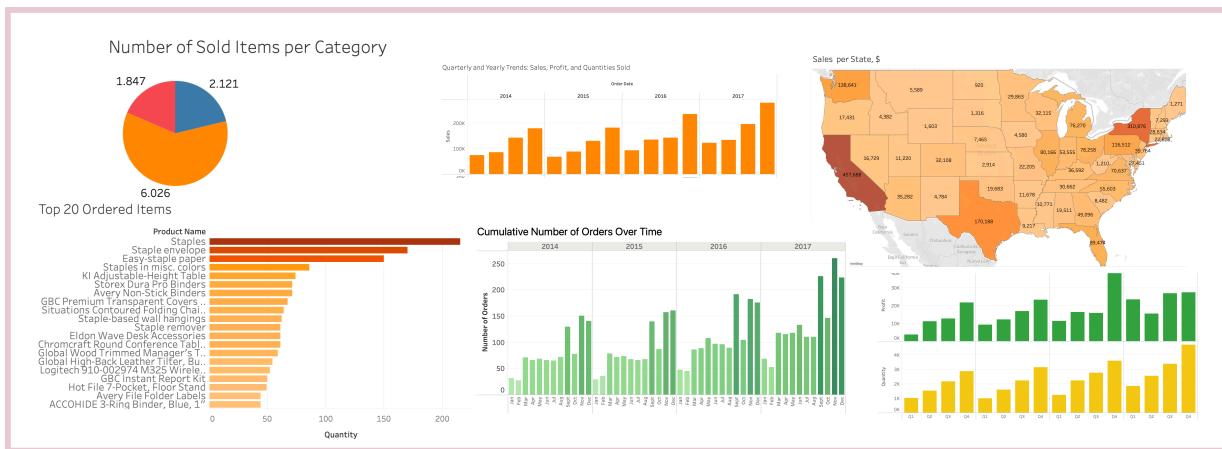
connect to a database



import data



setting primary and foreign keys
and building database schema



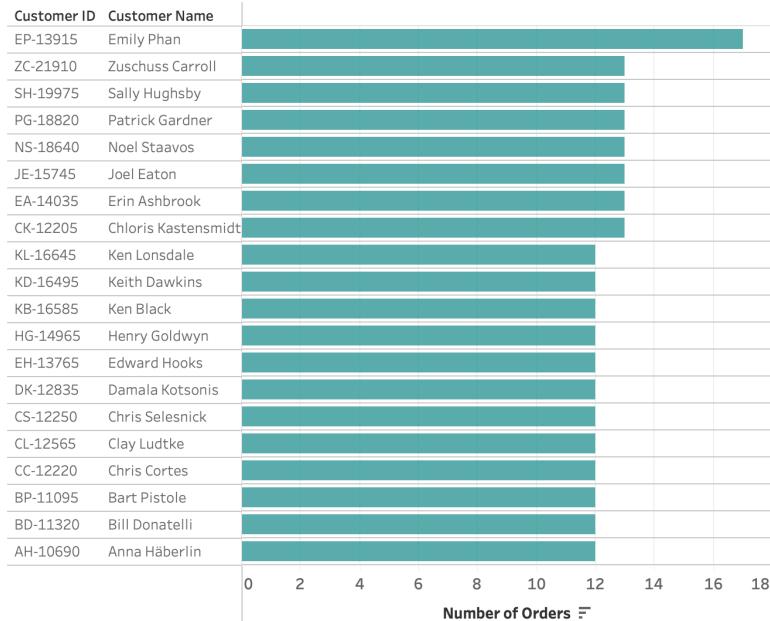
querying and analysis

1 int4	123 Row ID
2 varchar(50)	A2 Order ID
3 varchar(50)	A2 Order Date
4 date	A2 Ship Date
5 varchar(50)	A2 Ship Mode
6 varchar(50)	A2 Customer ID
7 varchar(50)	A2 Customer Name
8 varchar(50)	A2 Segment
9 varchar(50)	A2 Country
10 varchar(50)	A2 City
11 varchar(50)	A2 State
12 int4	123 Postal Code
13 varchar(50)	A2 Region
14 varchar(50)	A2 Product ID
15 varchar(50)	A2 Category
16 varchar(50)	A2 Sub-Category
17 varchar(128)	A2 Product Name
18 varchar(50)	A2 Sales
19 int4	A2 Quantity
20 varchar(50)	A2 Discount
21 varchar(50)	A2 Profit

data types check

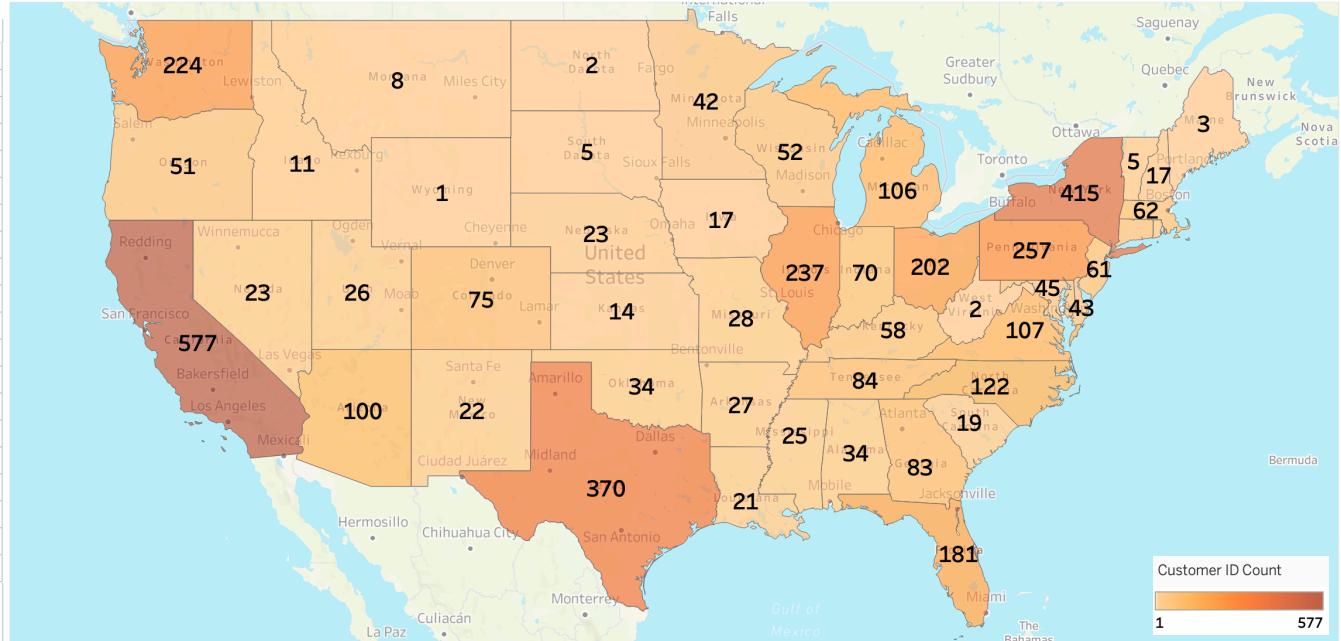
Customer Statistics

Orders per Customer: Top 20



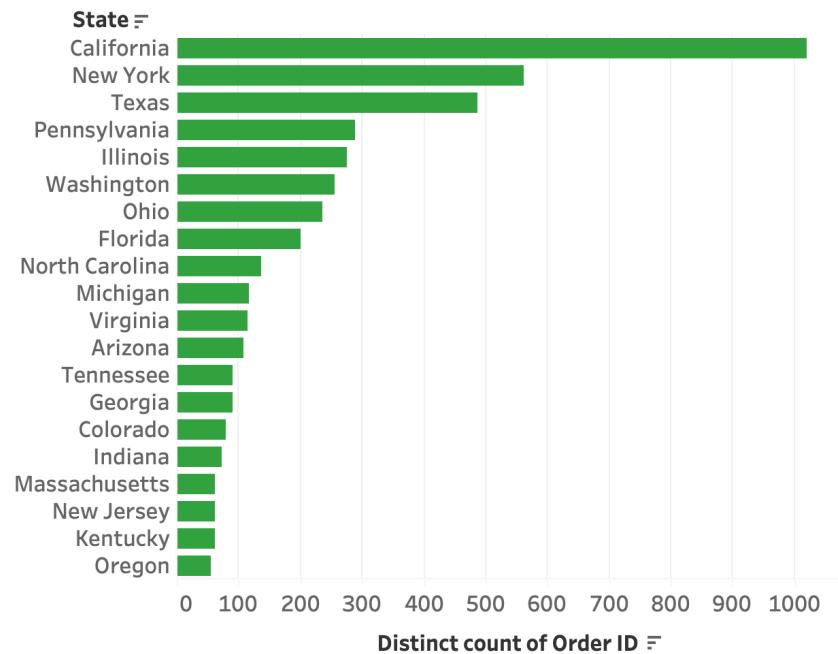
Emily Phan has the highest number of orders: 17

Number of Customers per State

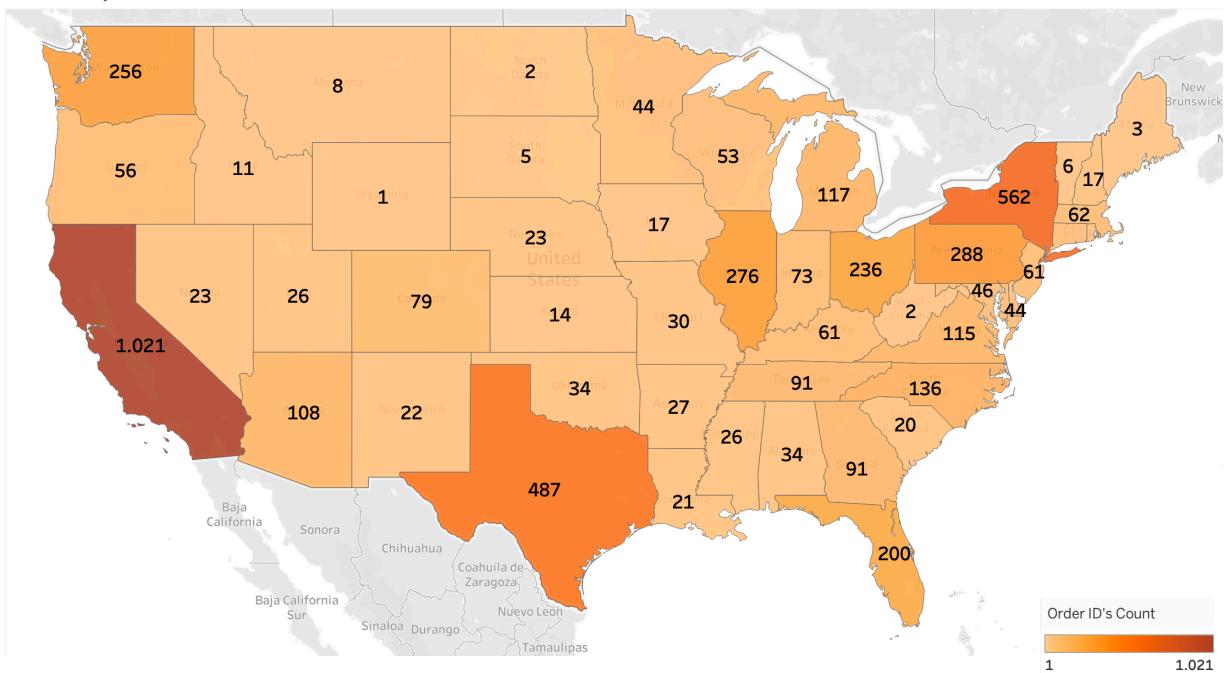


Orders Statistics

Numer of Orders per State: Top 20



Orders per State



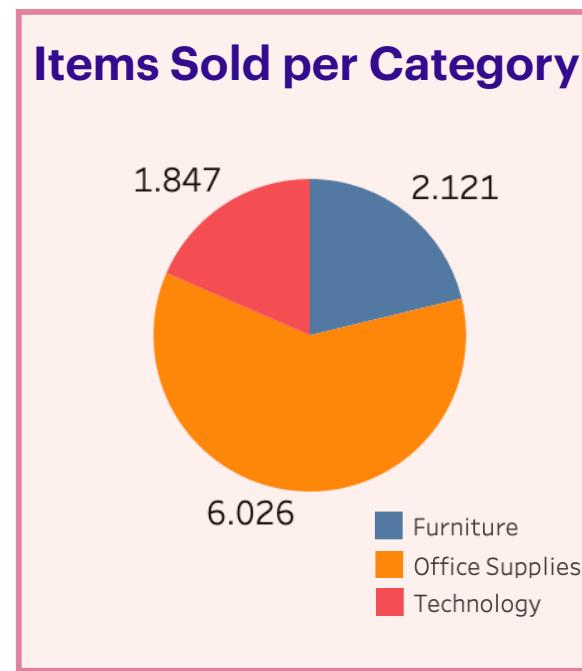
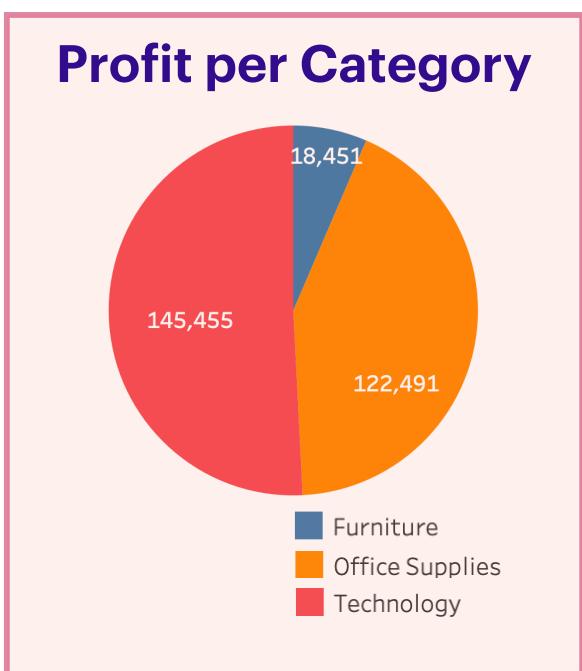
California, New York, and Texas Rank Highest in Orders

Key Performance Indicators

Total Profit
~ 286 397 \$

Total Sales
~ 2 297 200 \$

Quantities Sold
37 873 units



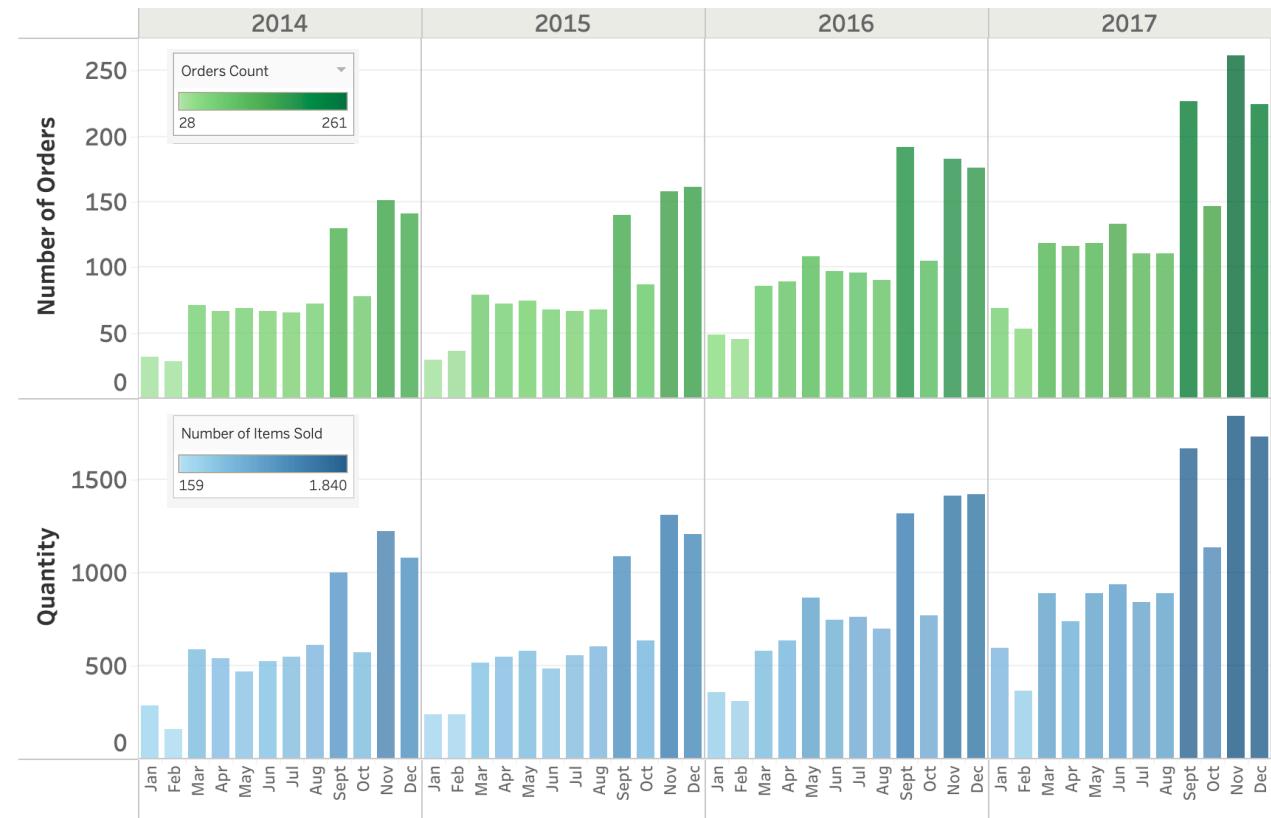
KPI: Number of Orders and Quantities Sold

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



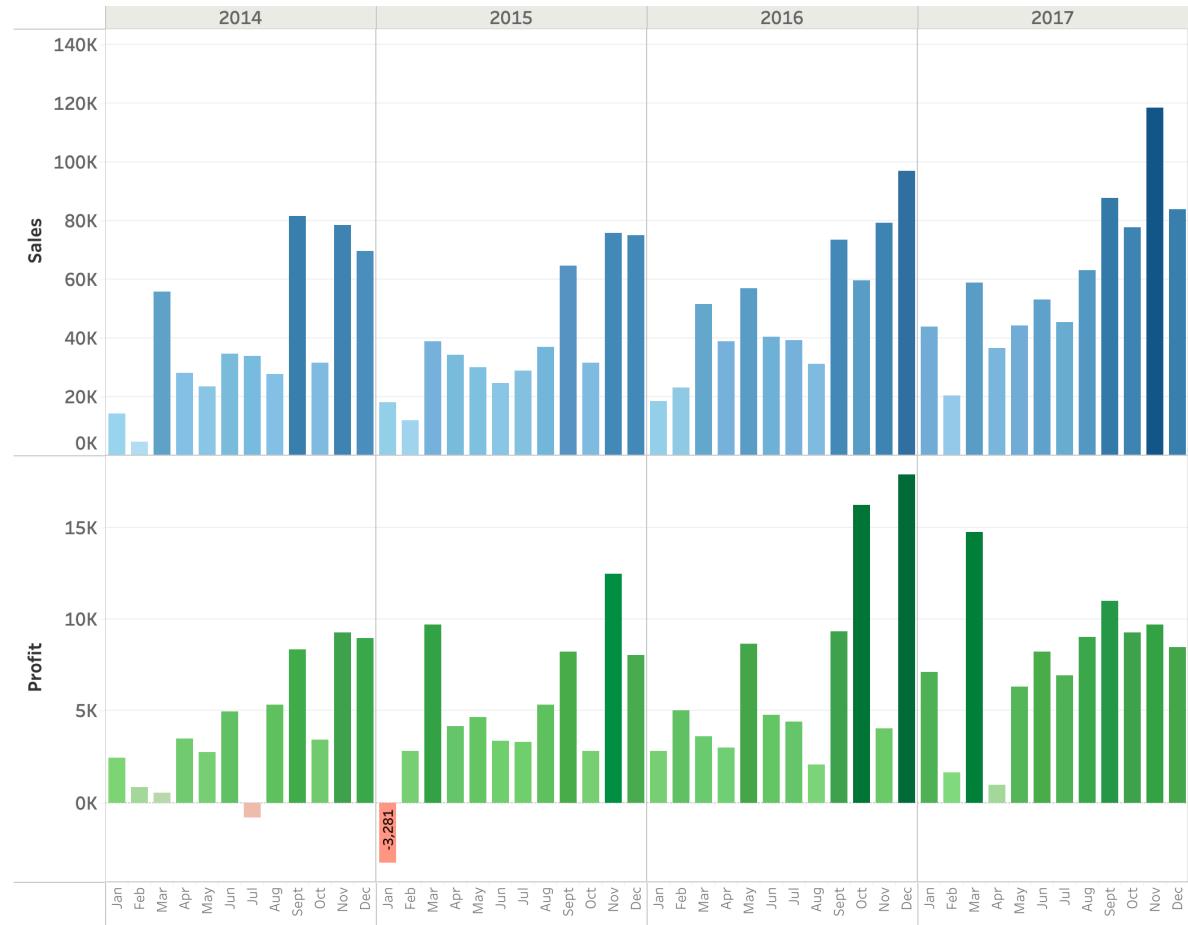
KPI: Sales and Profit

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%

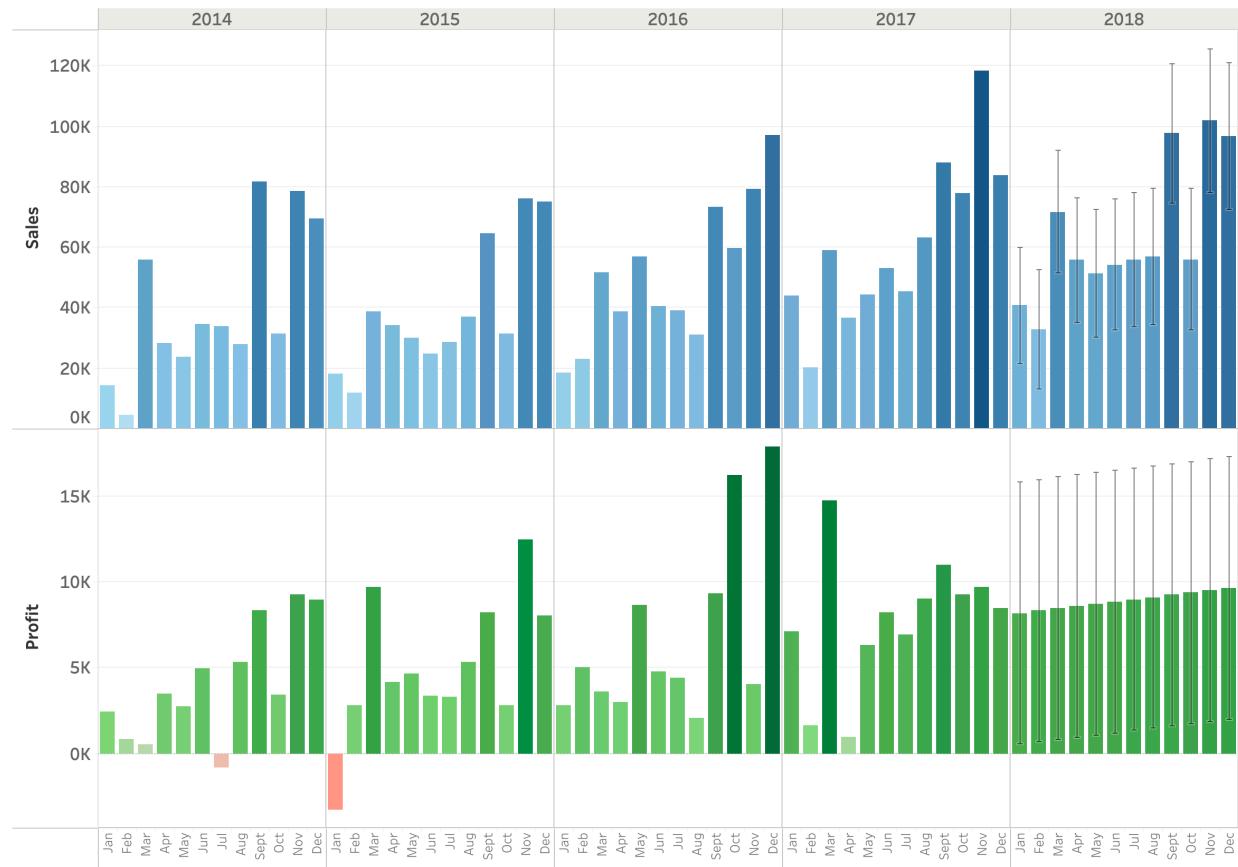
Sum of Sales

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

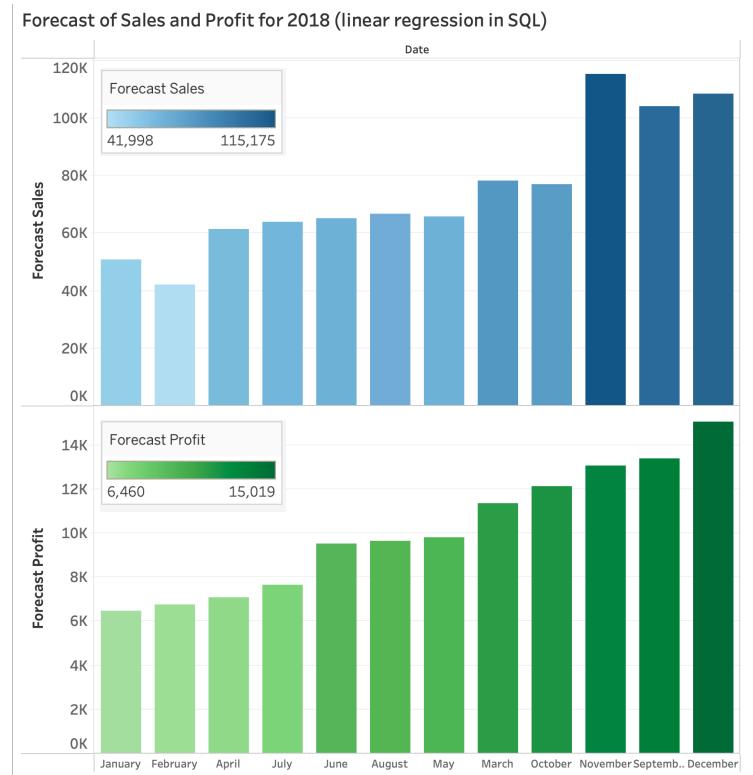


Rough Forecast: Sales and Profit (PostgreSQL)

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

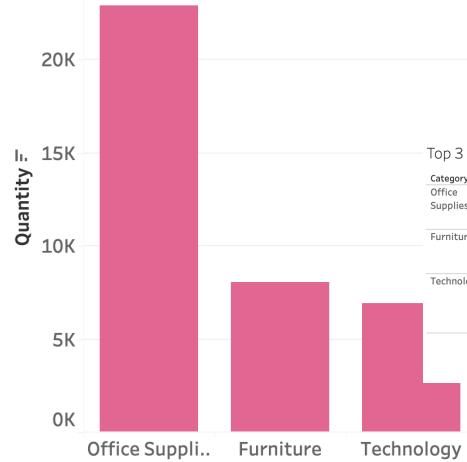
Revenue grew from 733,215 in 2017 to 899,023 in 2018 — a **22% increase**.

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

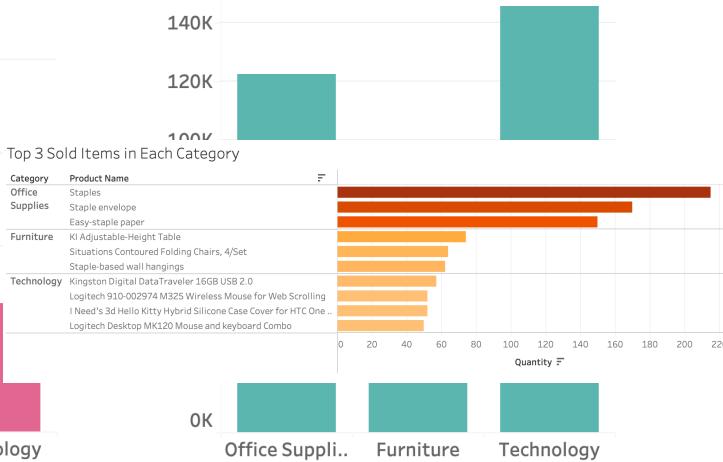


Items and Category Statistics

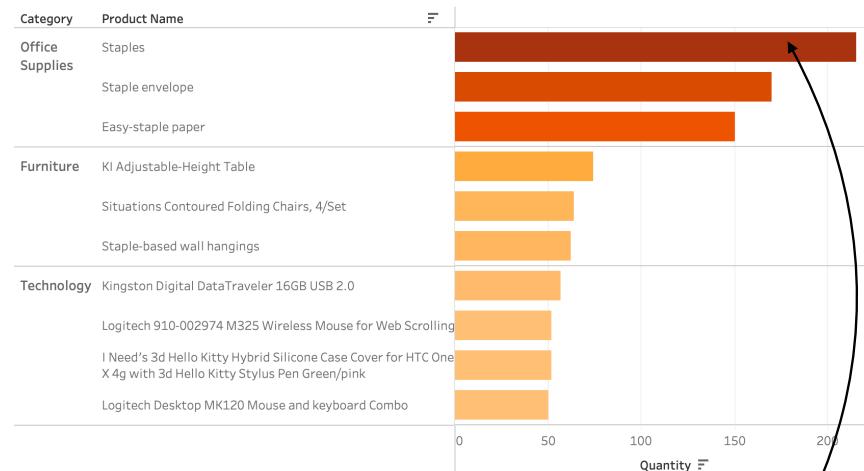
Total Quantity Sold per Category



Profit per Category



Top 3 Sold Items in Each Category



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)