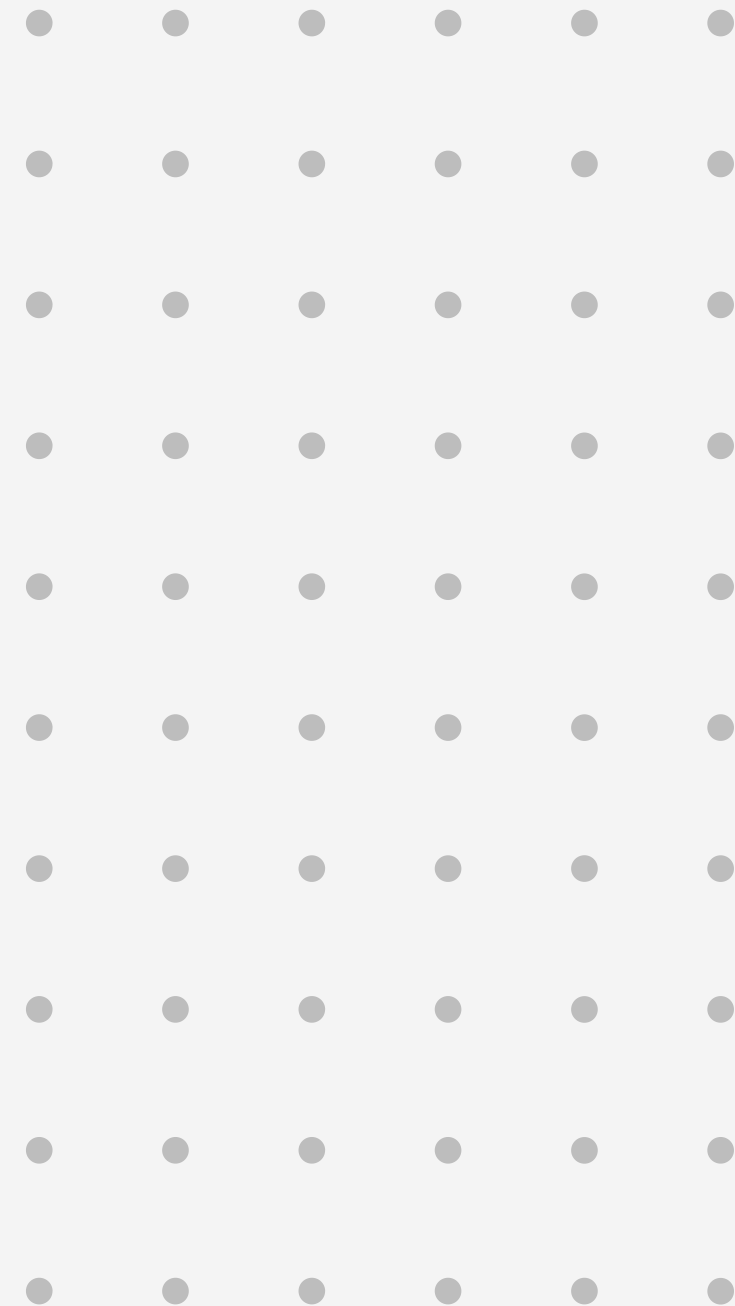




# Why Do We have a Loss?

2022 August 09

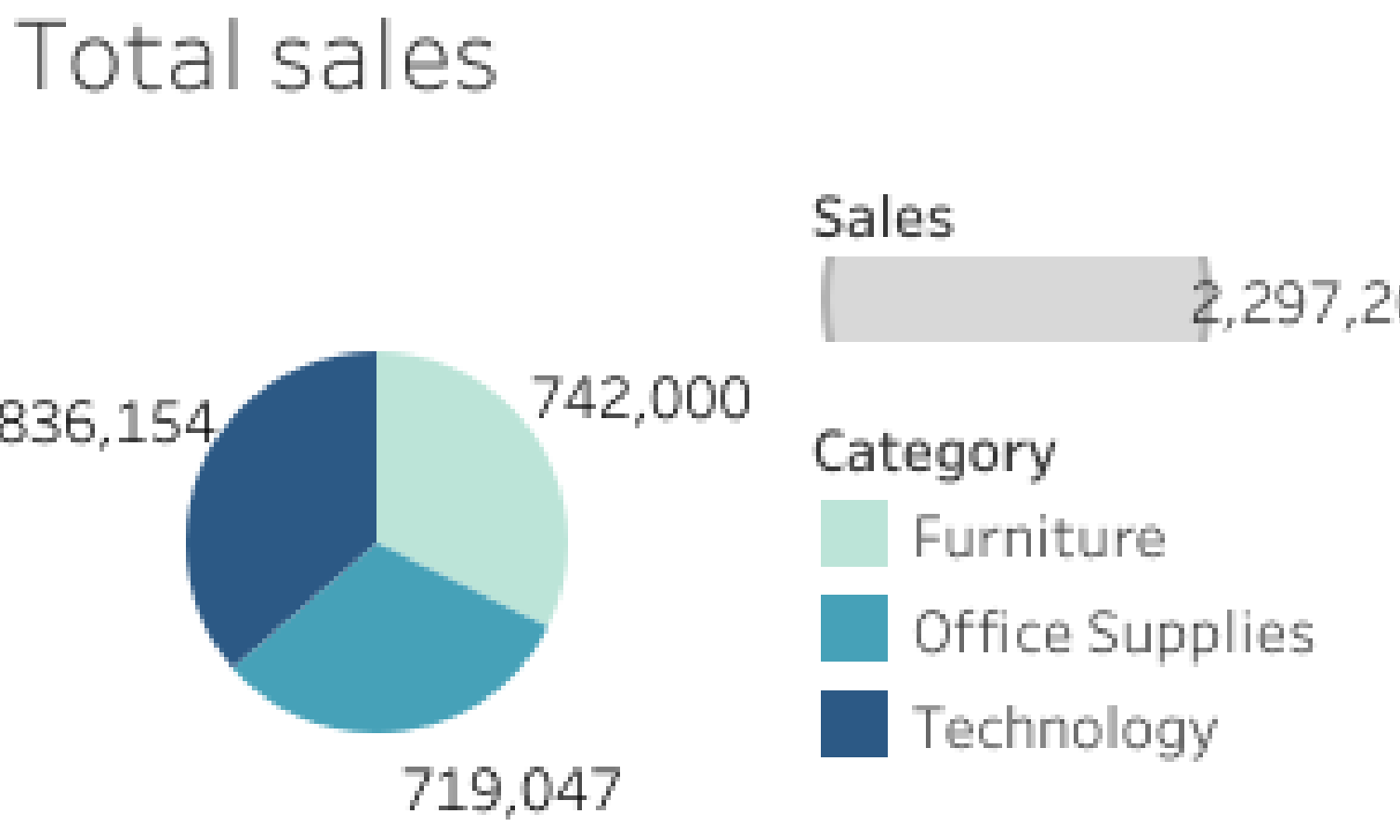
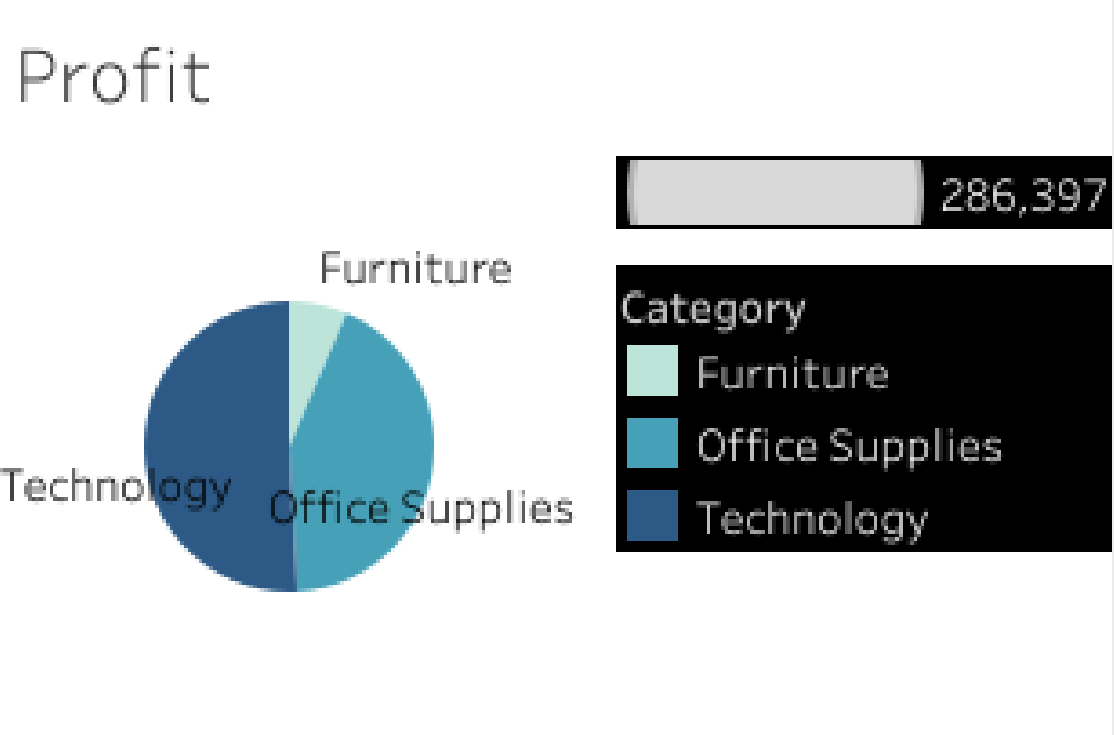
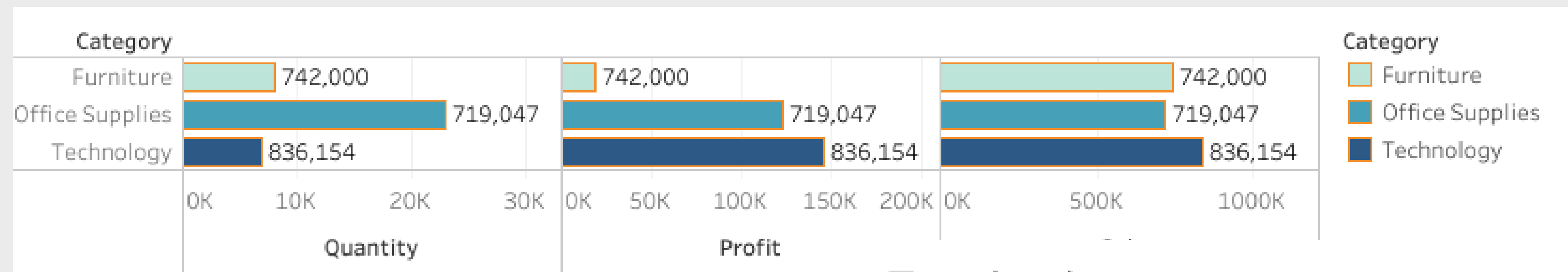
Bty Mohamed A. Abokhoshien



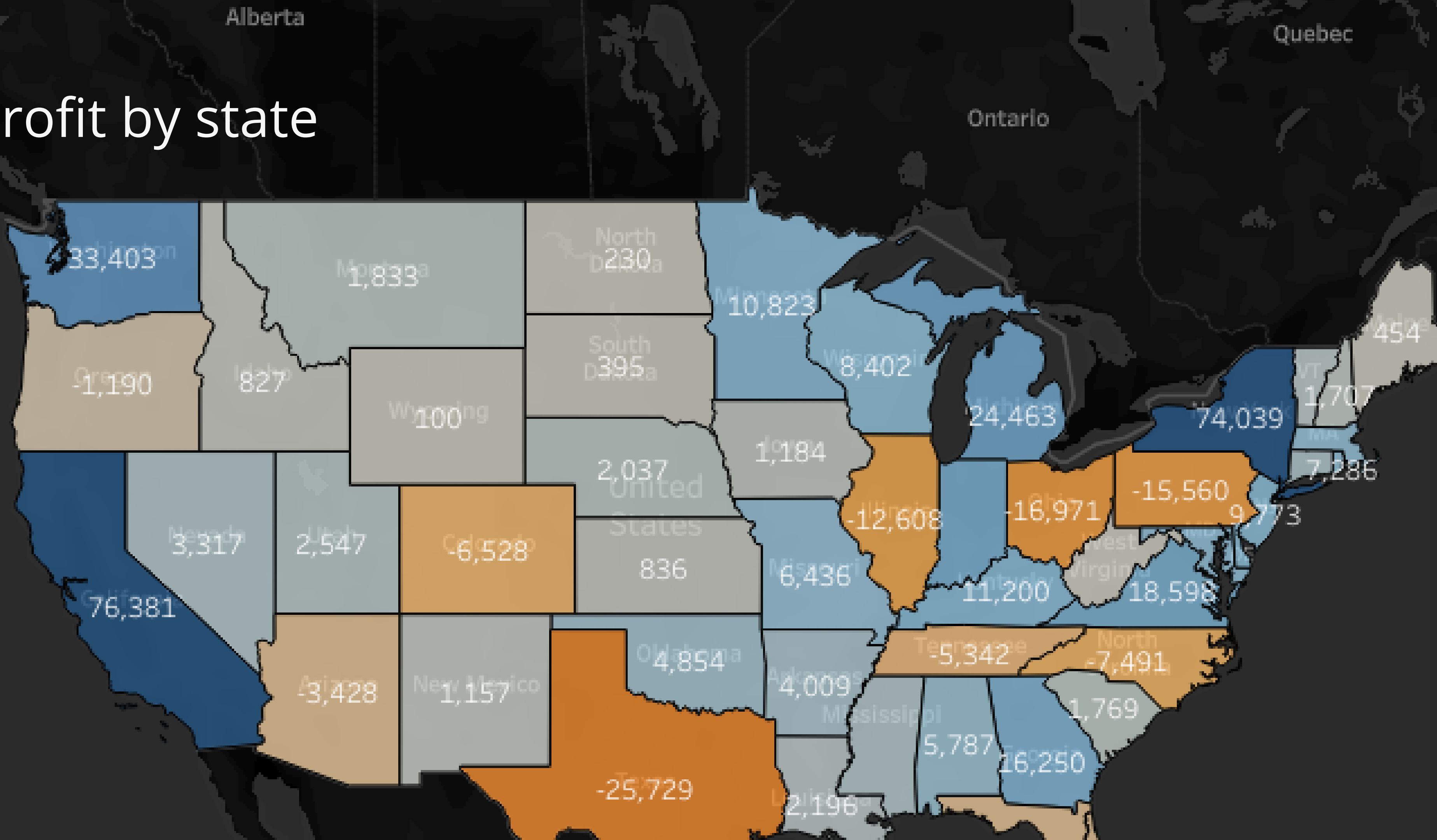
# Overview

- This data set was collected and downloaded from kaggle.com
- I had an Exploratory Data Analysis on it using python programming language.
- After some claculations I found that some sub0categories cost the company losses, that's why I had a further analysis on those categories.

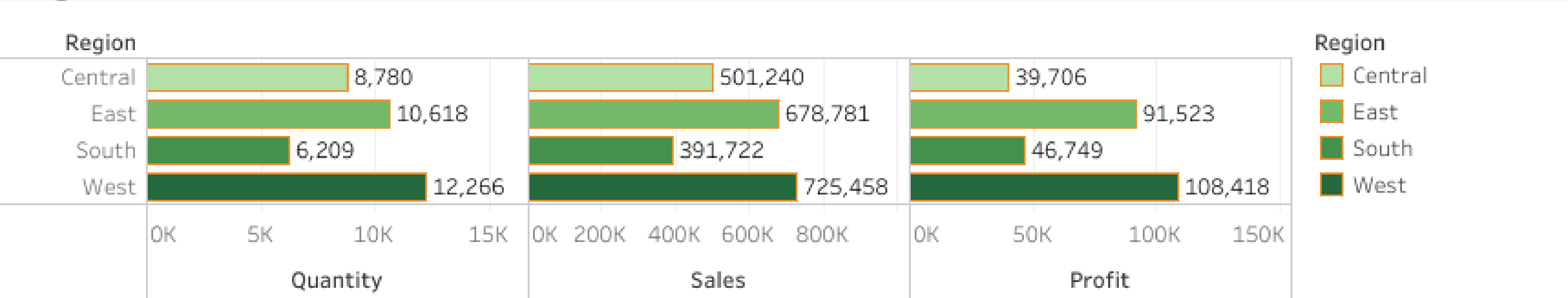
# Quantity, Profit , total sales by category



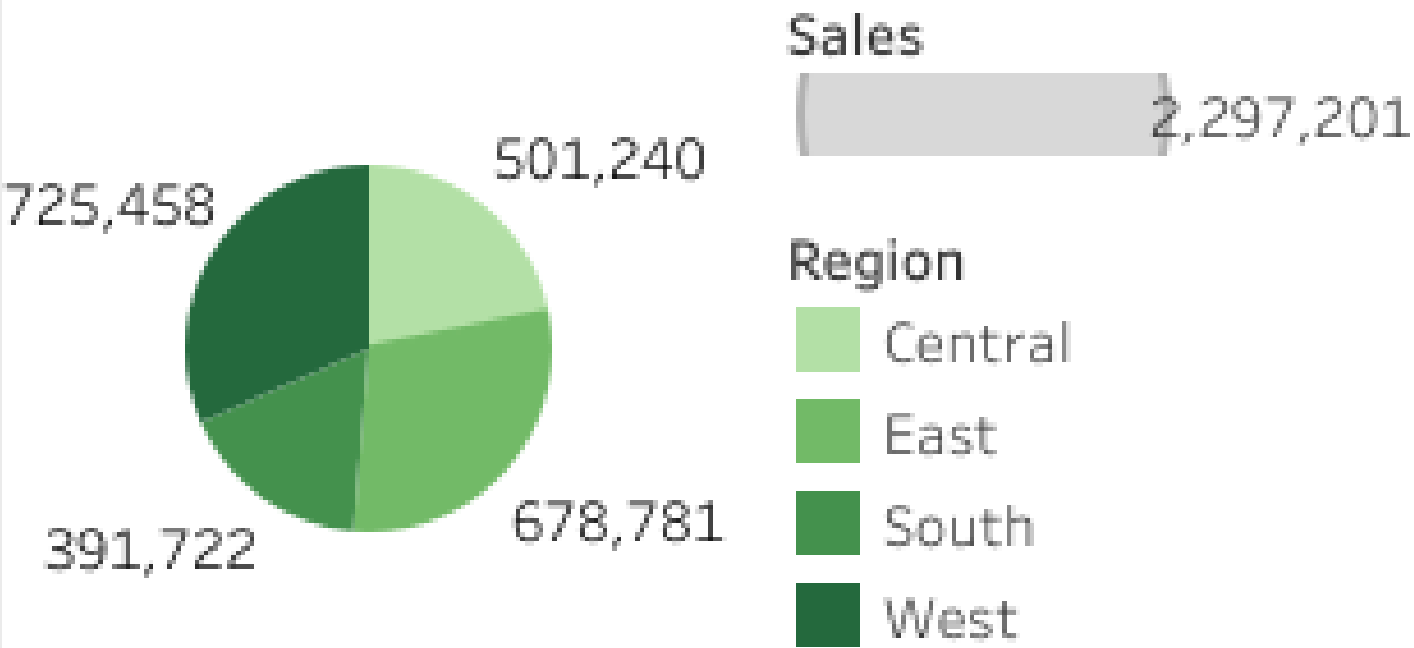
# Profit by state



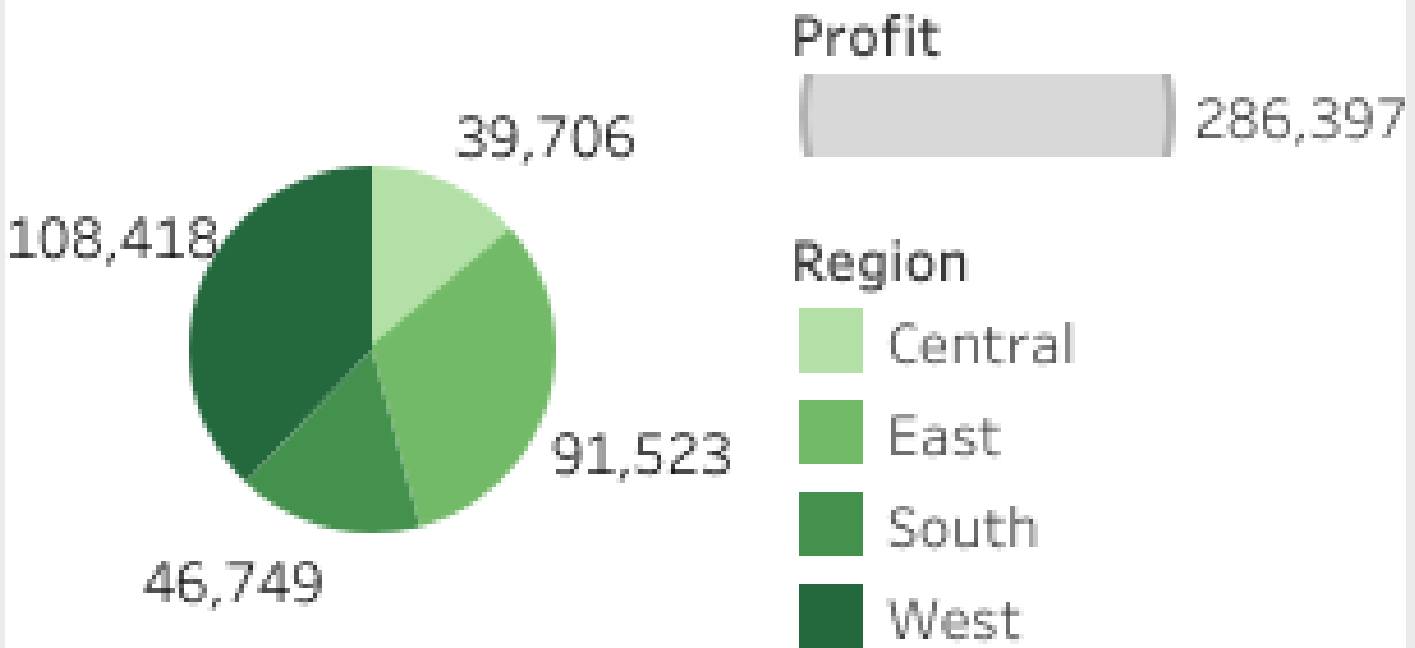
# Regional basis



Regional total sales



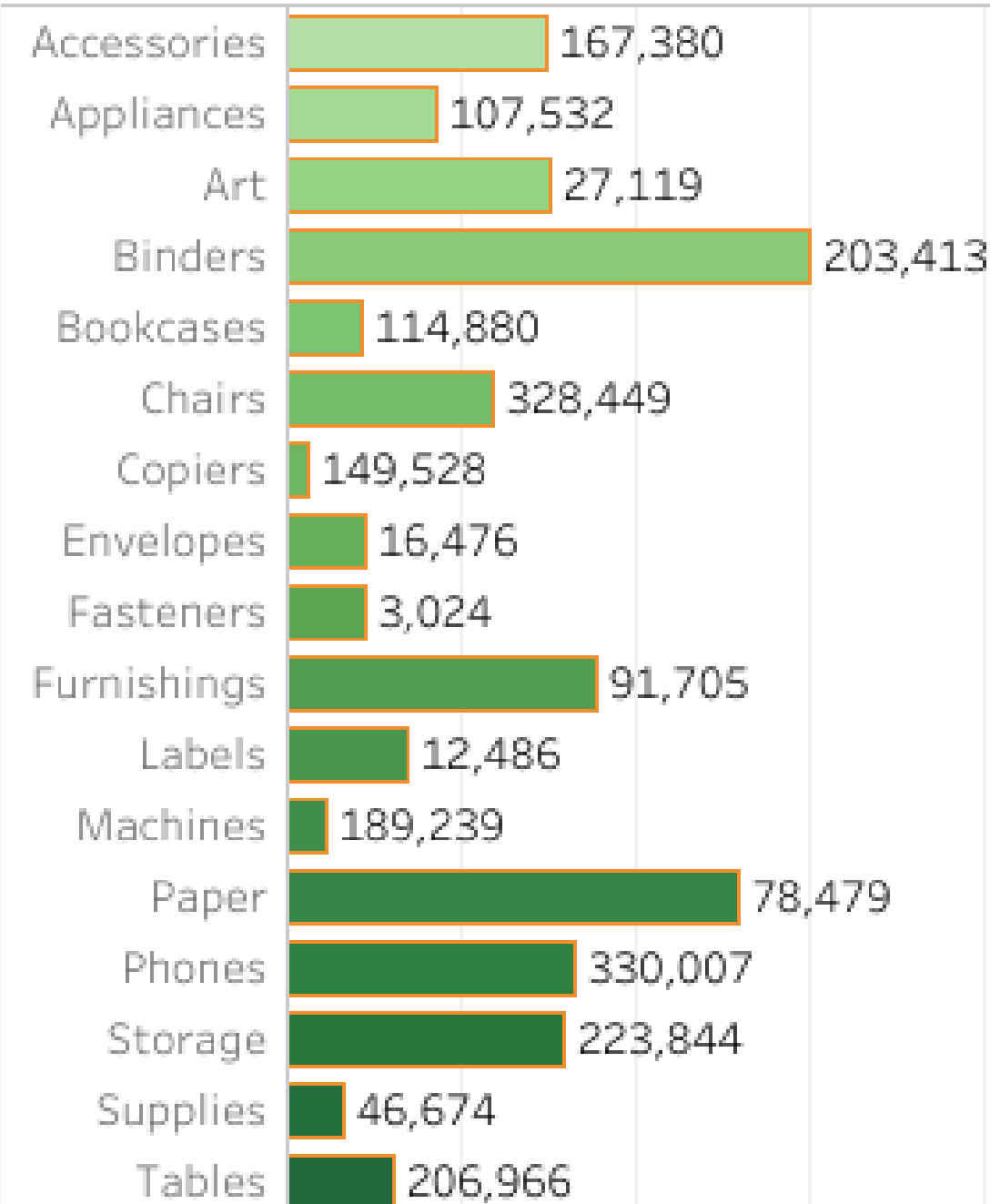
Regional total profit



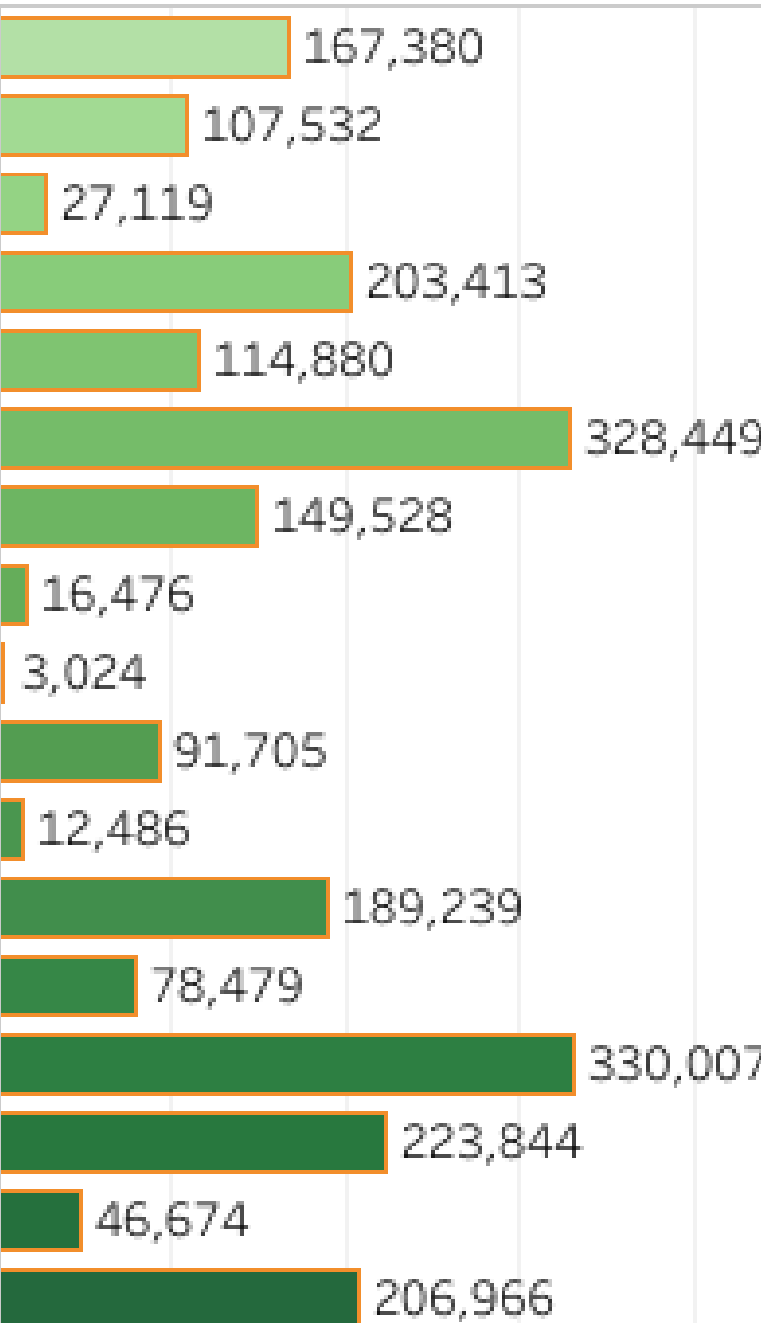
# Sub-categories

Sub\_categories

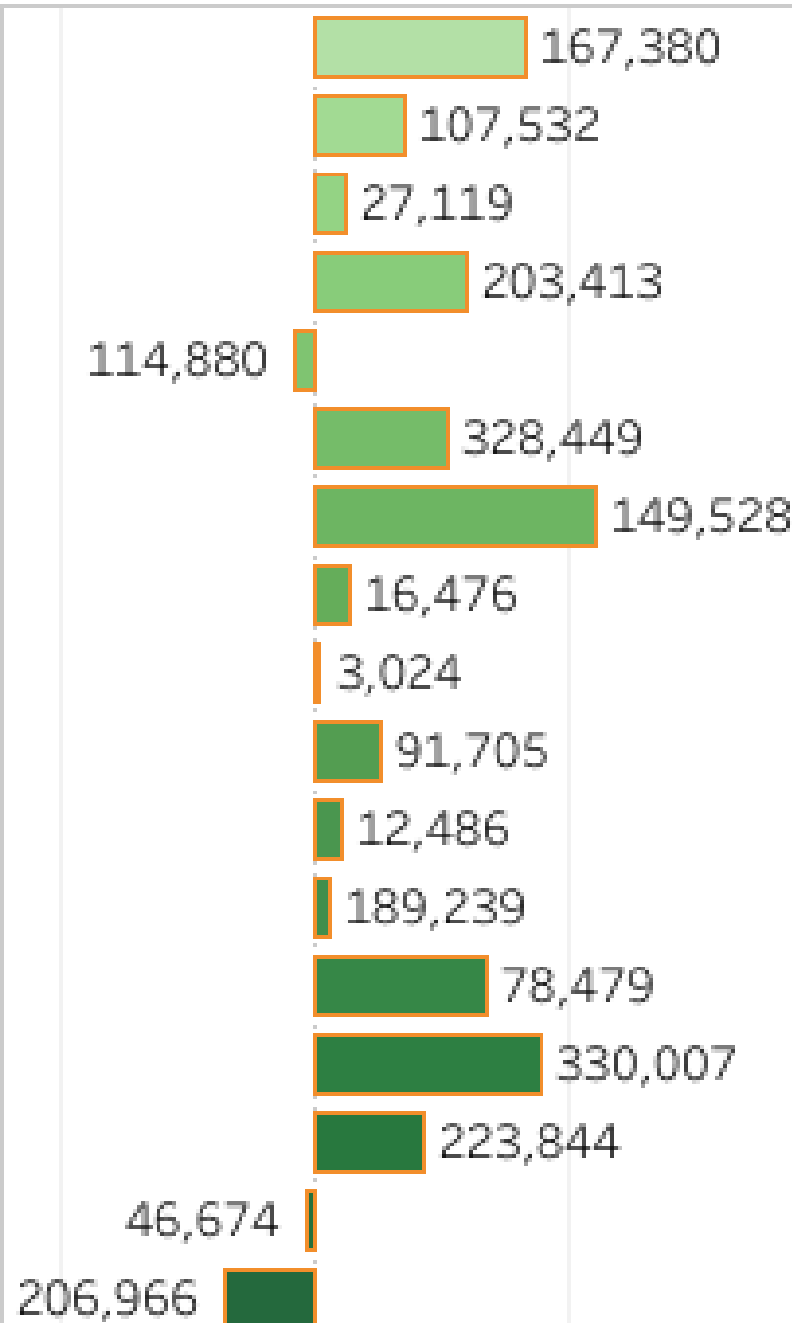
Sub Category



Quantity



Sales



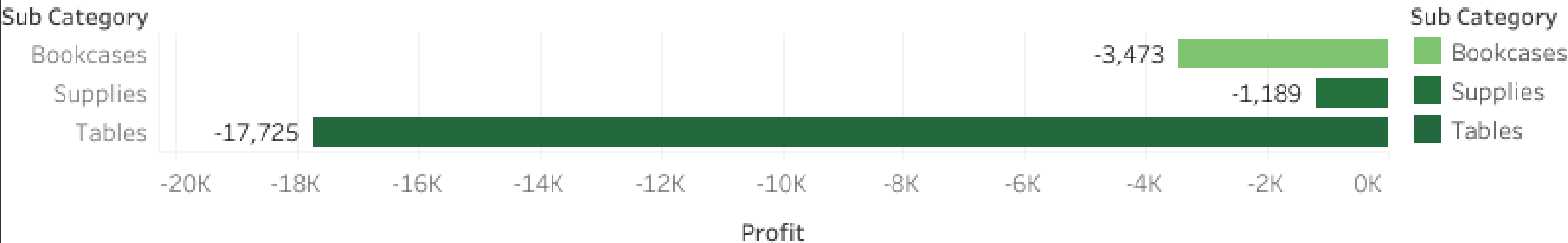
Profit

Sub Category



# Losing sub-categories

Losing\_sub\_categories



How much loss?

Bookcases

3473

Supplies

1189

Tables

17725

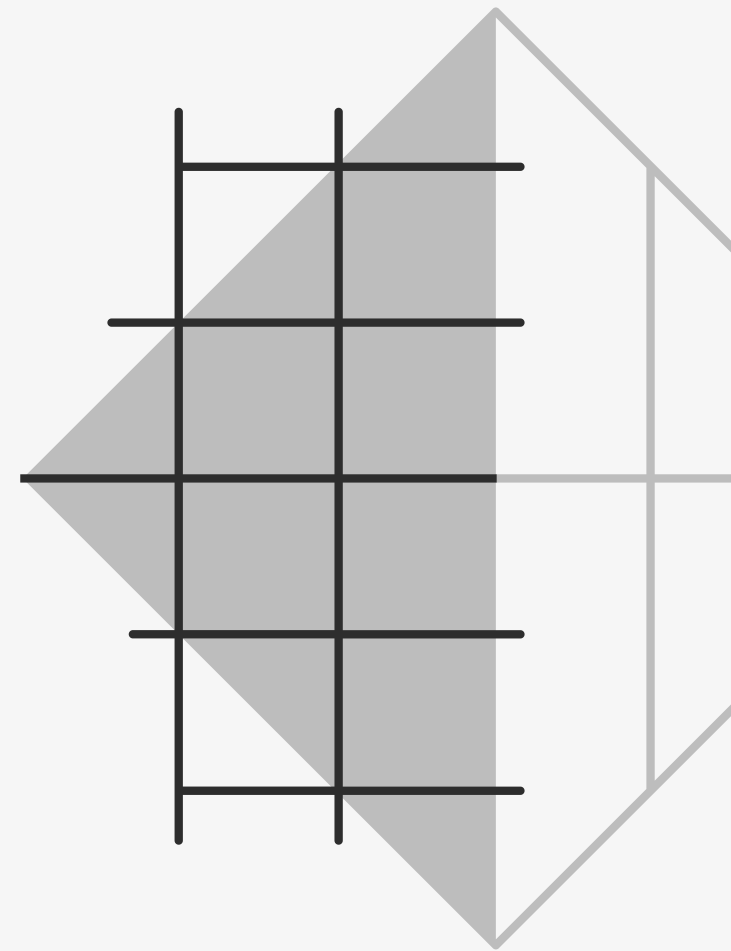
Why da we  
lose?





## Further more

- Doing analysis on the basis of products helps a lot.
- I chose 3 different products from each losing sub-category.





## **product: FUR-BO-10001798**

**Unit costs**

110.0232

**Price no discount**

130.980

**Margin**

20.9568

**– Margin profit percentage of sales price is  $20.9568 / 130.980 = .16$**



## **product: FUR-TA-10004534**

**Unit costs**

170.897

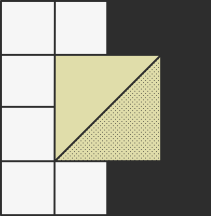
**Price no discount**

205.90

**Margin**

35.003

**– Margin profit percentage of sales price is  $35.003 / 205.9$   
= .16999999**



## **product: OFF-SU-10003936**

**Unit costs**

3.1482

**Price no discount**

3.180


**Margin**

0.0318

**– Margin profit percentage of sales price is  $0.0318 / 3.180 = .01$**



# Findings

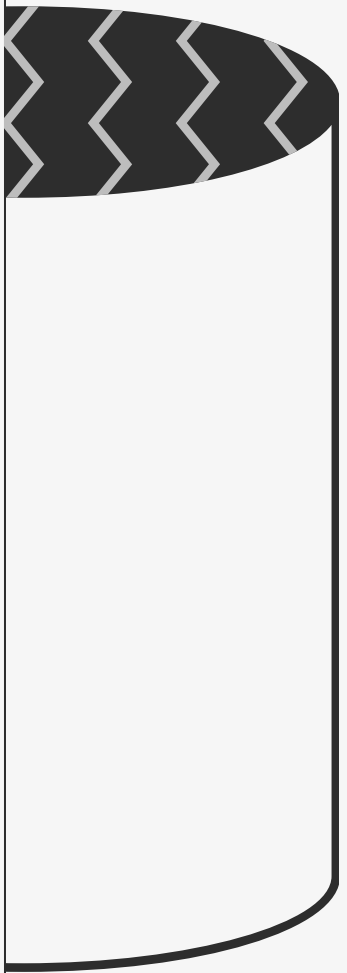
- 
- There are a lot of losing transactions in different categories exactly 1936 operations.
  - It is noticeable that the profit margin in all of those operations is less than the discount percentage which reaches 50% in some cases.
  - Furniture and office supplies are the main two harmed categories of those operations due to their low margins.





# Recommendations

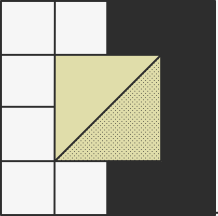
## Production



Find new sustainable production ways that help reduce costs and maximize profit.

## Discounts

Be clear about limitations of giving discounts to the customers based on profit margins and costs of the products.



# Thank you

2022 August 11th  
Mohamed A. Abokhoshien

