

Business Analytics



Overview

Online purchases of goods including books, toys, clothing, footwear, food, furniture, and other home things are made possible via e-commerce platforms like Unicorn. Data on unicorn sales from 2015 to 2018 were made available.

Problem: Business growth opportunities for Unicorn

Analysis of Online Data

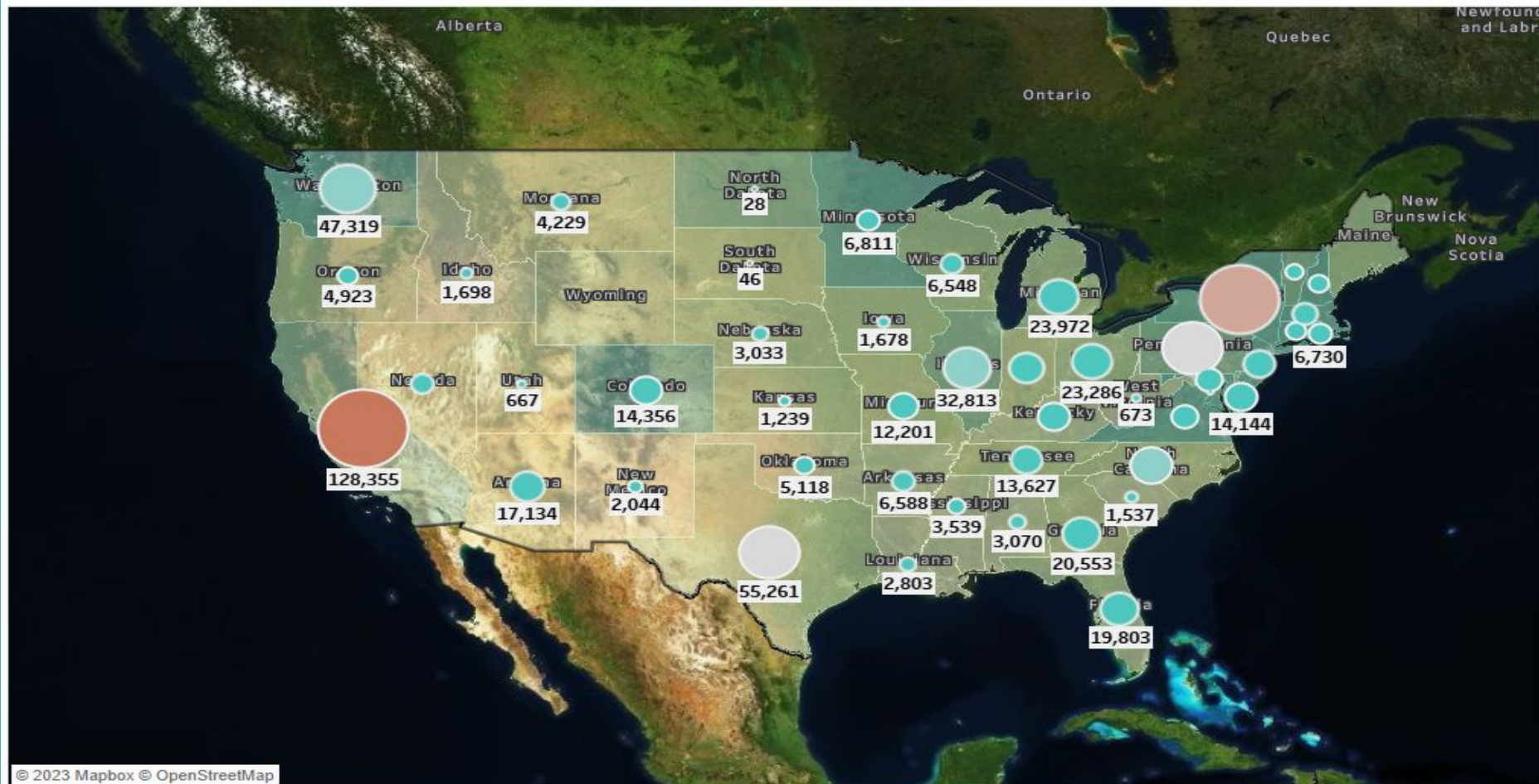
Data is presented in numerous tables with the following names:

1. Orders tables
2. Customers' table
3. Product table
4. Order details table

Enlightening observations and weak points

- With the use of SQL queries, we were able to perform exploratory analysis on the data and find solutions for a number of business concerns.
- City, location, and product plus category-wise, we discovered a number of findings.
- With only distinct columns, we connected all four tables.
- For data cleaning and additional profit and variance analysis, we used spreadsheets.
- In order to present the insightful analysis and advice, we created a graphic using Tableau.

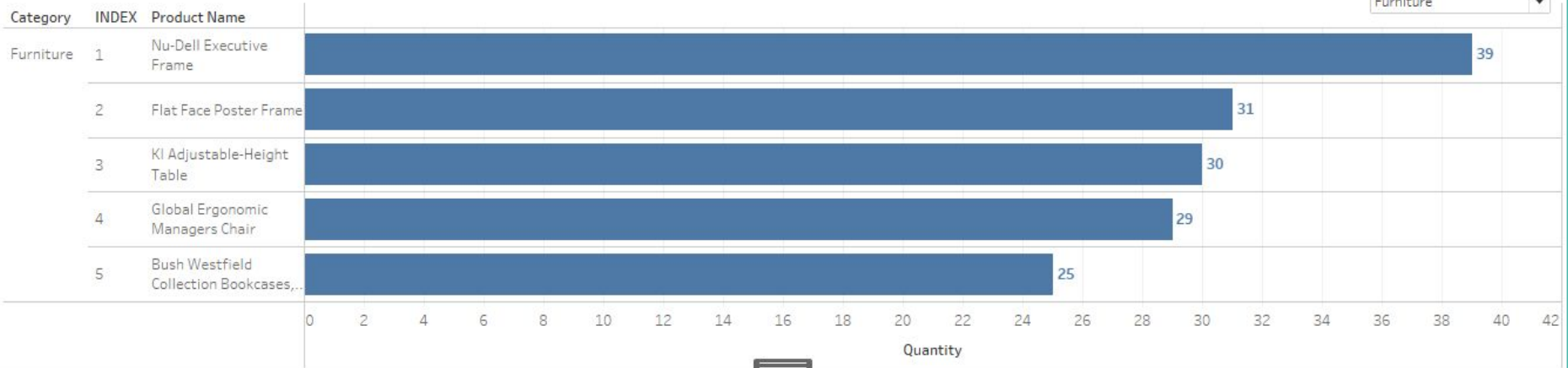
Sales & Discount by states



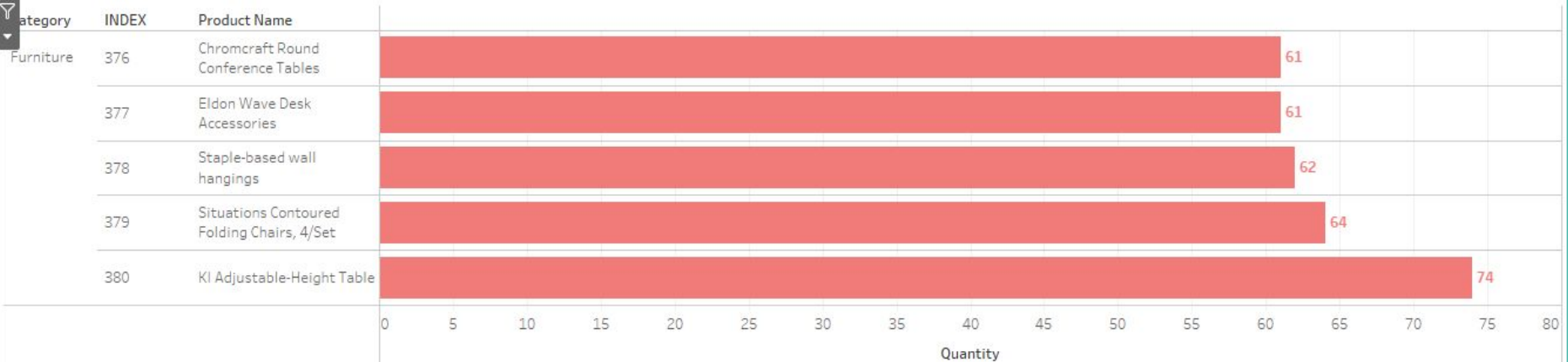
TOP 5 items in each category across all states

Category

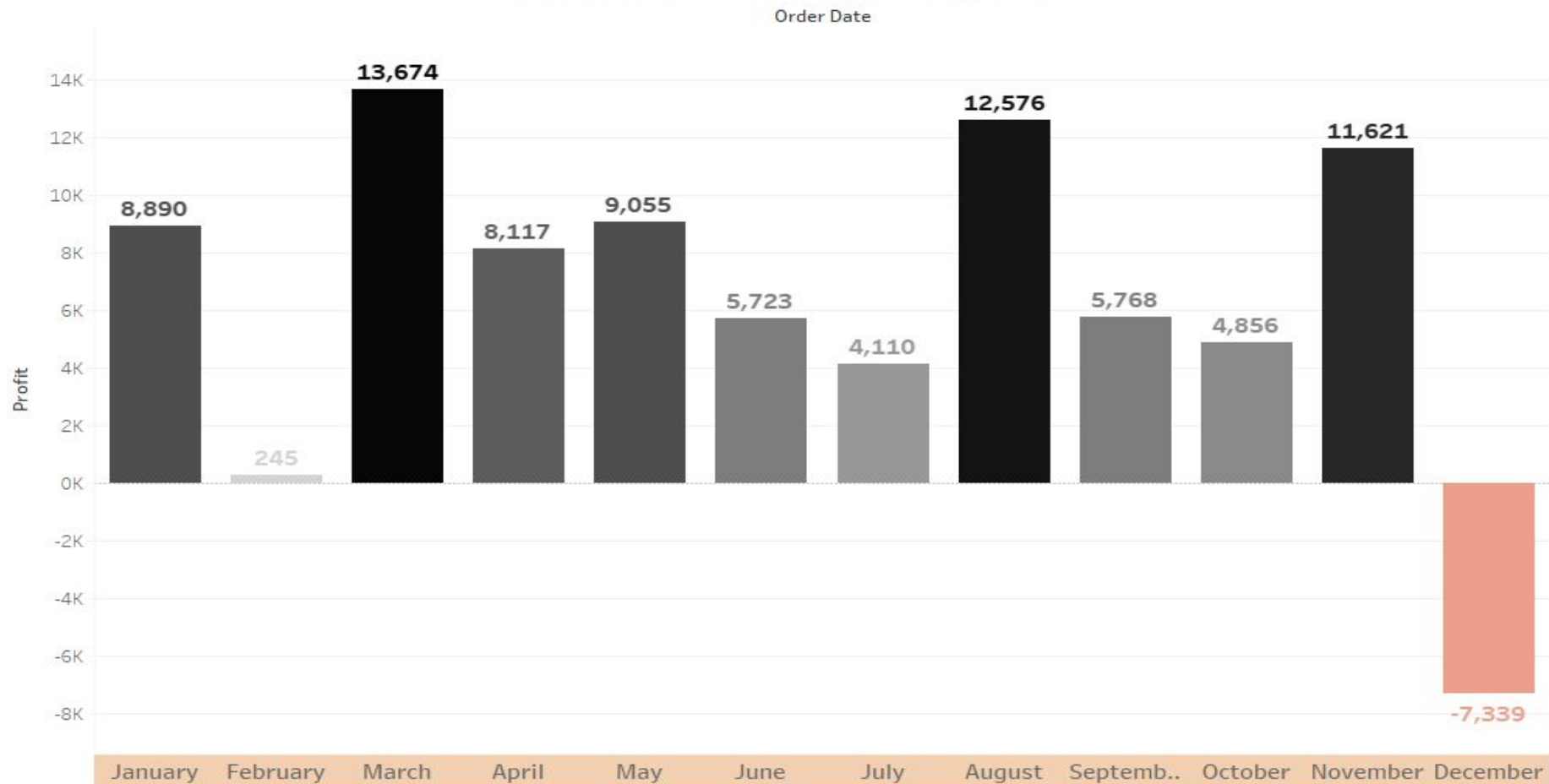
Furniture



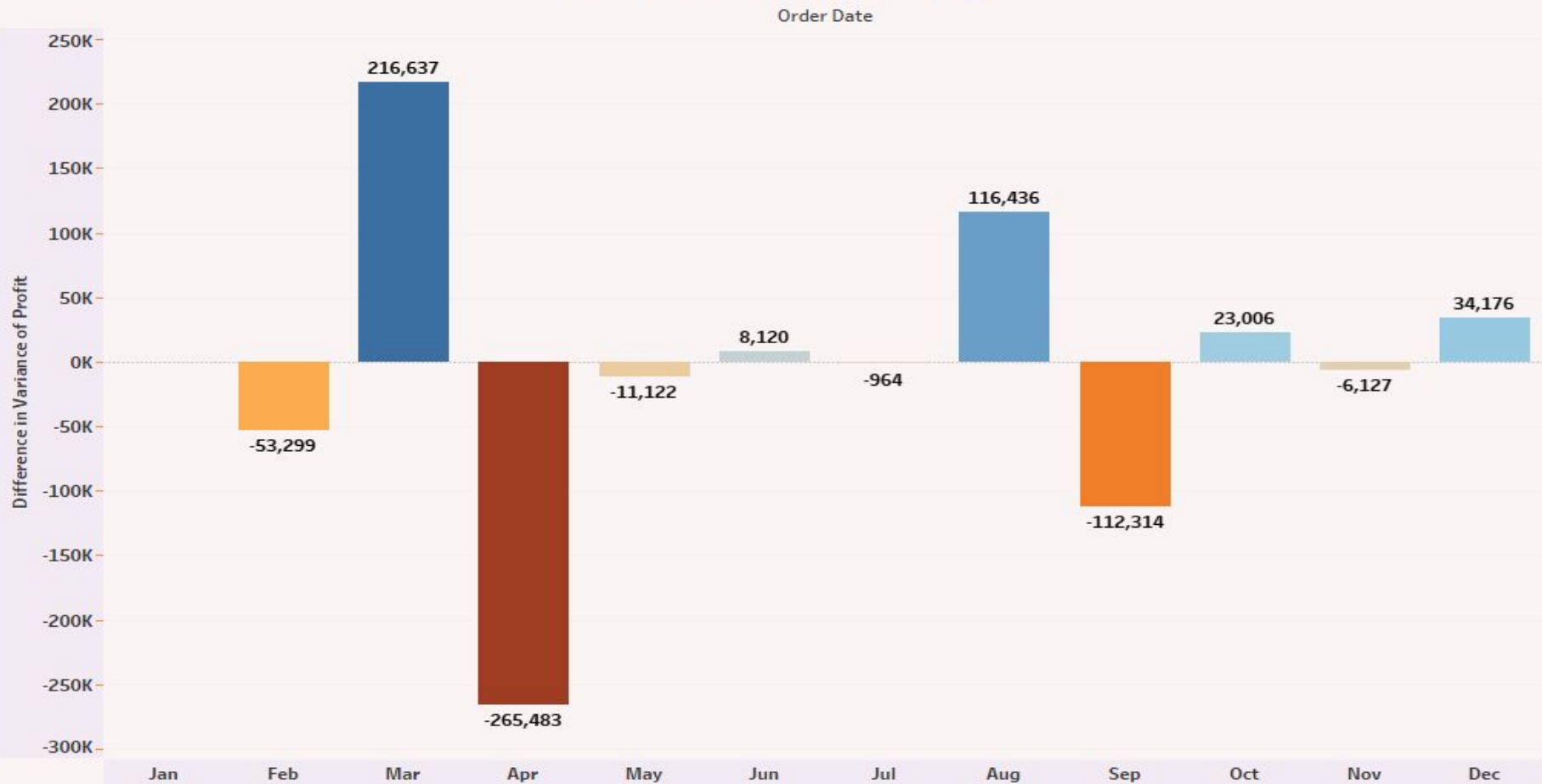
BOTTOM 5 items in each category across all states



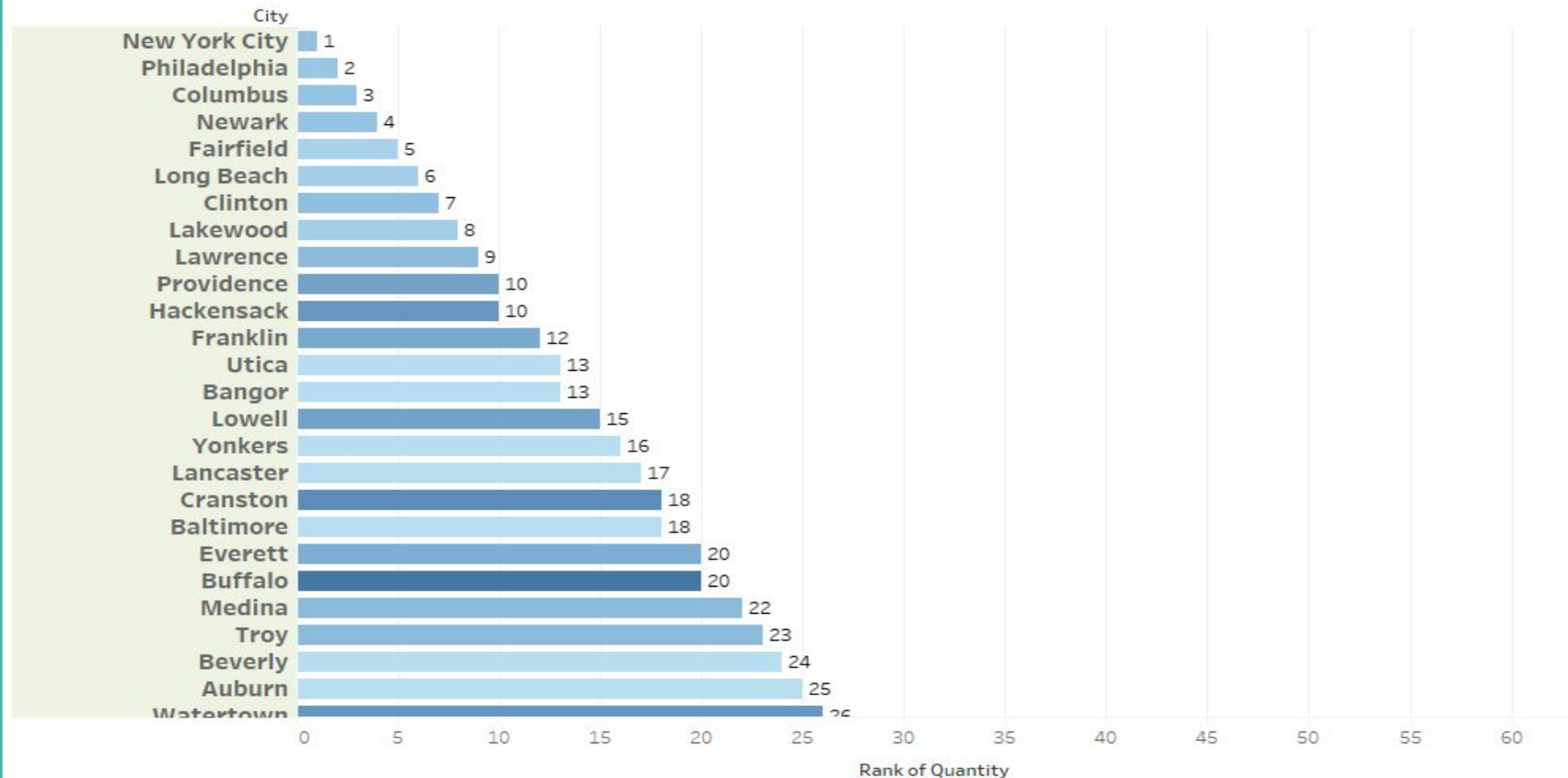
2018's overall most profitable month



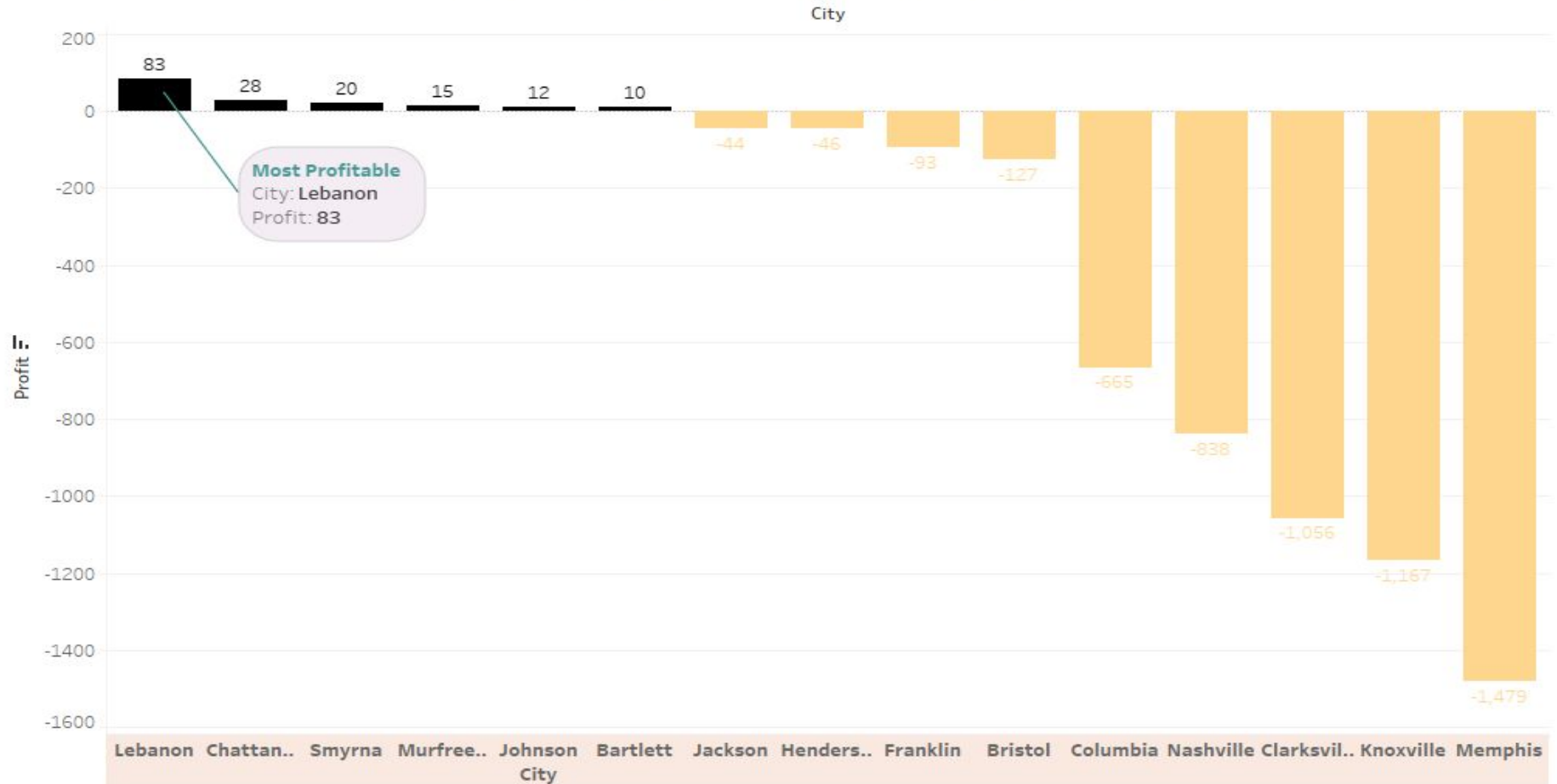
Varying monthly profits in 2018



2015 Rankings for every city in the East



Most financially stable city in Tennessee State



LEBANON's average annual profit for all years

Lebanon

27.67

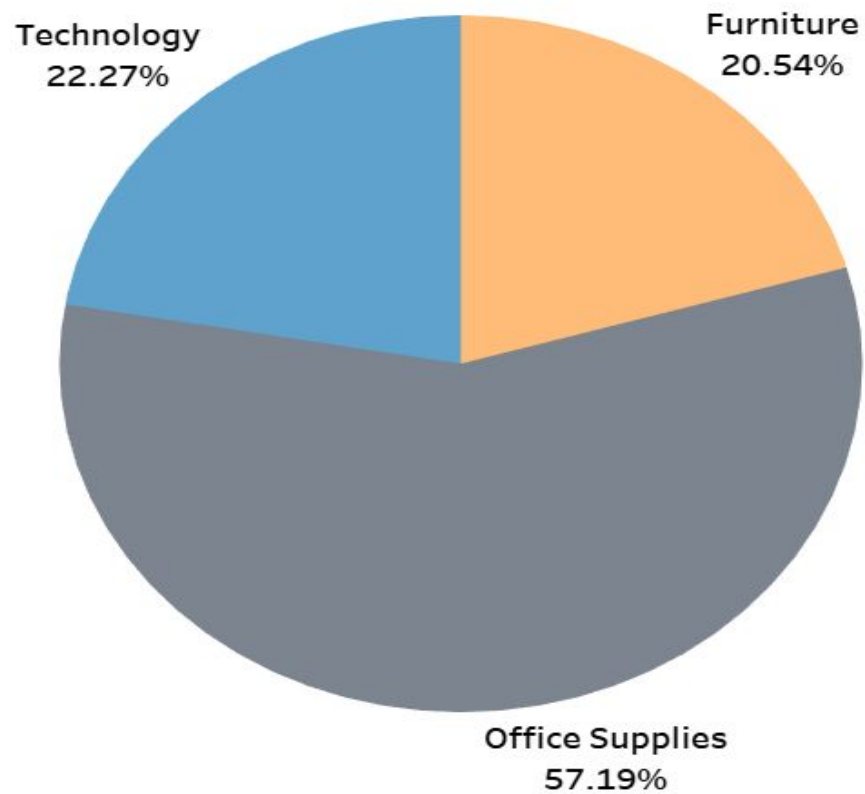


Country	Average Annual Profit
Lebanon	27.67

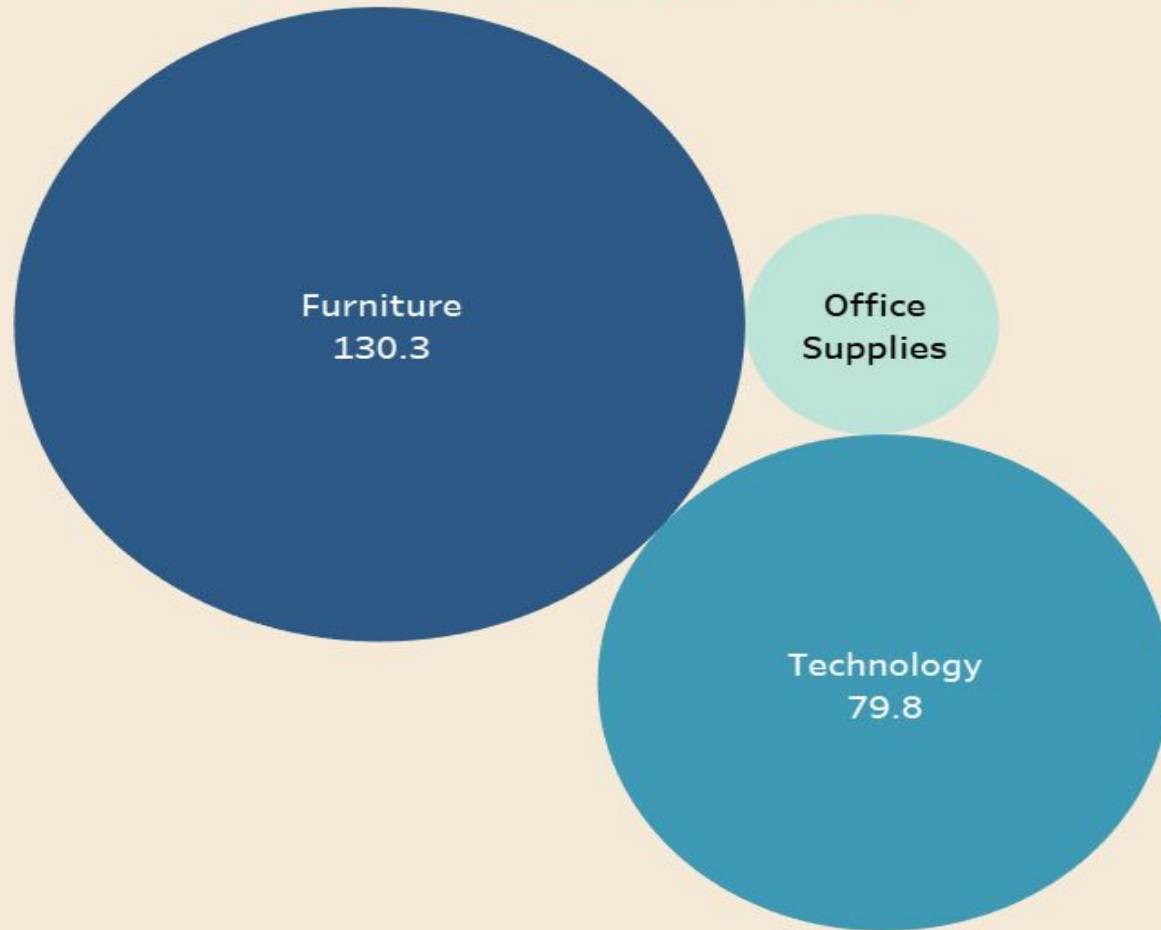
% of products in various REGIONS for each category



% of items under the categories



Profitable product category on average



Conclusions:

- Percentage of Products under Furniture is Lower comparatively though it is most profitable.
- Office Supplies has higher product percentage and regional penetration though the least profitable it is.
- TOP ranked cities over the 4 years are New York, Philadelphia and Columbus.
- Most Financially stable city is Lebanon in the state of Tennessee in average as well as overall.
- Most Profitable month for the year 2018 was March and varying monthly profit for the year 2018 was also March.
- In state comparison California has the highest sales in nos.

Recommendations

1. With a higher product proportion, the regional penetration of the category of Furniture & Technology should rise.
 2. More product advertising needs to be done in December, January, and February to boost monthly income.
 3. A demand-driven inventory of the worst-performing products should be maintained.
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