Lab report 5

Fall 2021

CSE422L Data Analytics Lab

Submitted by: **Ayaz Mehmood**

Registration No.:**18PWCSE1652**

Section: **A**

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work."

Student Signature: _____

Submitted to:

Engr. Mian Ibad Ali Shah

Last date of Submission:

9 January 2022

Department of Computer Systems Engineering

University of Engineering and Technology, Peshawar

OBJECTIVE:

The basic Objective of this lab is:

- To know about Tableau and how to use tableau in data analytics.
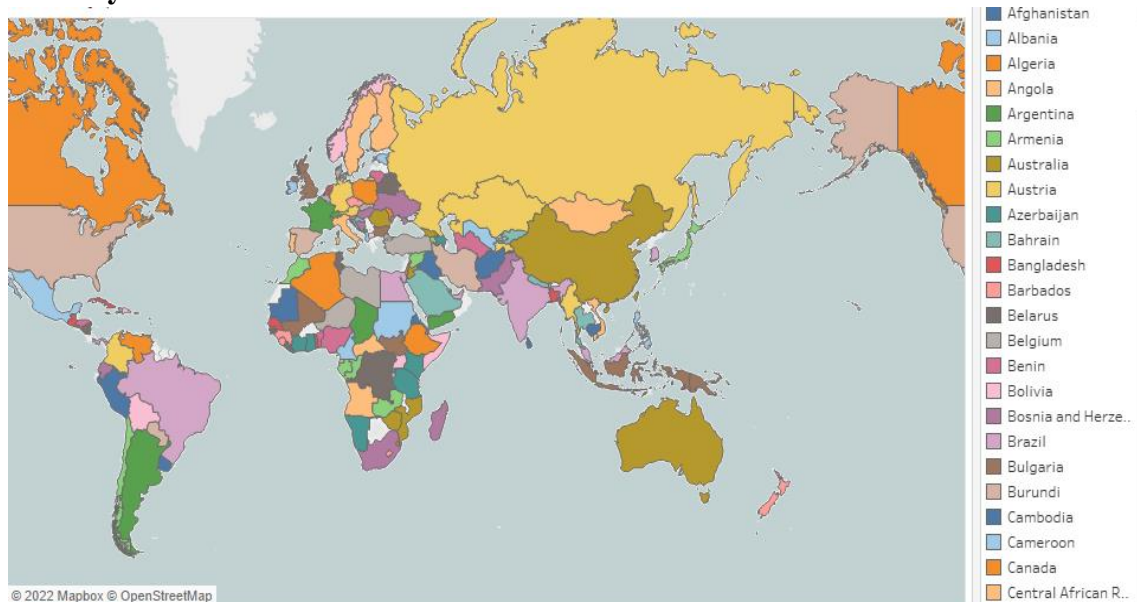- To use Tableau for visualization of data.

TASKS
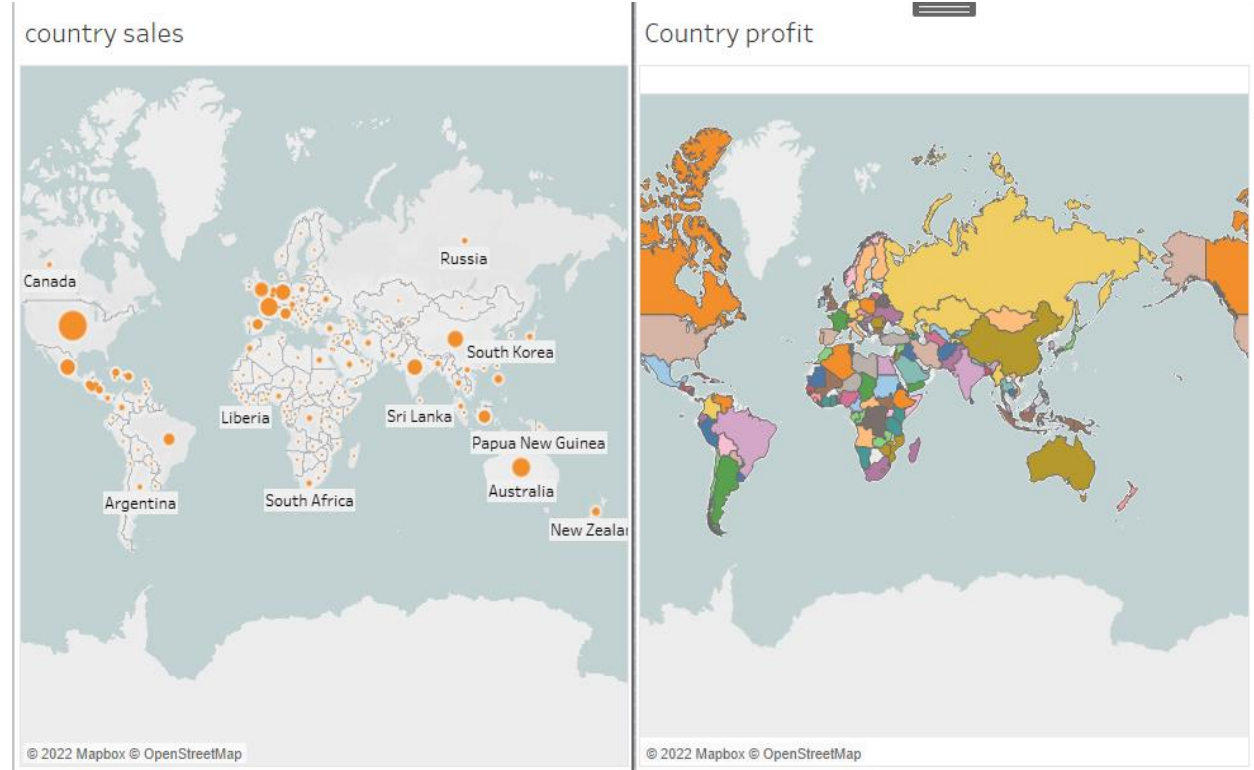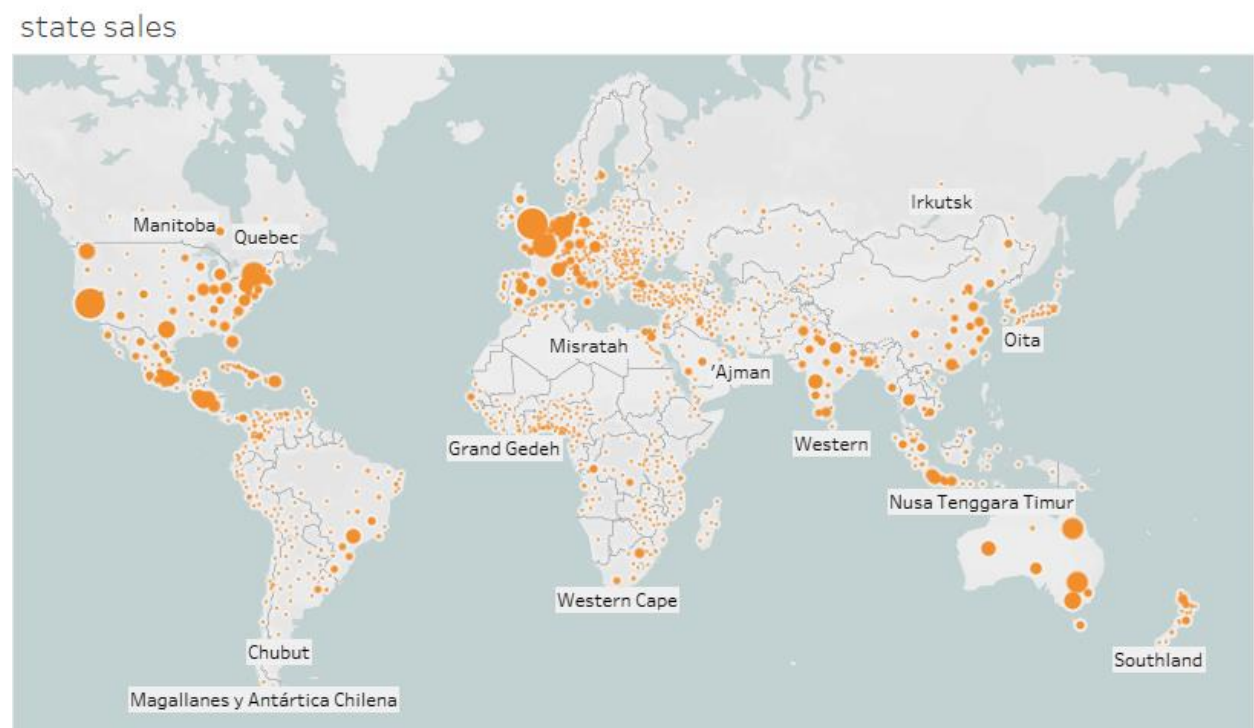## Global Superstore
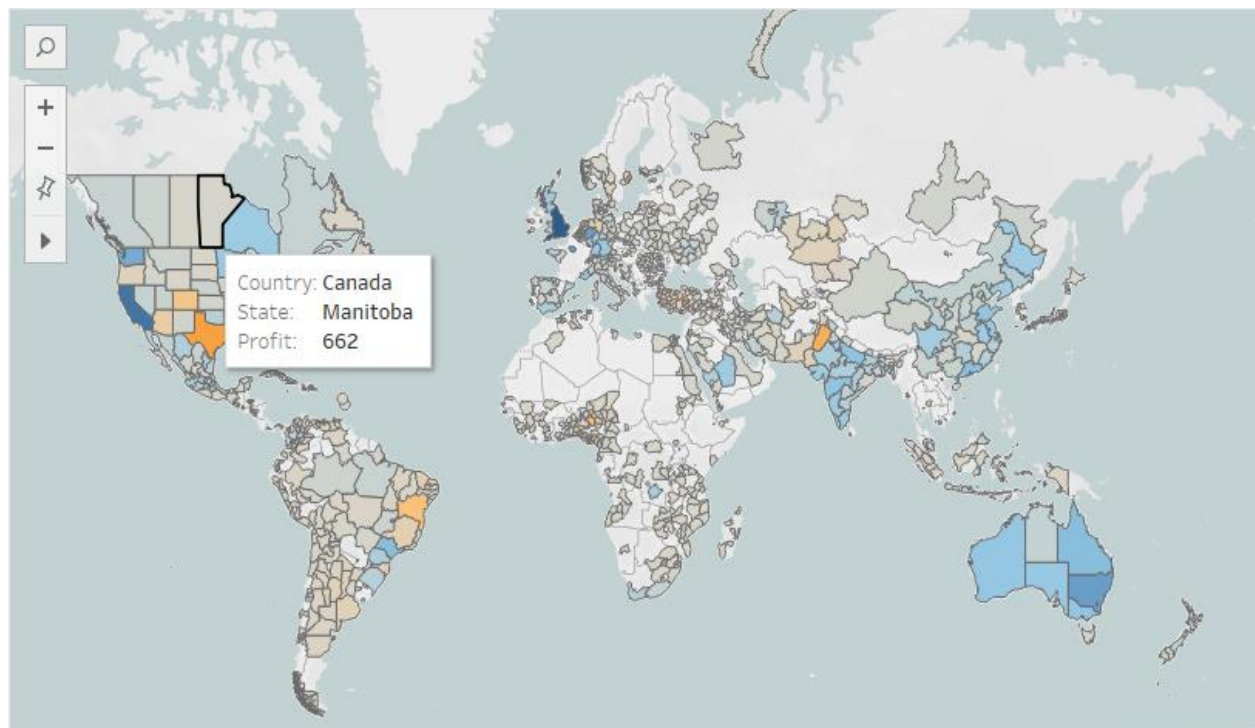
Country Sales:

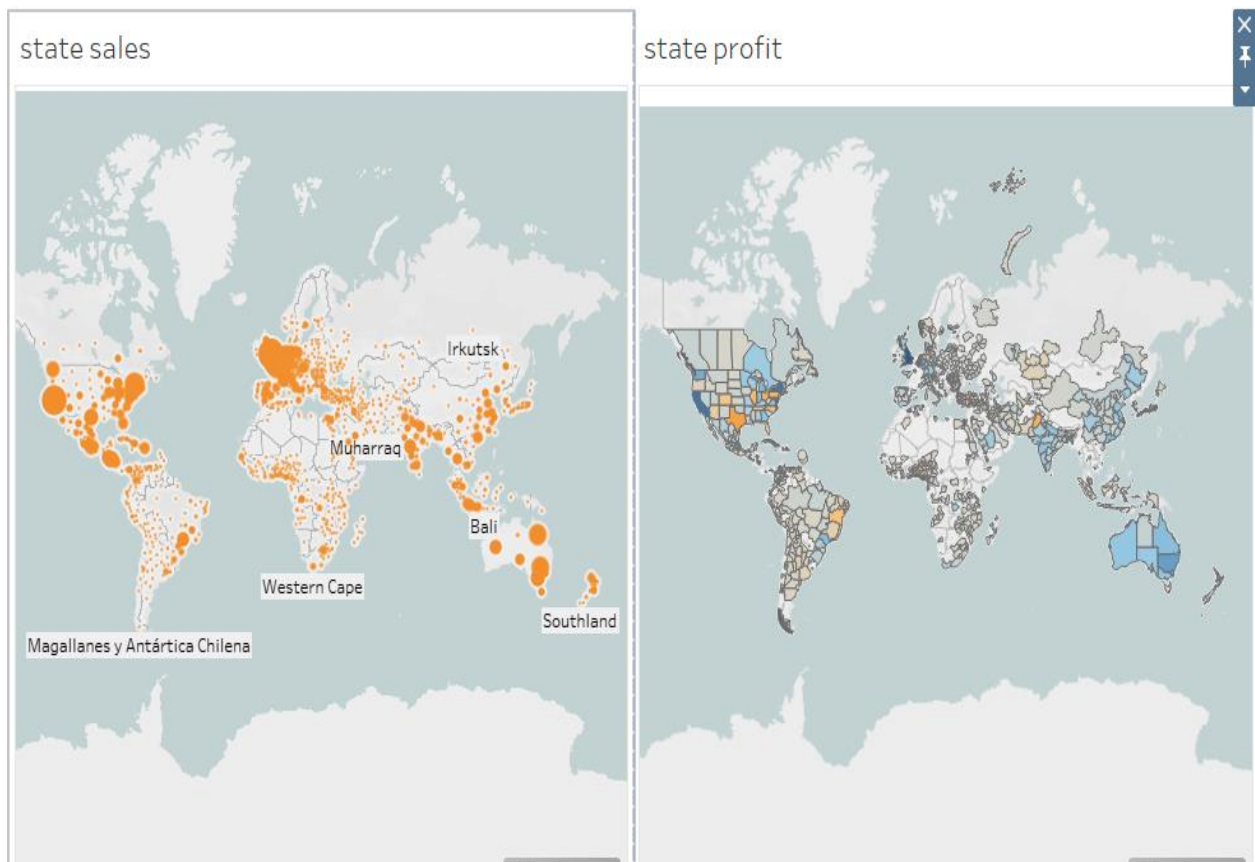country sales

Country Profit:

Country Sales & Profit Dashboard:

State Sales:

State Profit:

State Sales and Profit Dashboard

USA Sales:

USA sales only

© 2022 Mapbox © OpenStreetMap

USA Profit:

USA profit only

© 2022 Mapbox © OpenStreetMap
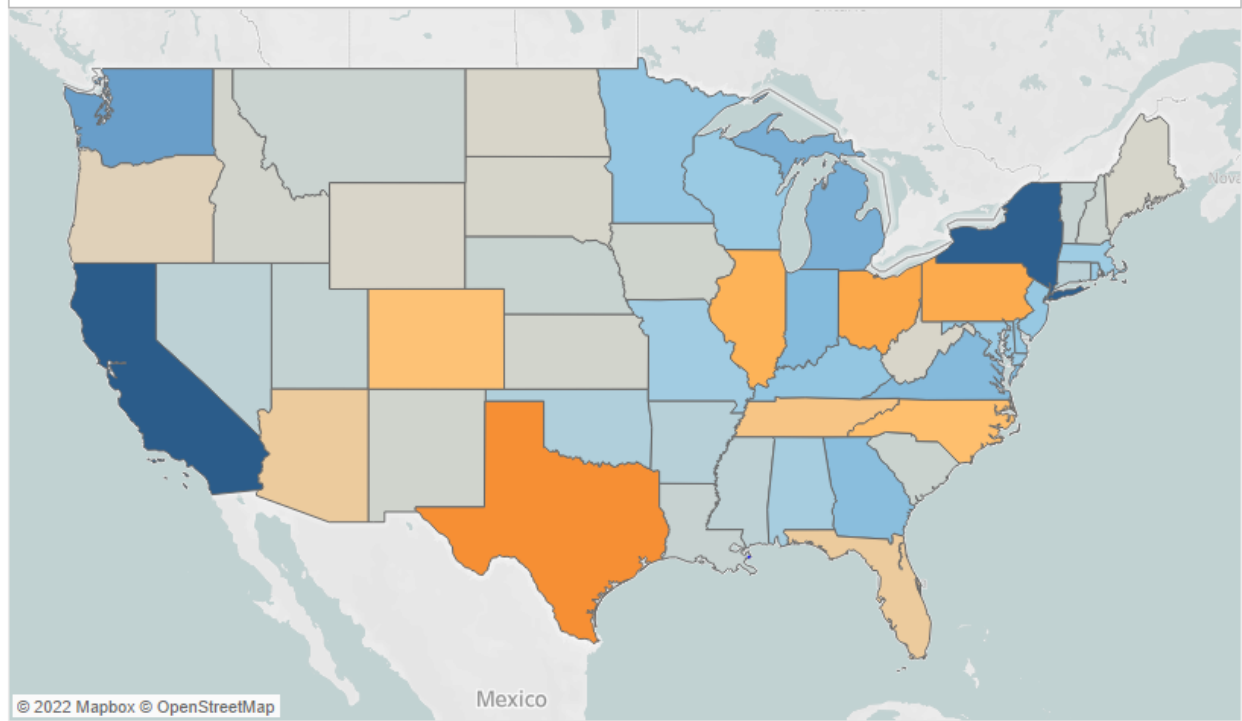
USA Sales and profit Dashboard:

USA sales only

USA profit only

© 2022 Mapbox © OpenStreetMap

© 2022 Mapbox © OpenStreetMap
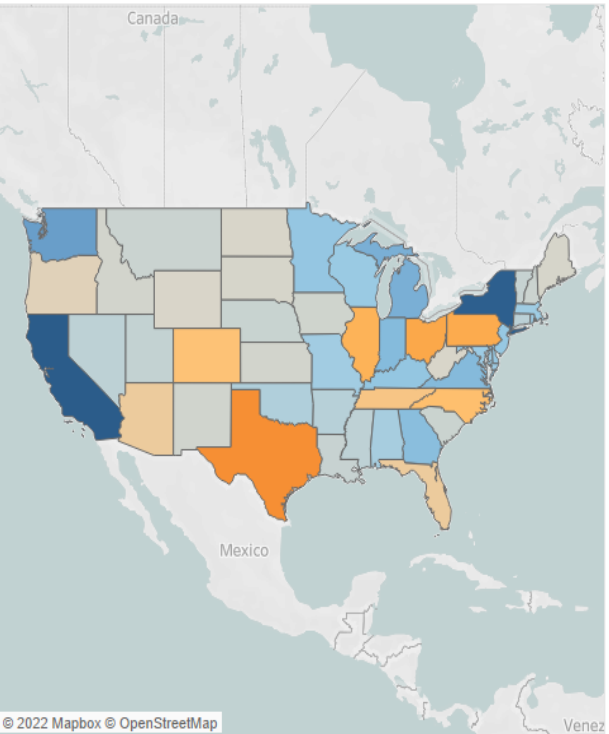
Sales vs Profit:
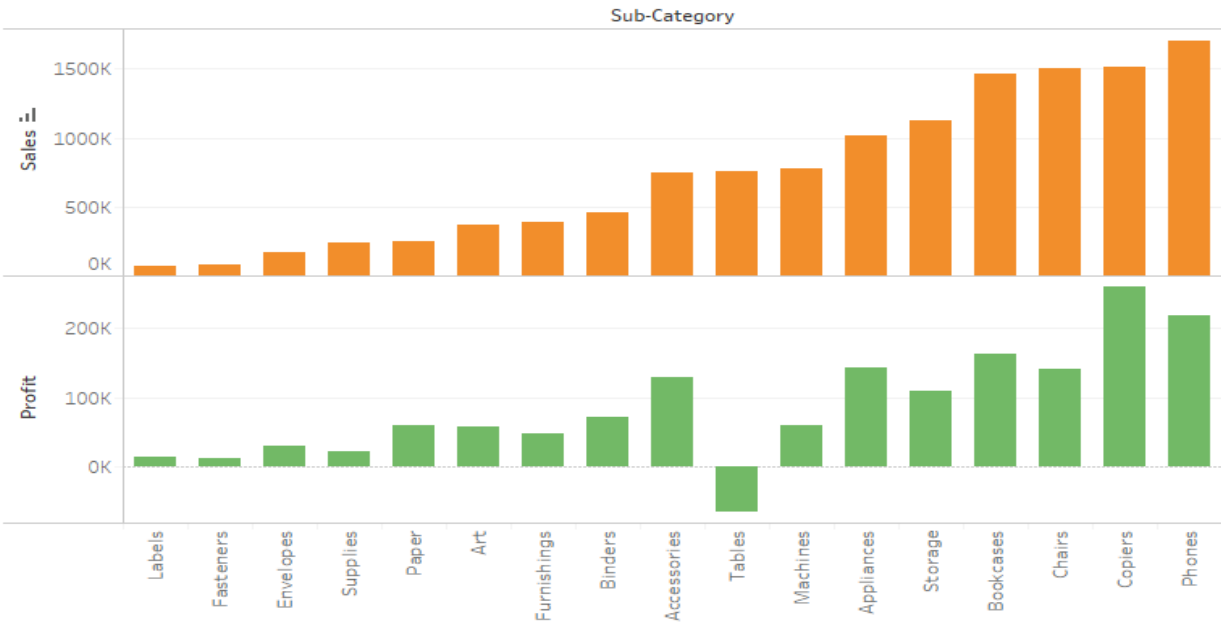
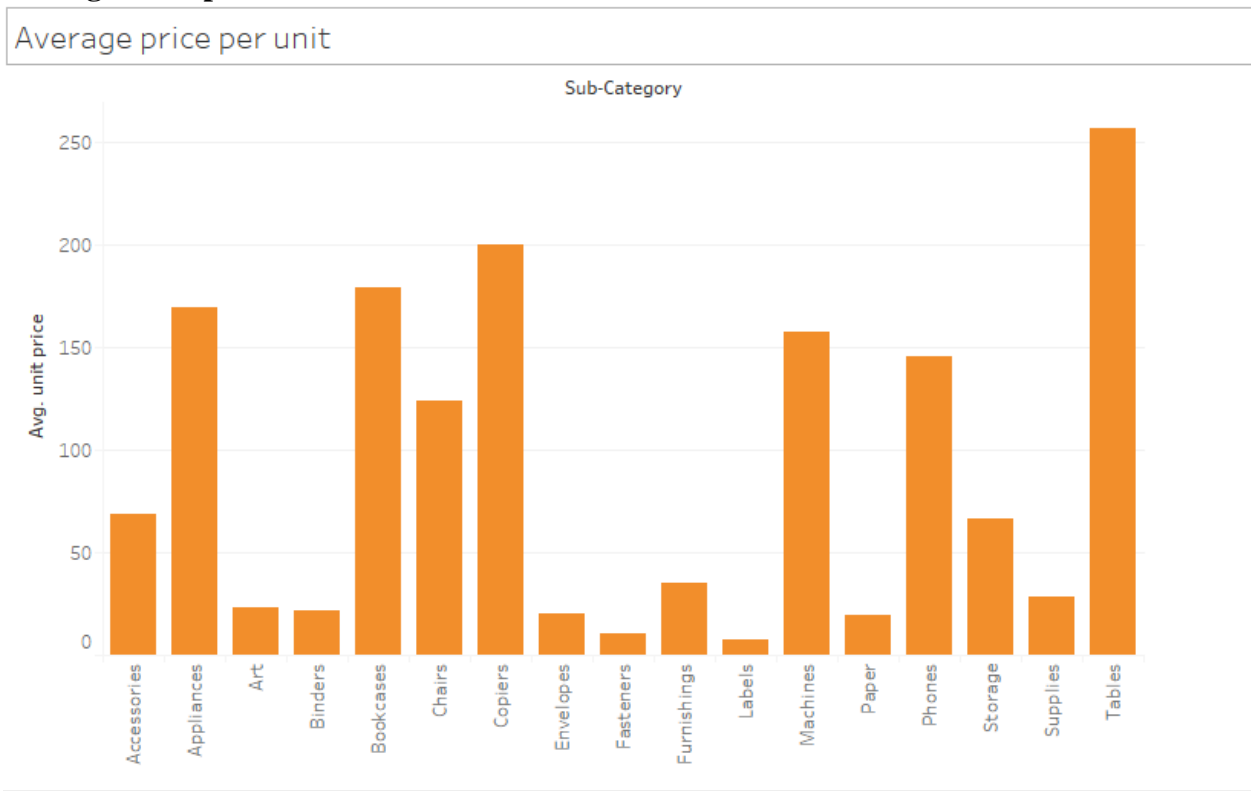sales vs profit

Sales vs Profit trend:
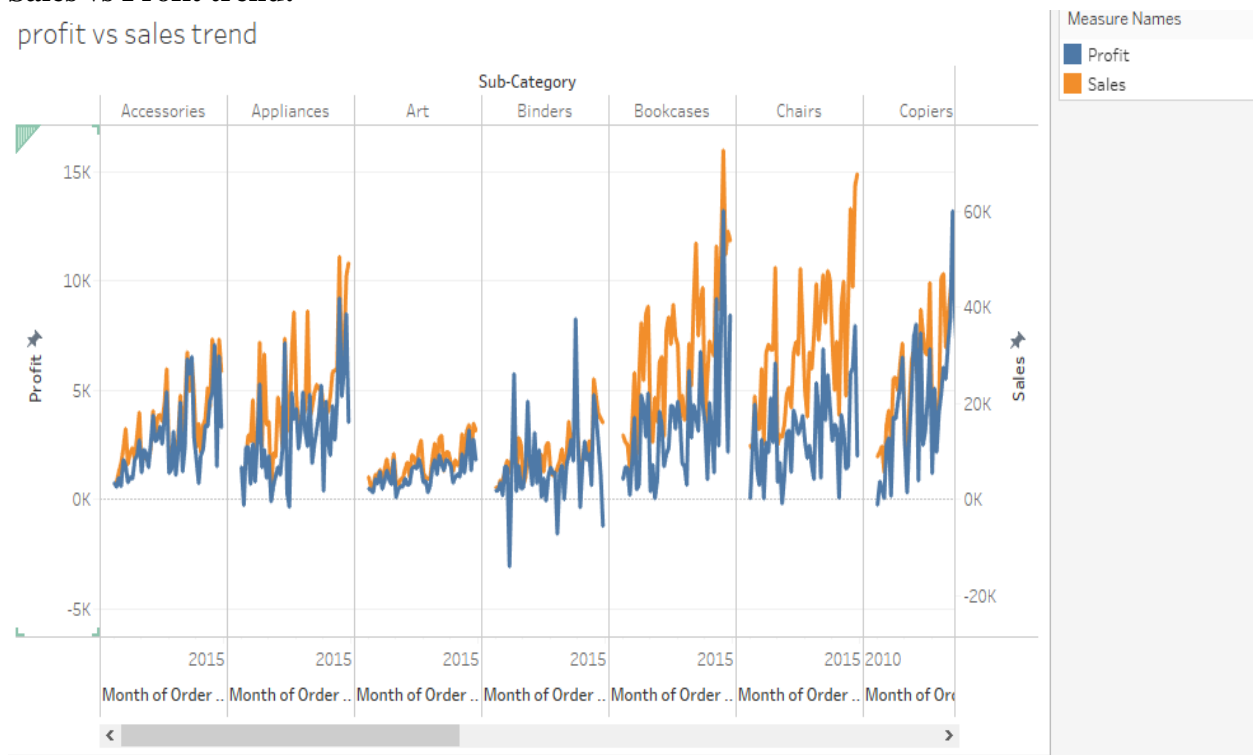
Sales vs profit Dashboard:

Average Price per unit:

Average price per unit
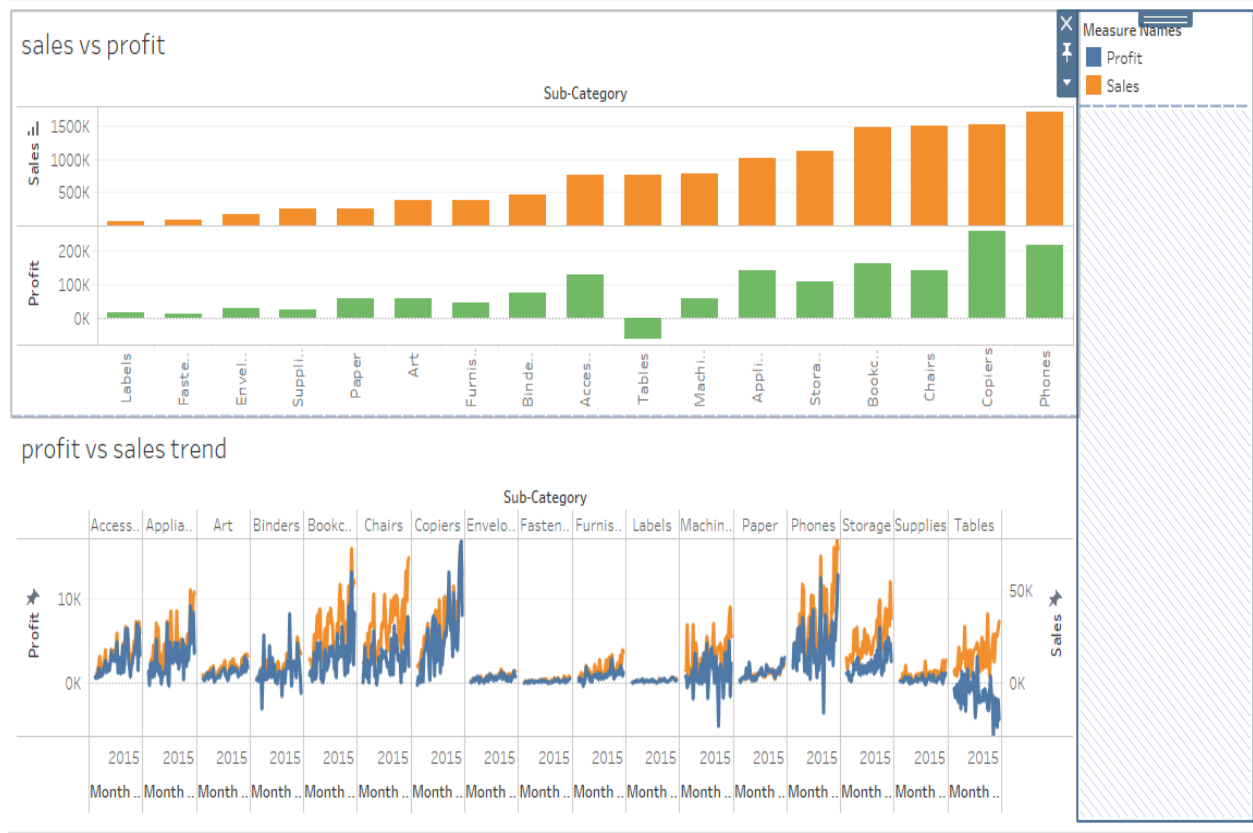
Average Profit per unit:

Average profit per unit
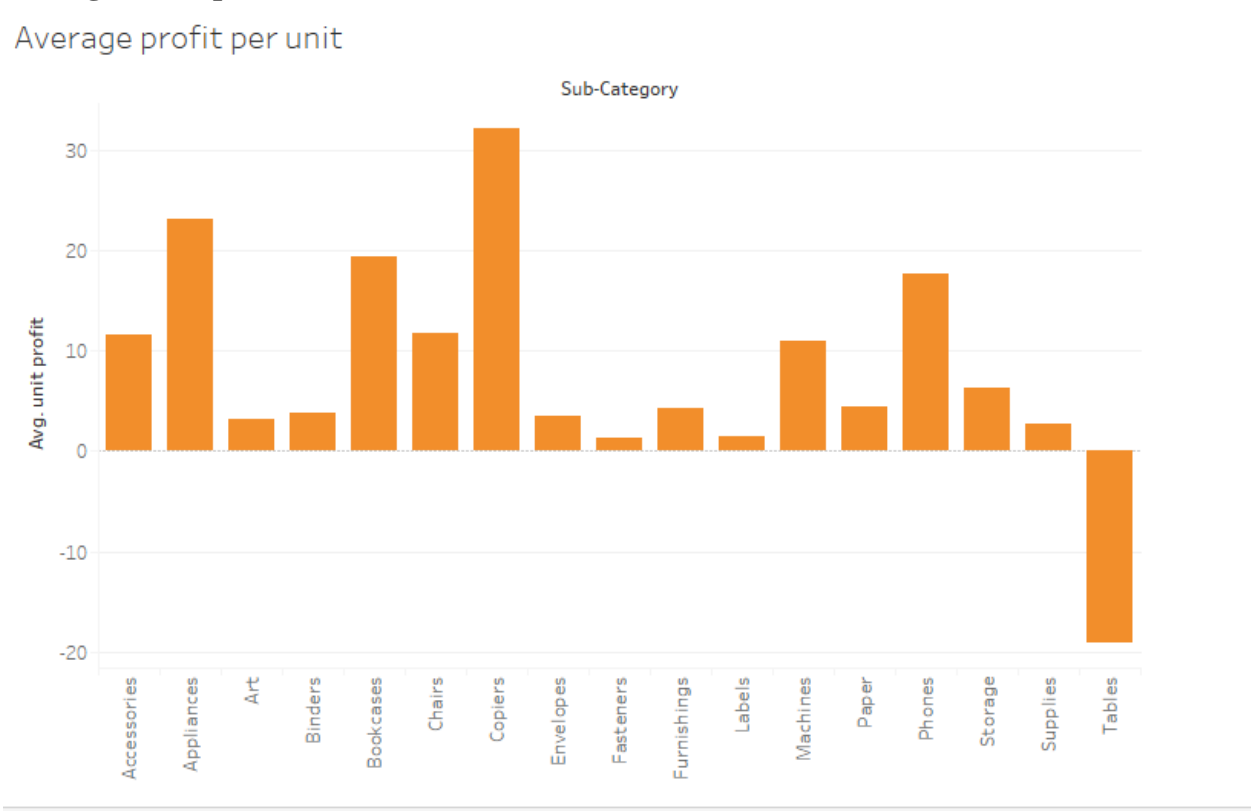
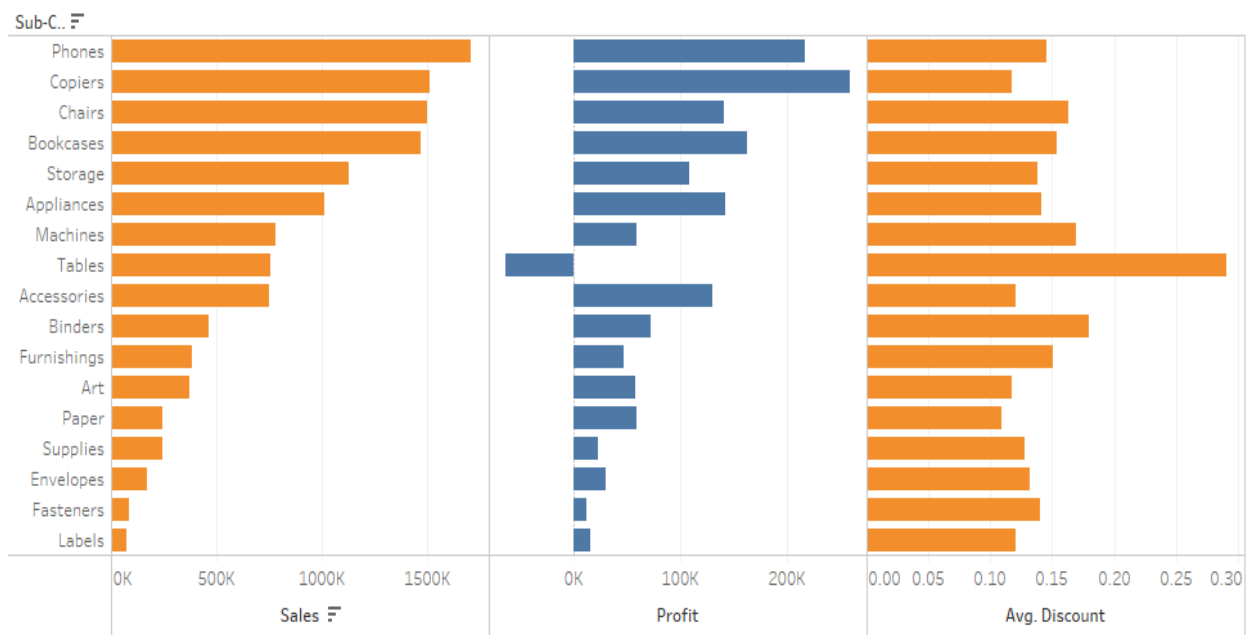## Average Price vs Profit per unit Dashboard:

Average price per unit
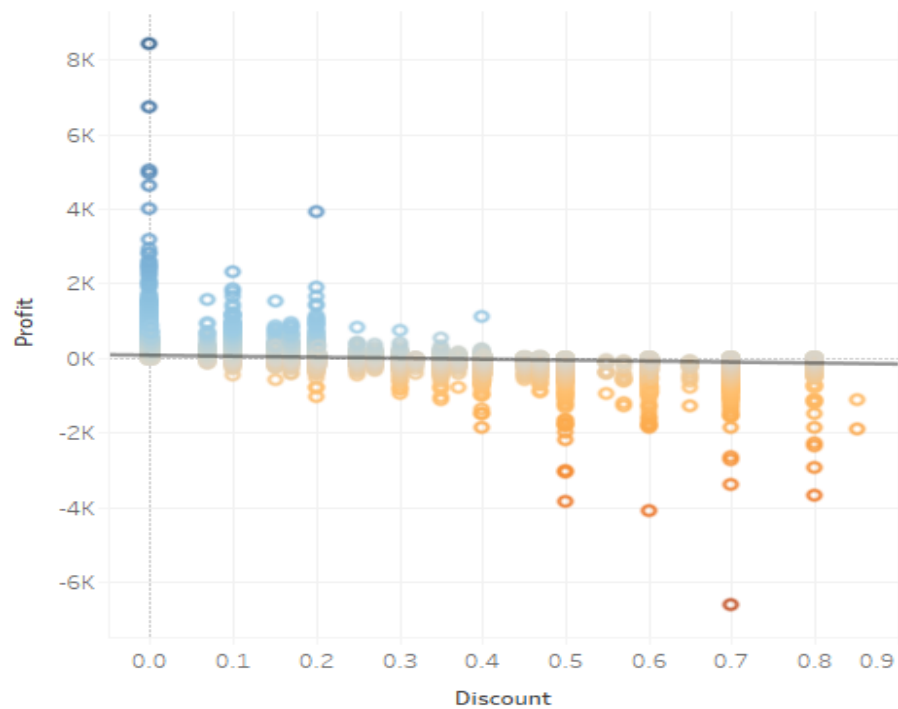

Average profit per unit
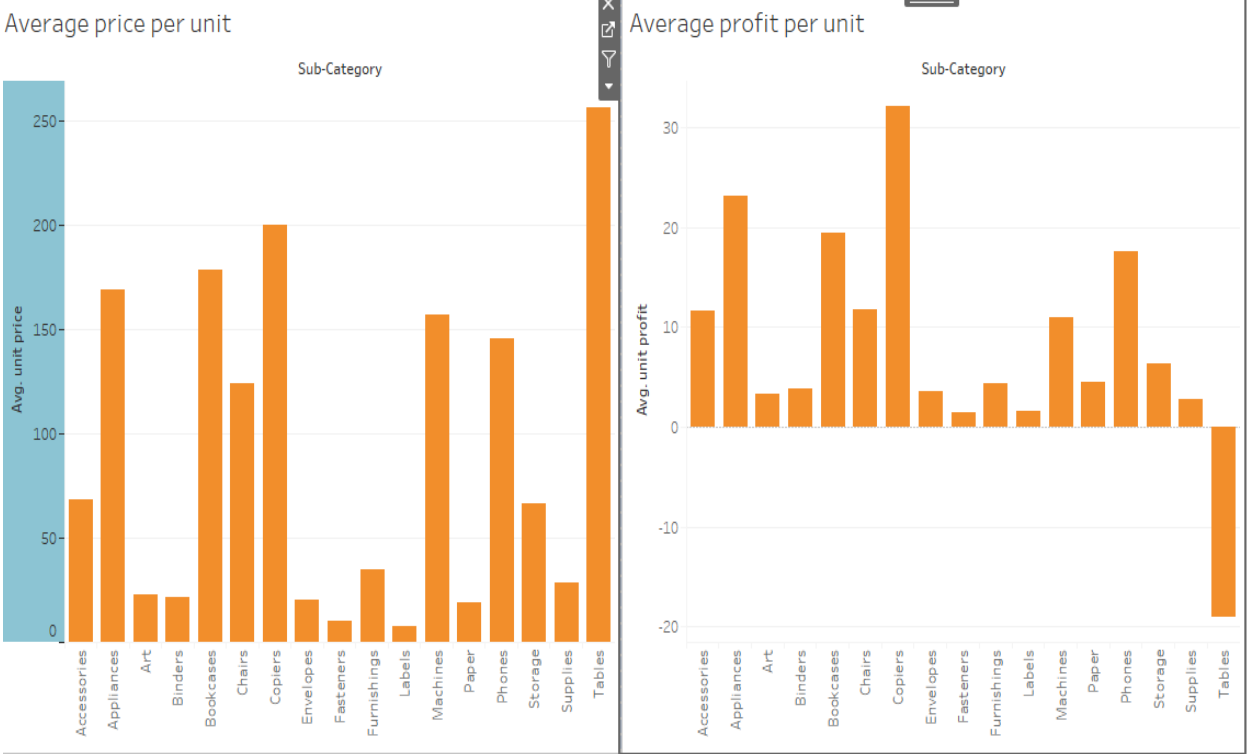
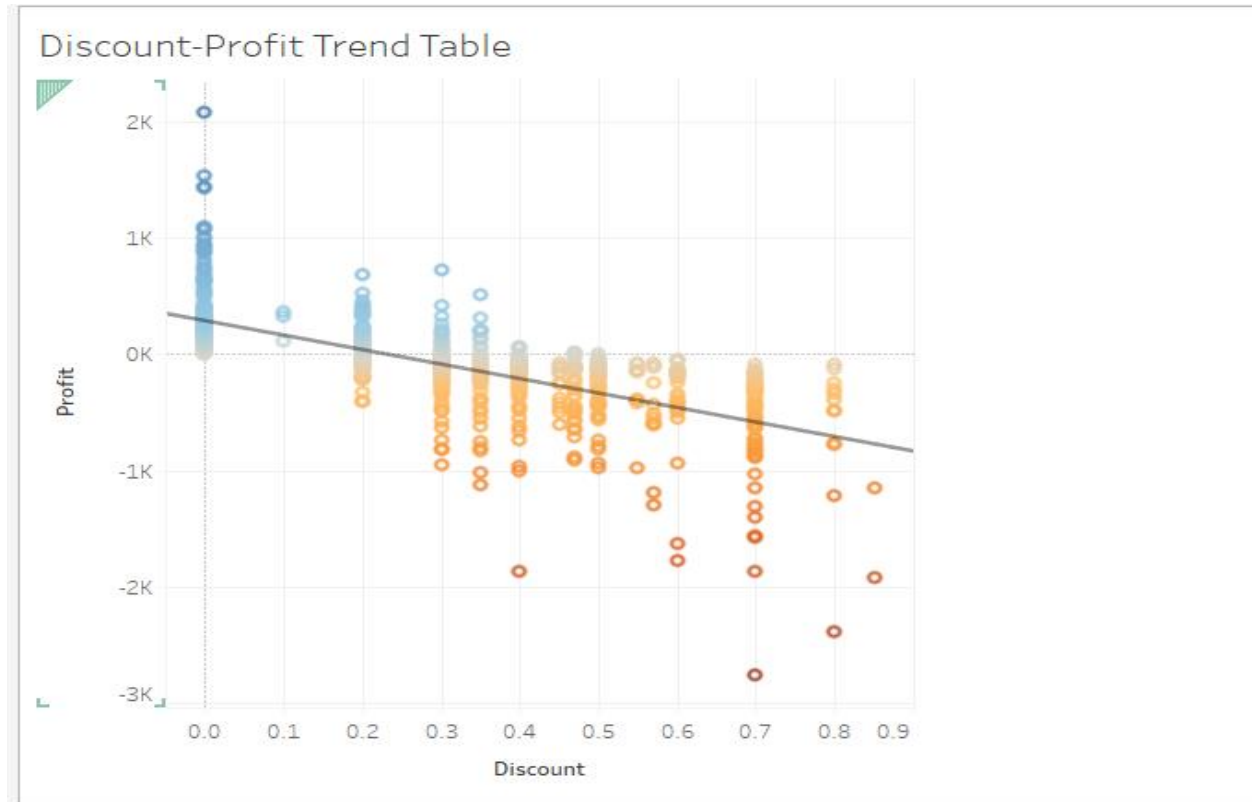## Sales, Profit and Discount:

sales, profit and discount
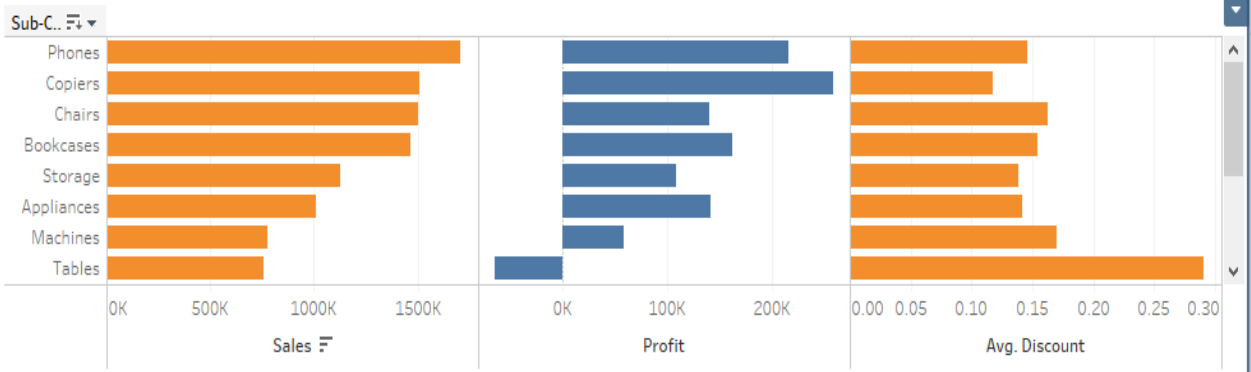
Discount Profit trend all:

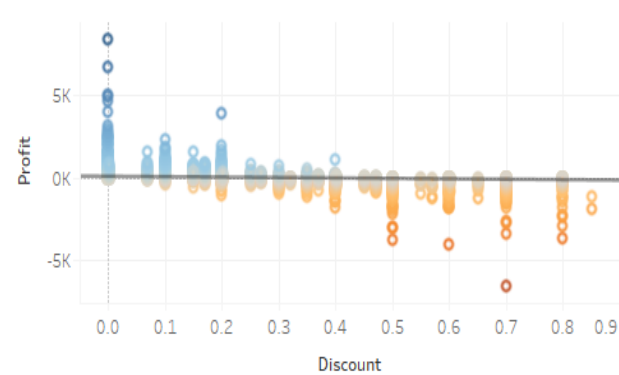Discount-Profit Trend All

Discount Profit trend table:

Discount-Profit Trend Table

Discount Profit Dashboard:

sales,profit and discount

Story:
Company KPI and Improvement Suggestion:
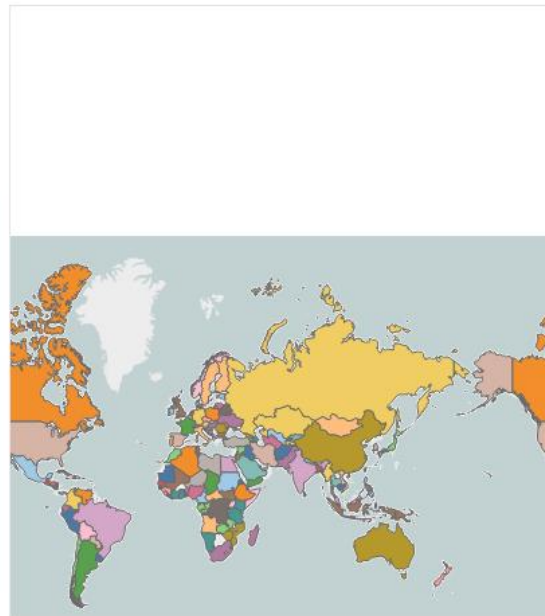
country sales

Country profit

USA sales only
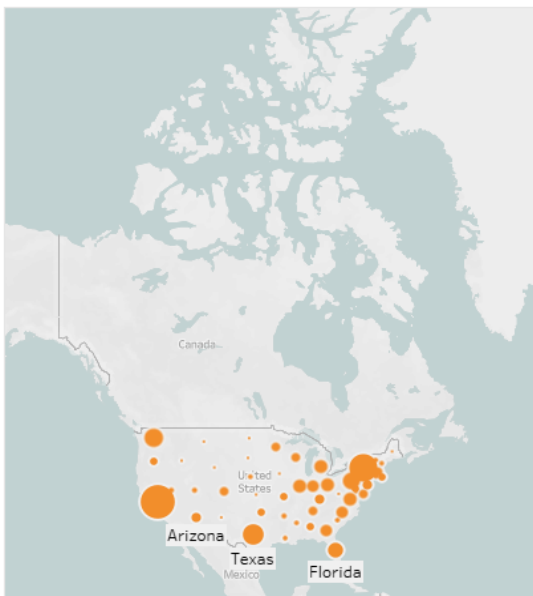
USA profit only

Company KPI and Improvement Suggestion

sales vs profit

Measure Names
- Profit
- Sales

Sub-Category

profit vs sales trend

Sub-Category
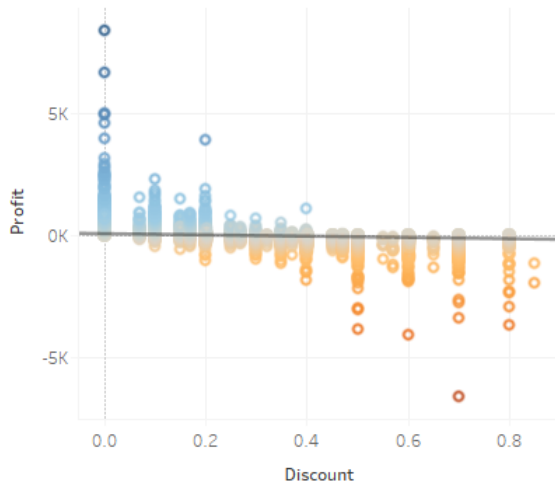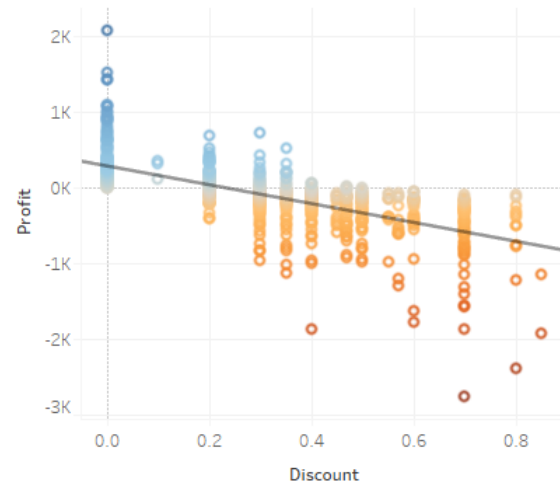
sales,profit and discount
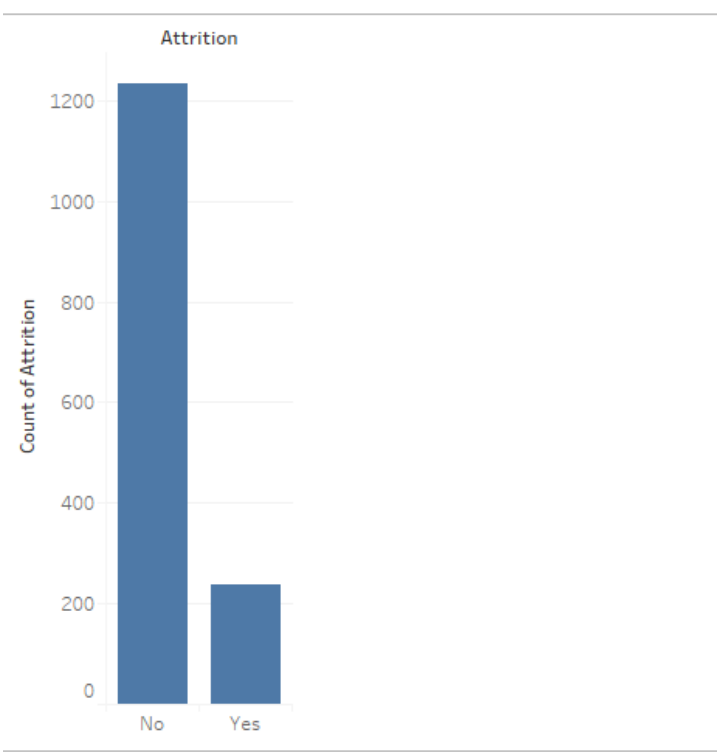

Discount-Profit Trend All

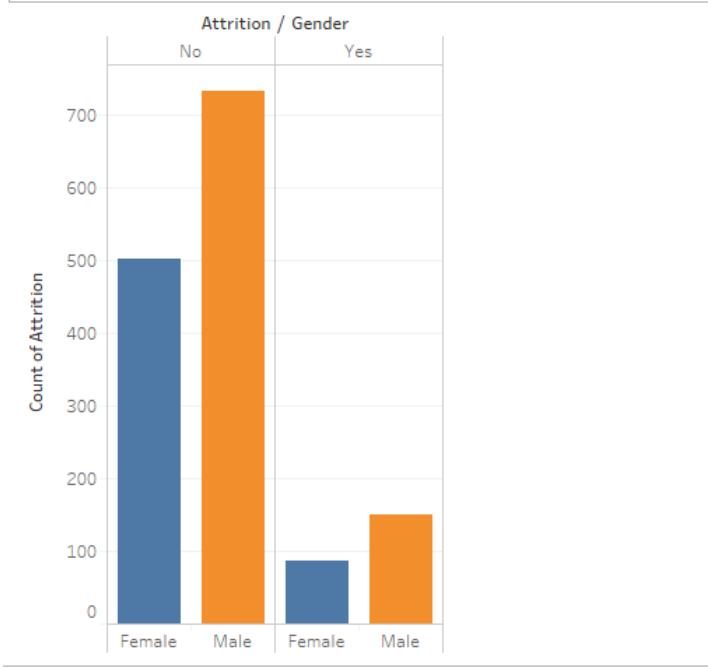## Discount-Profit Trend Table

Employee Attrition Dataset:
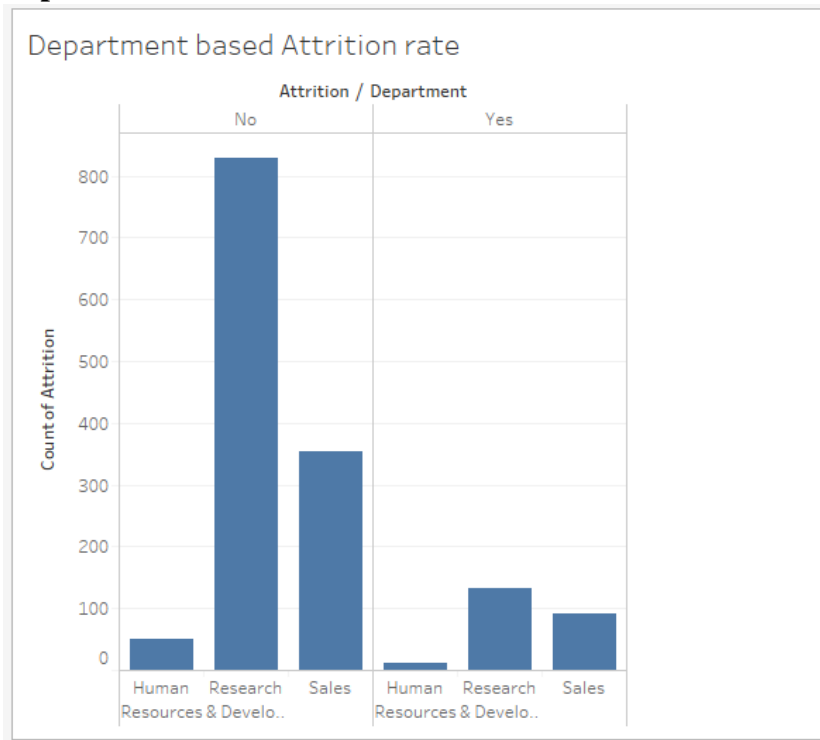
Attrition Rate:
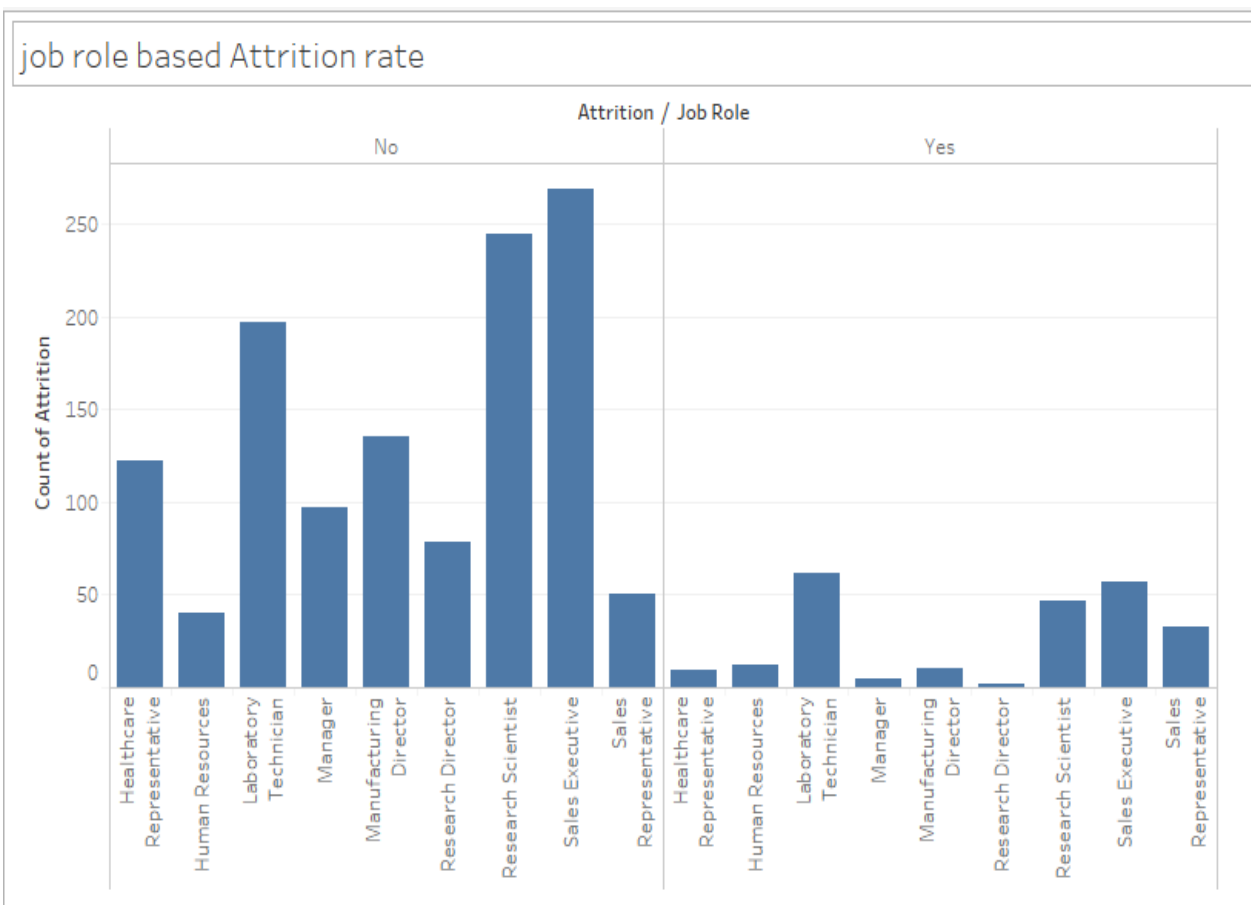
Attrition rate

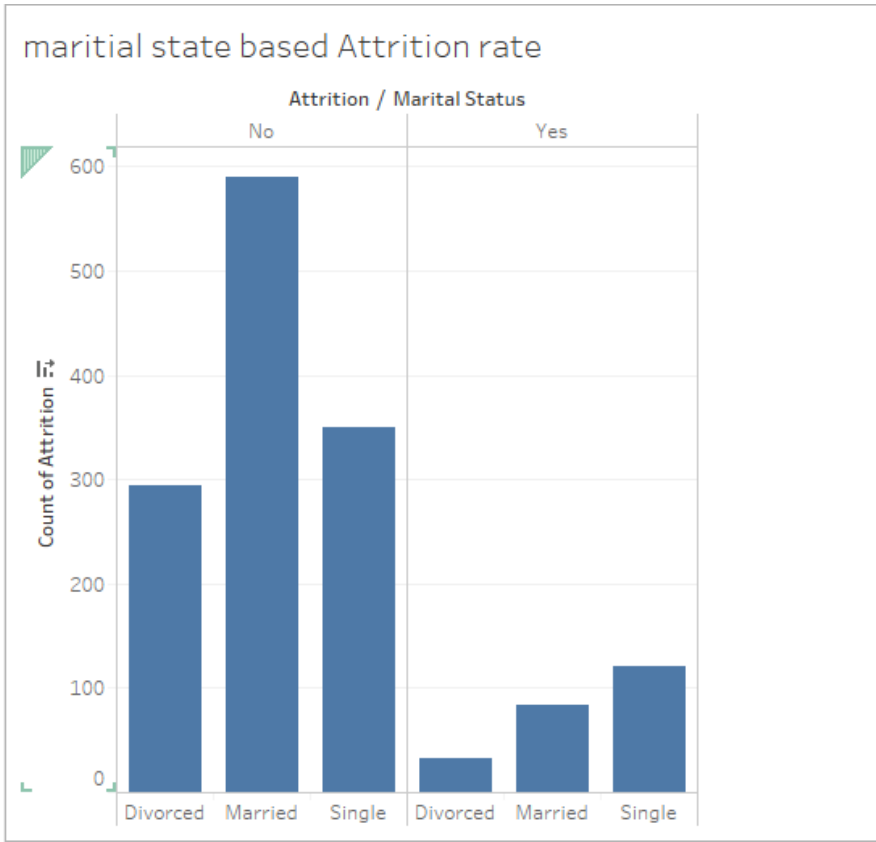## Gender Based Attrition Rate:

Gender based Attrition rate

Department Based Attrition Rate:

Job Role Based Attrition Rate:

Marital Status Based Attrition Rate:
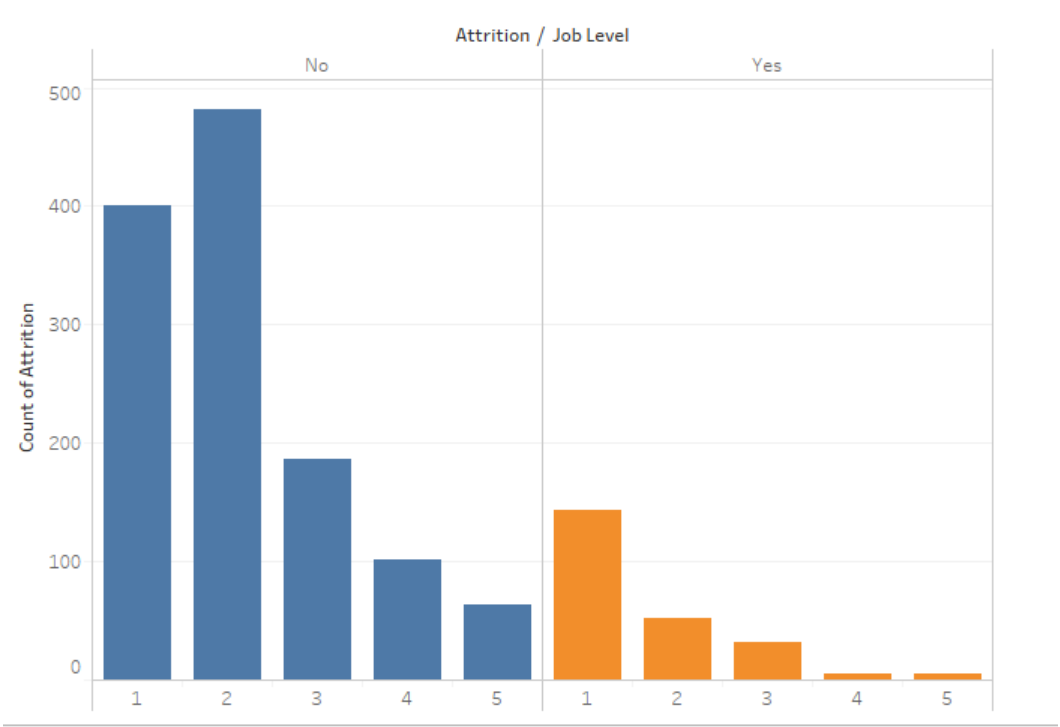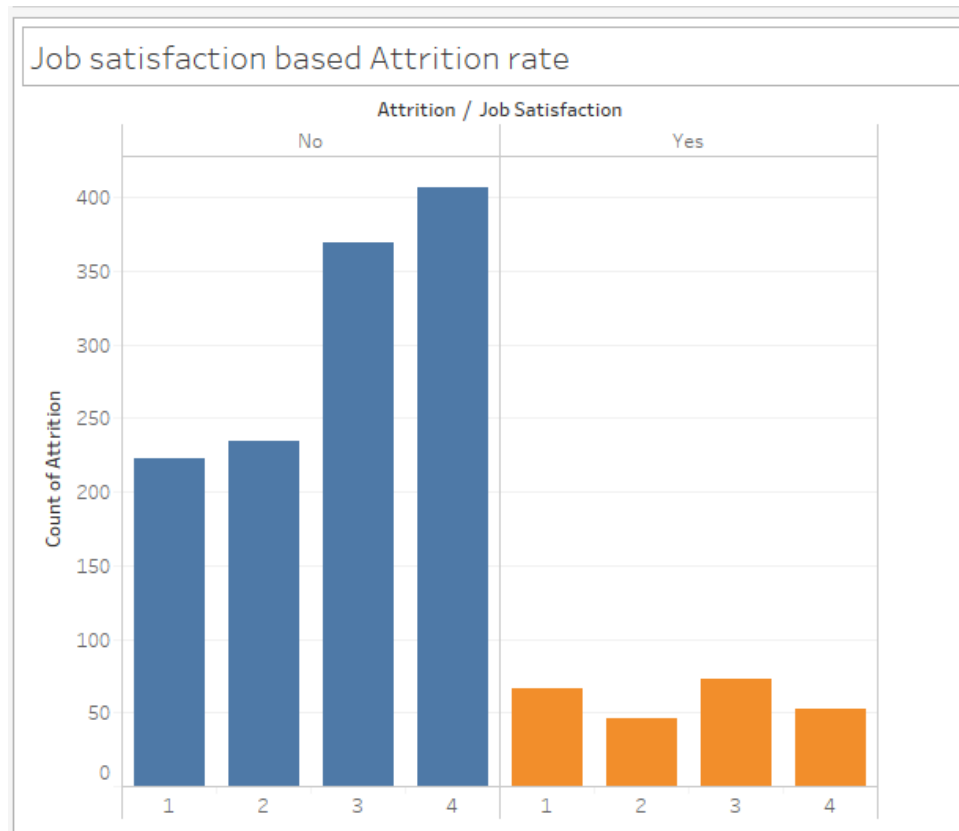
maritial state based Attrition rate

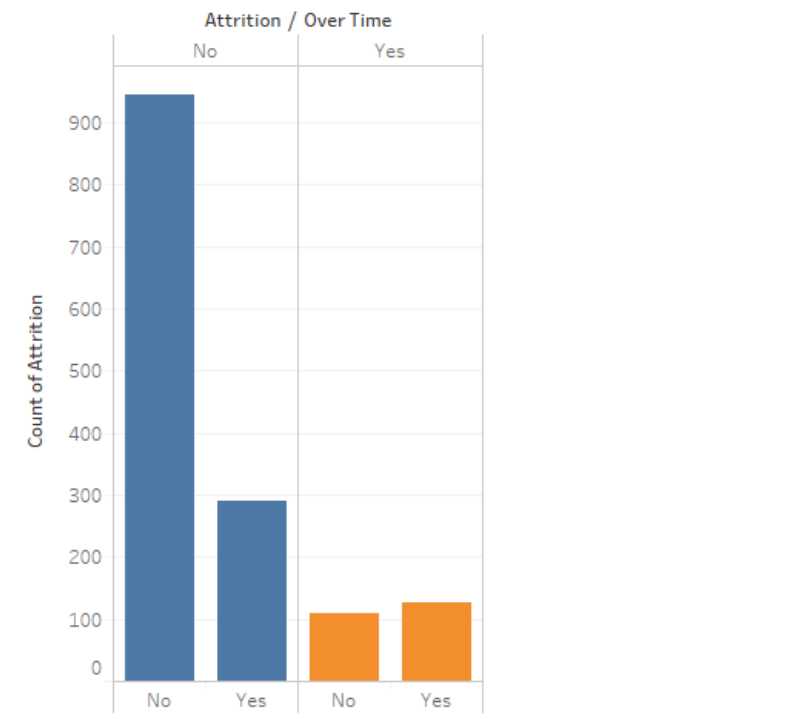**Job Level Based Attrition Rate:**

Job level based Attrition rate
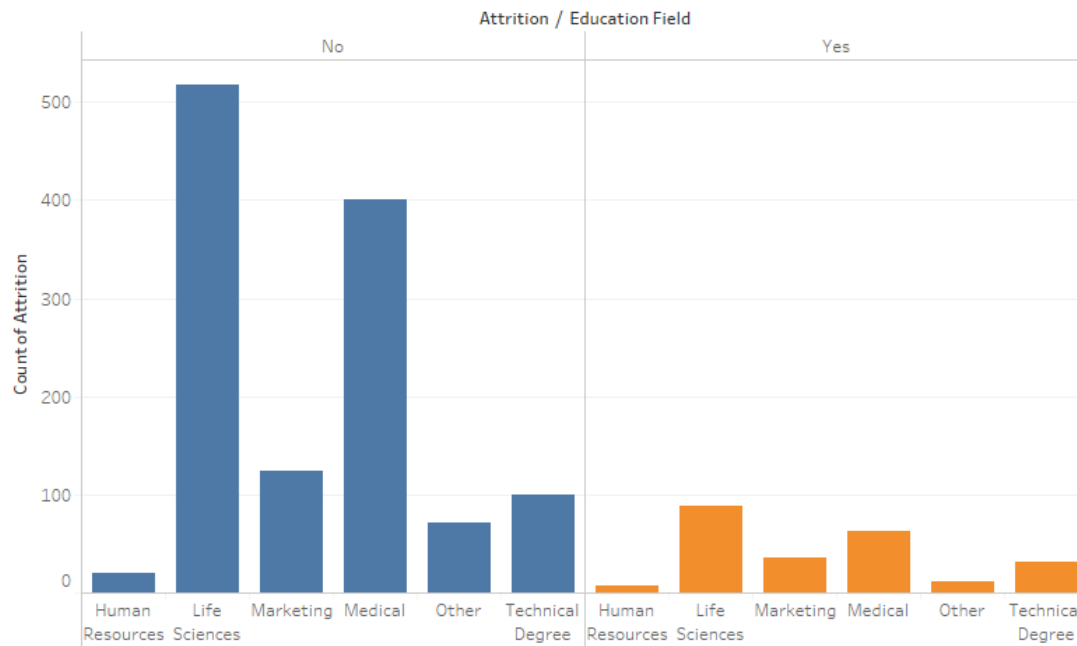
Job Satisfaction Based Attrition Rate:
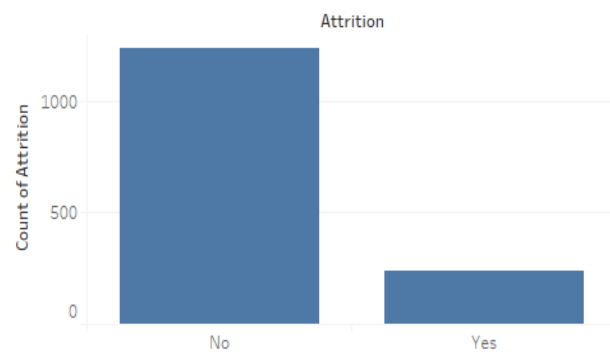

Overtime Based Attrition Rate:

Education Based Attrition Rate:

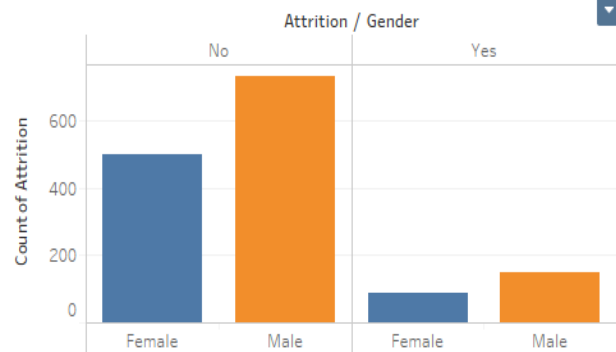EDu field Attrition rate

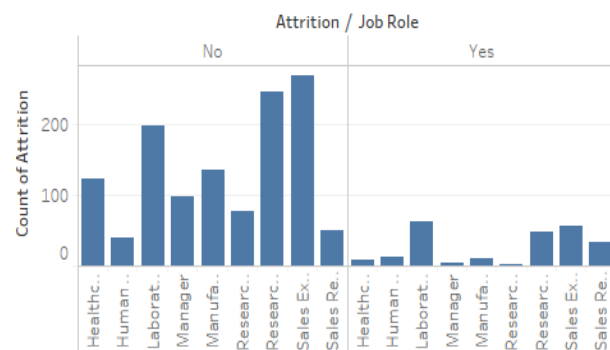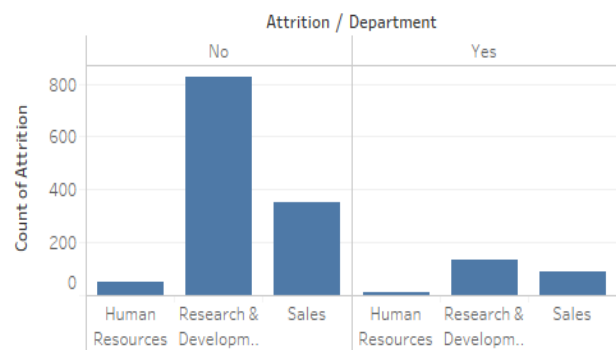**Attrition Rate Dashboard 1:**

Attrition rate

Gender based Attrition rate

job role based Attrition rate

Department based Attrition rate

Attrition Rate Dashboard 2:

Ages of People in Job (bin size=6):

Age Based Attrition Rate:

age based attrition rate
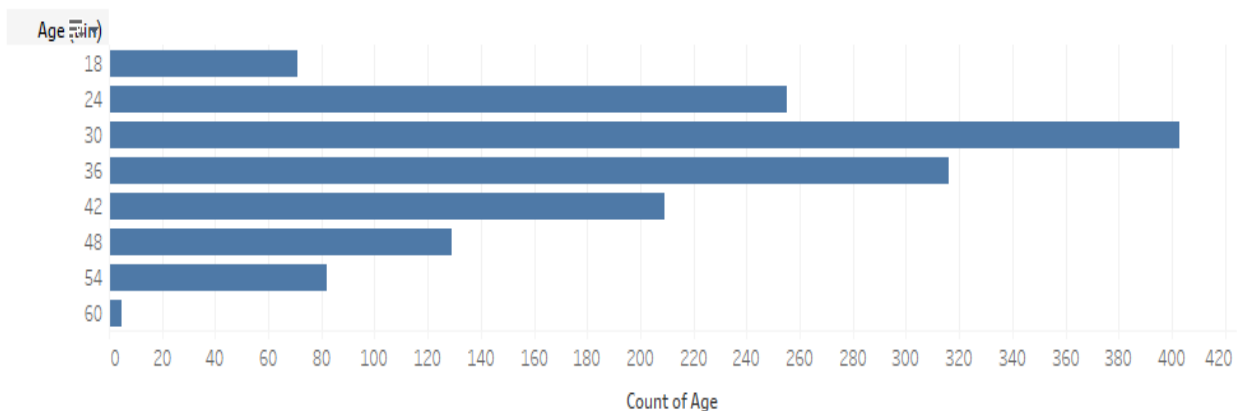
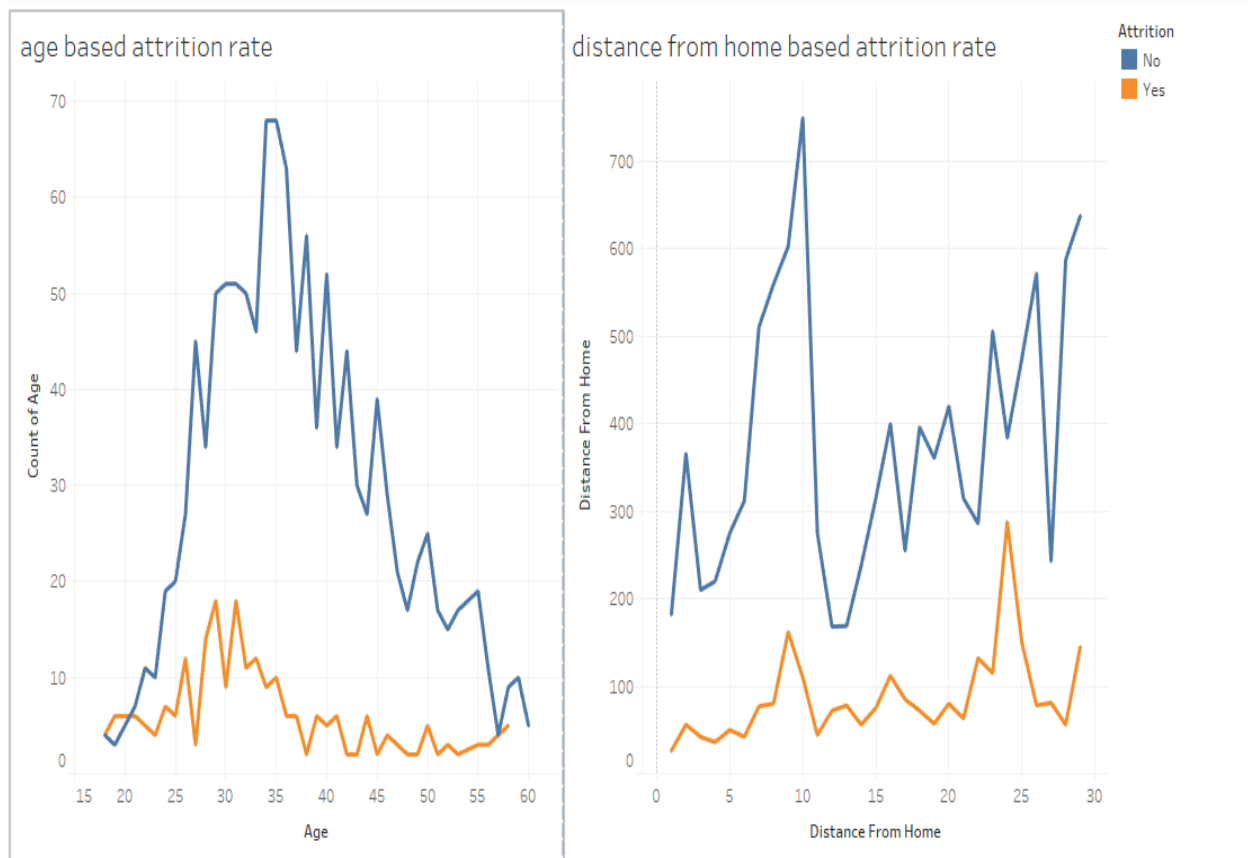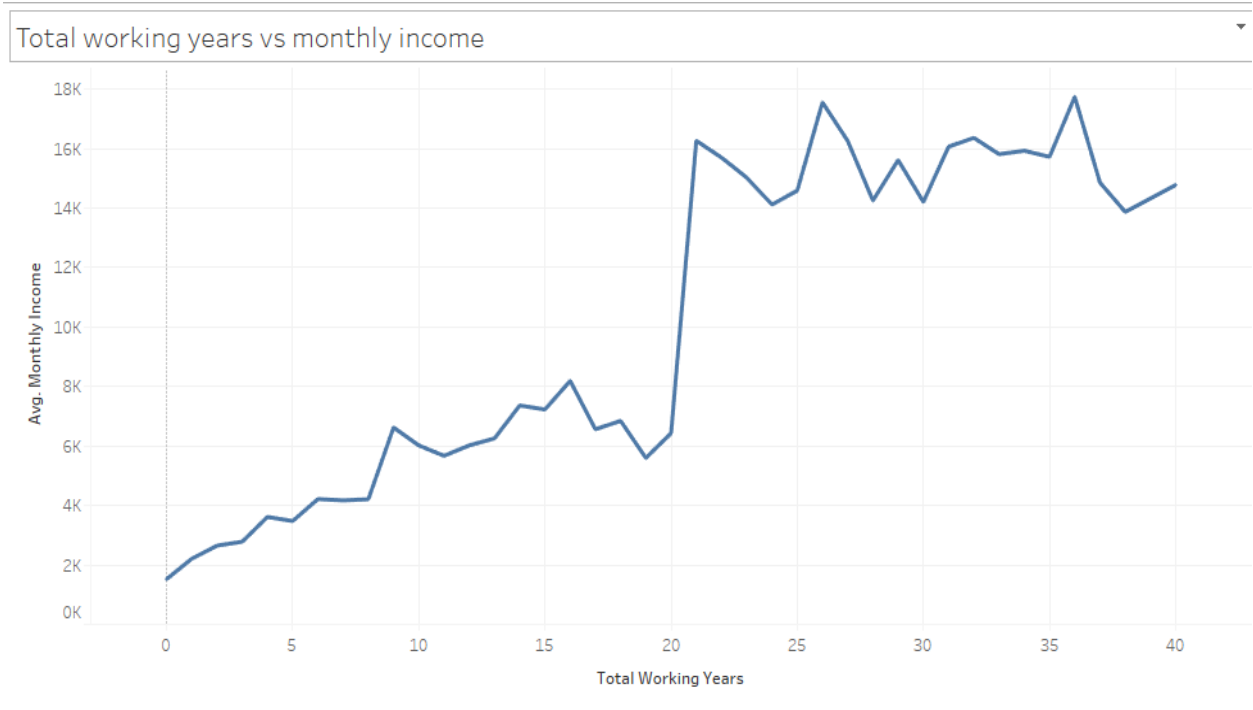**Distance from Home Based Attrition Rate:**
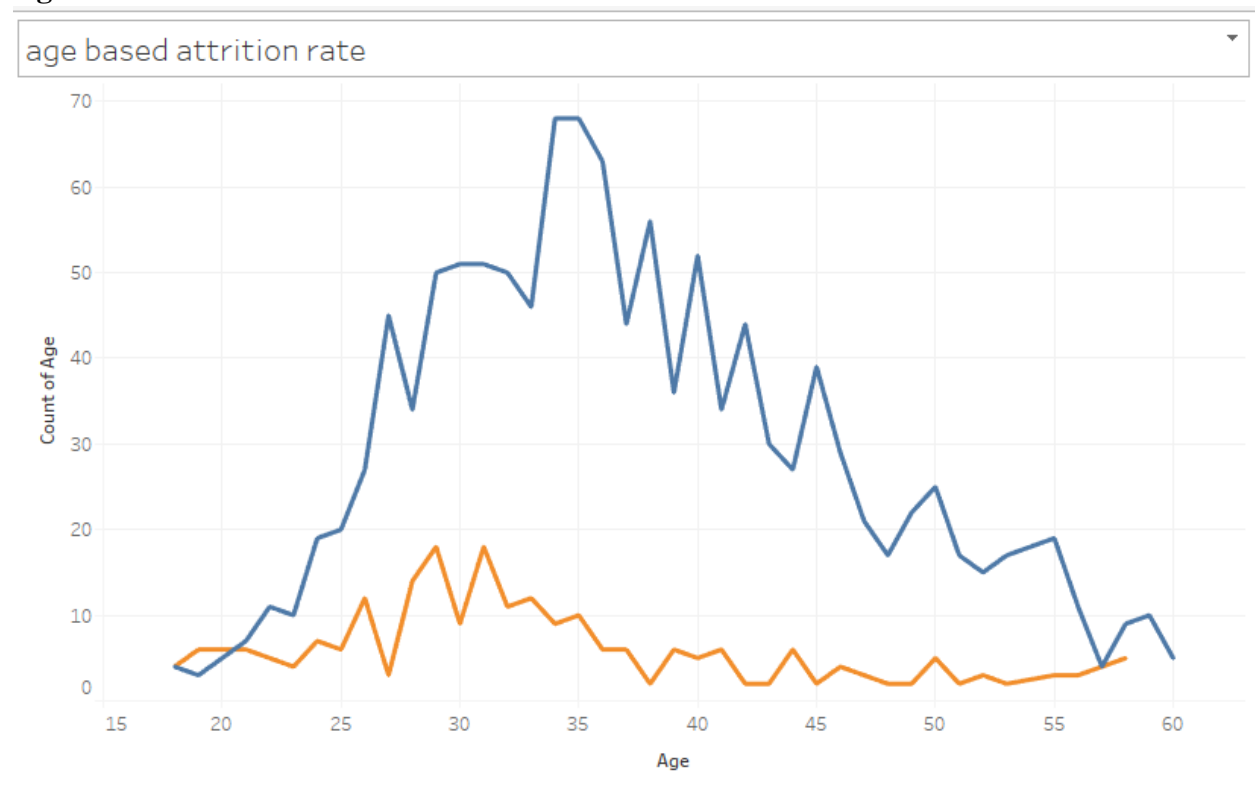
distance from home based attrition rate
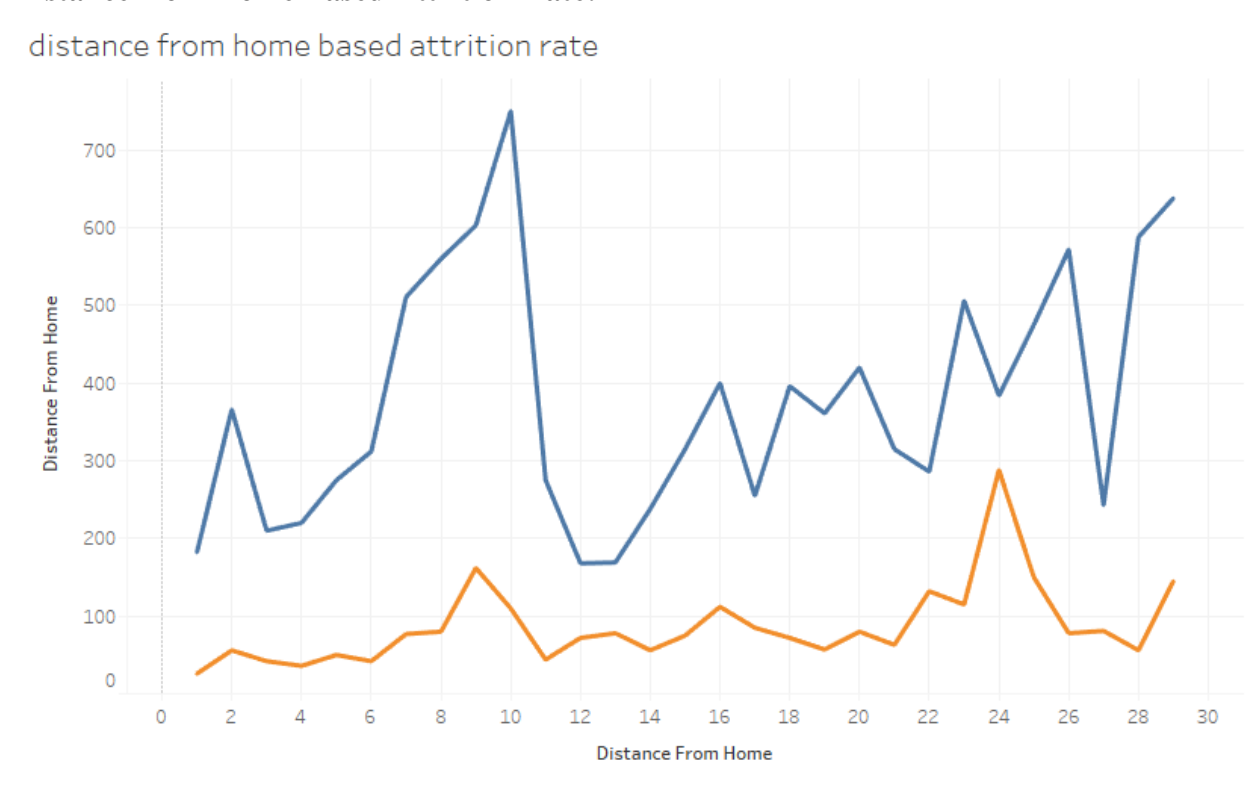
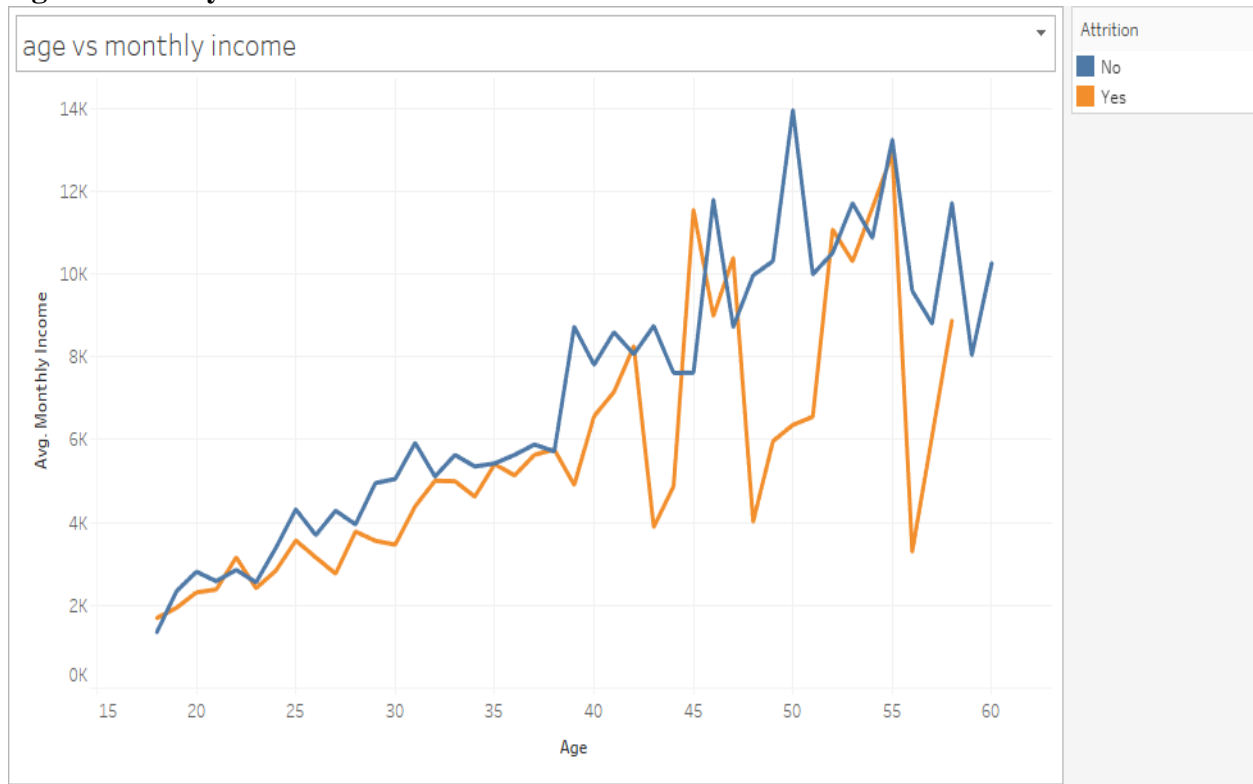## Age & Distance from Home based Attrition Rate Dashboard:

Working Years vs Monthly Income:

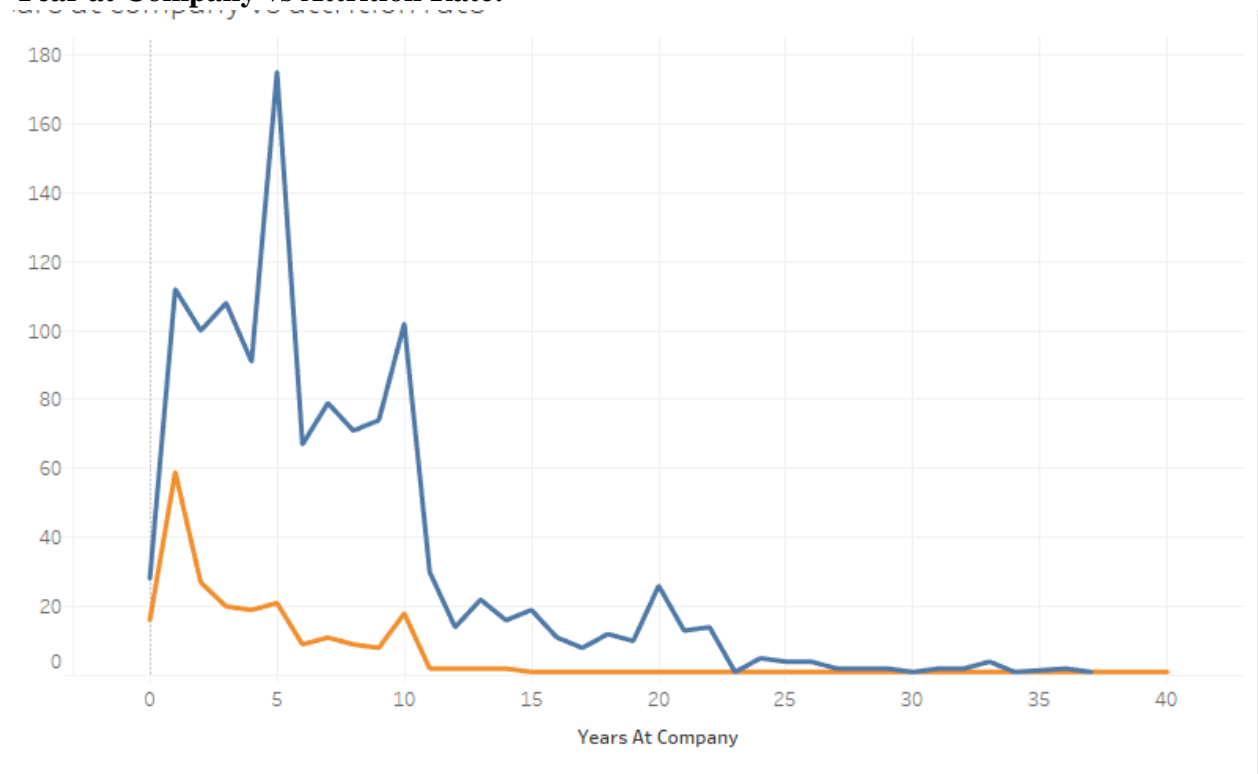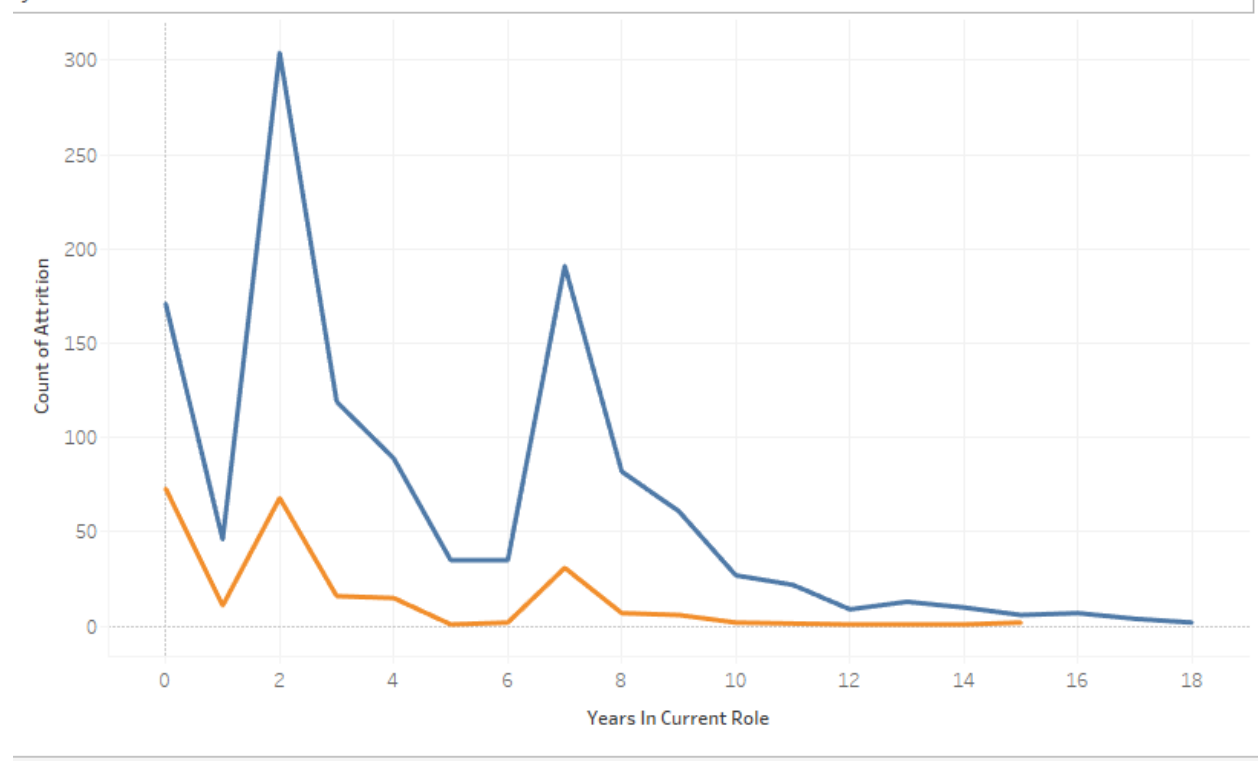**Age vs Monthly Income:**

Age, Total Working Hour vs Monthly income Dashboard:
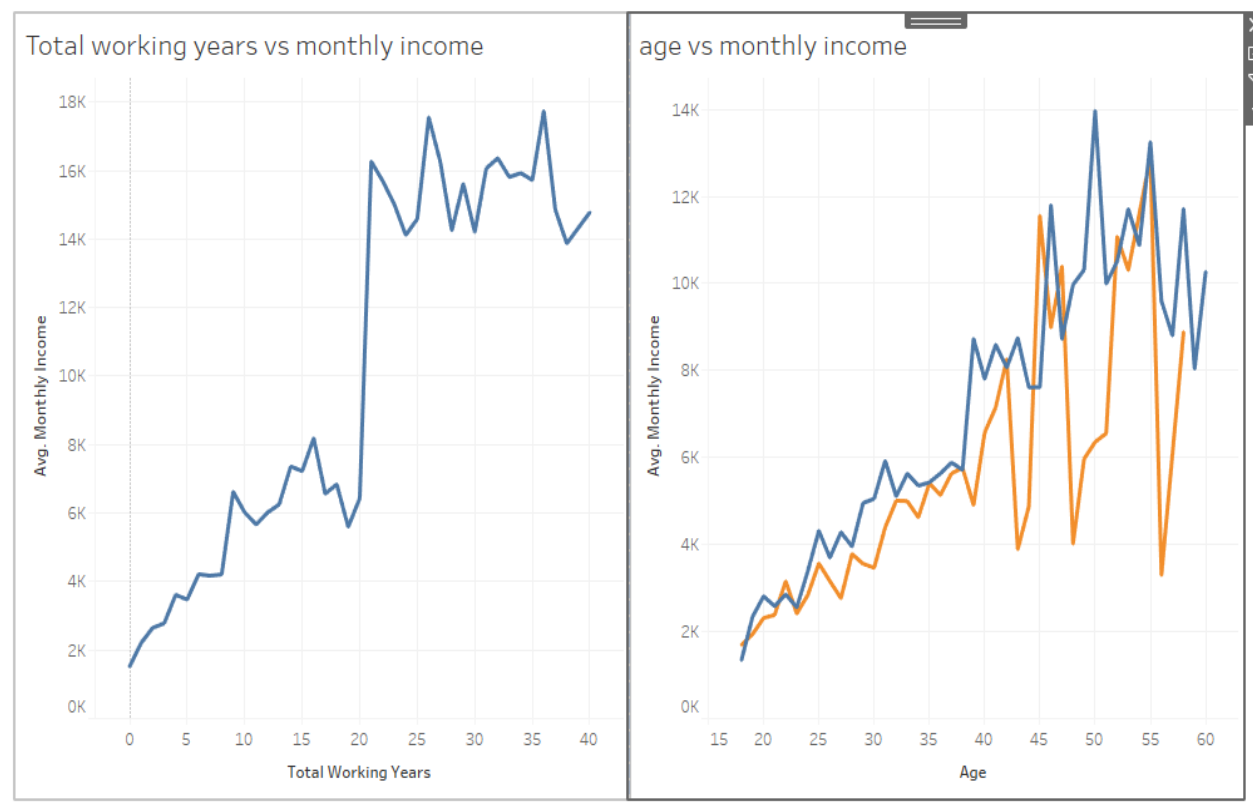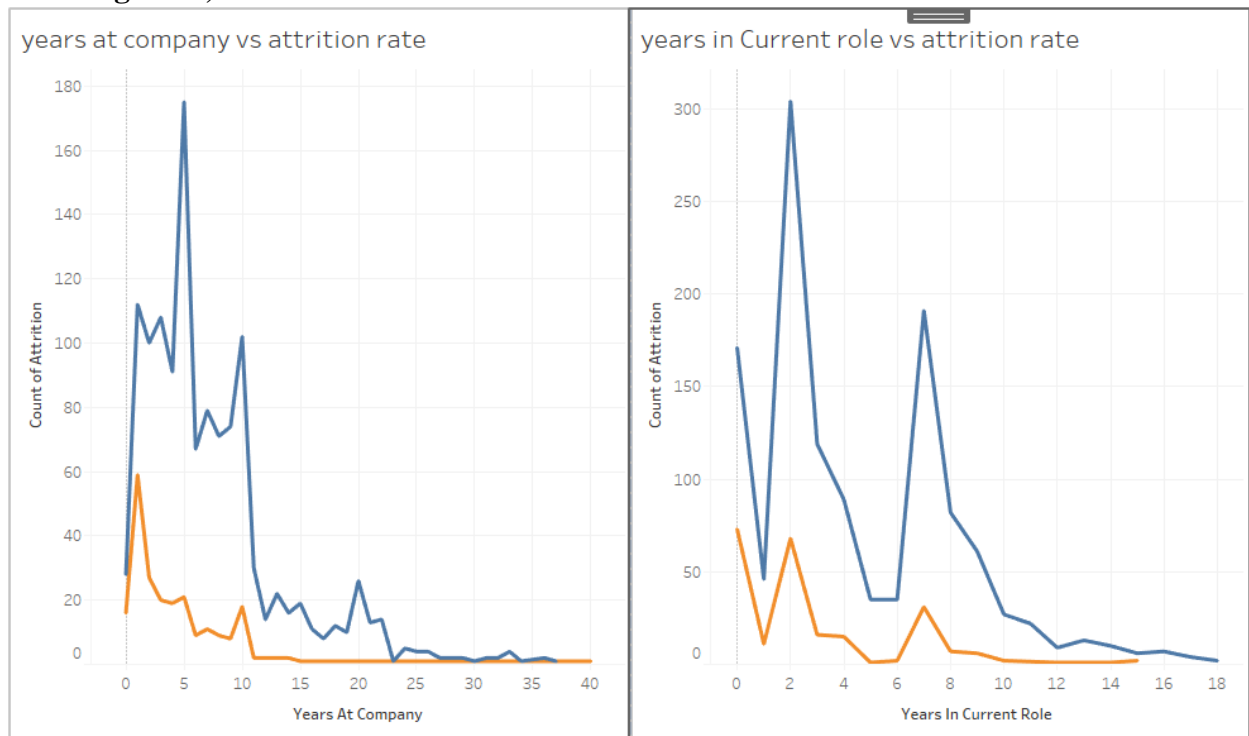
Year at Company vs Attrition Rate:
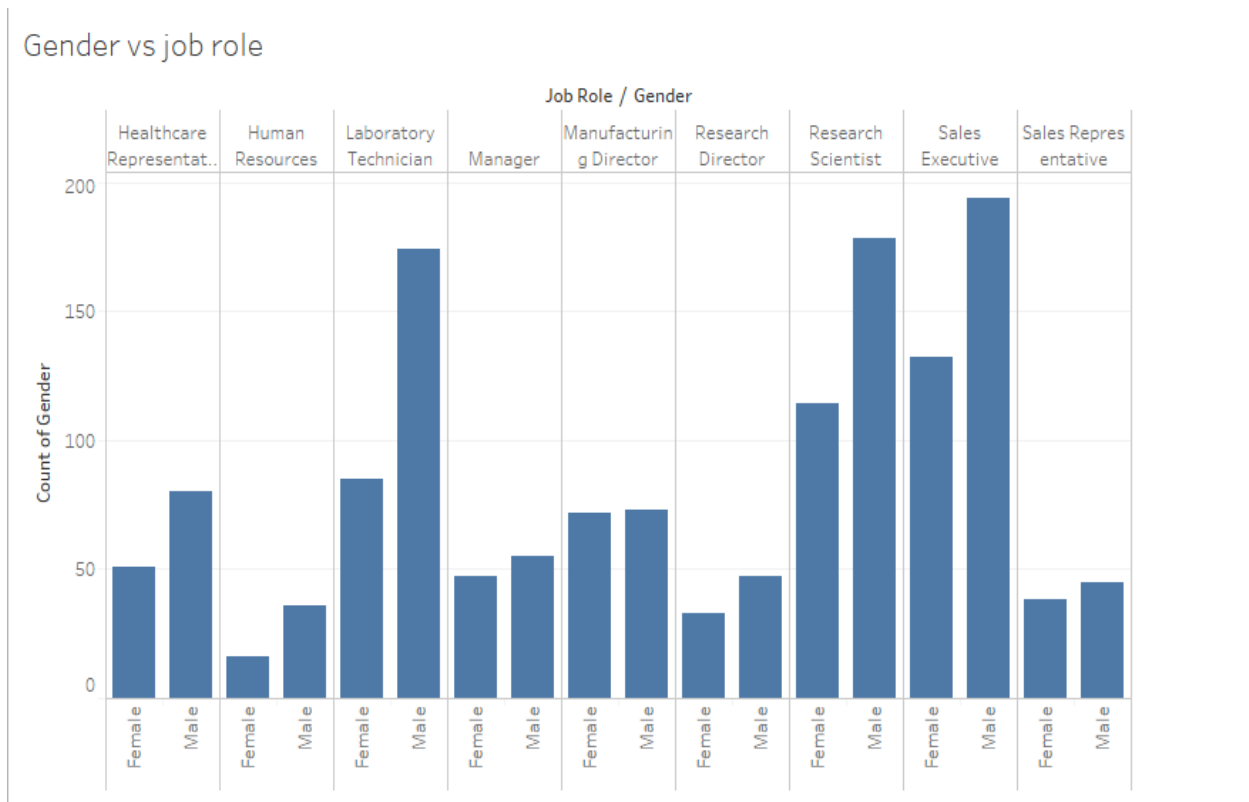

Year in Current Role vs Attrition Rate:

years in Current role vs attrition rate

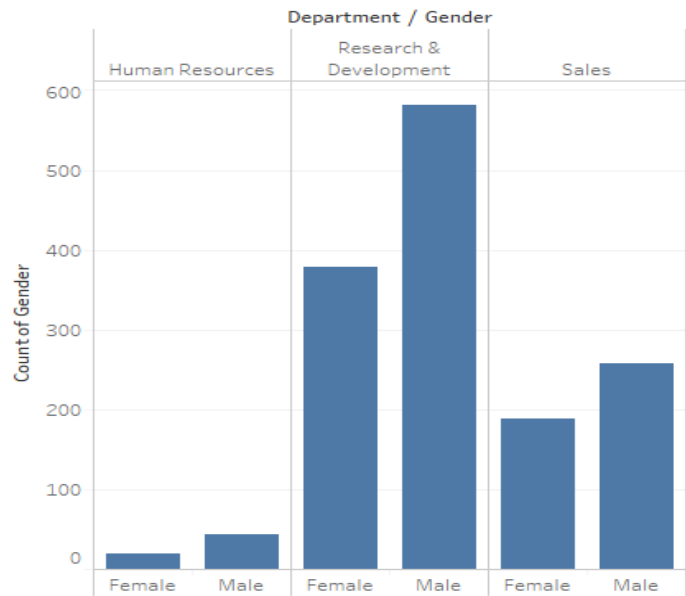**Working Year, Year in Current Role vs Attrition Rate Dashboard:**
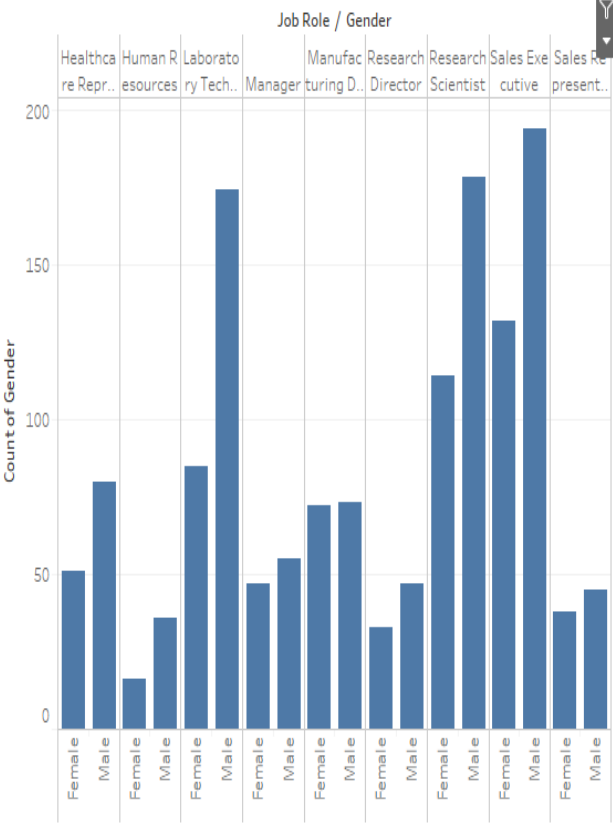

Gender count in Job Role:
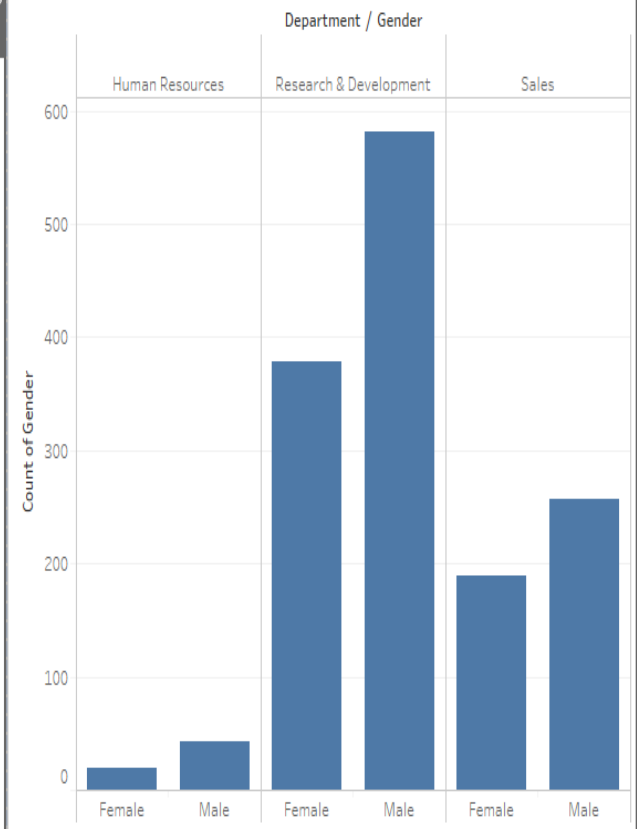
Gender Count In Department:

Gender Count in Job Role & Department Dashboard:

Story:

Employee Attrition Story:

Employee attrition story

Employee attrition is defined as the natural process by which	More single people left their job based on the figure it seem and	Age based attrition seems normal distribution for both	Average month income is increasing based on the total	More no of people attrited from the company are those	In each department, Male workers are in more no than the

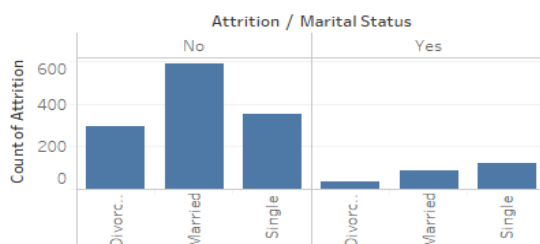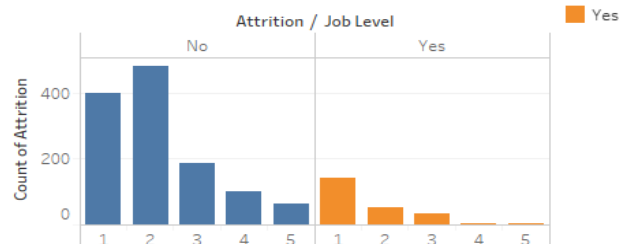### Gender vs job role

Gender vs Department

maritial state based Attrition rate

Job level based Attrition rate
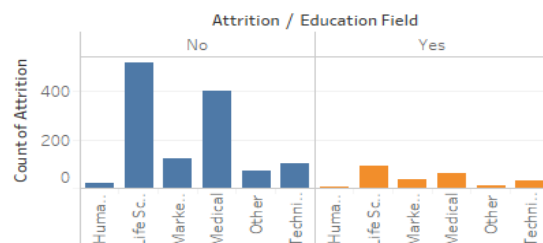

Attrition
- No
- Yes

Job satisfaction based Attrition rate

Overtime based Attrition rate
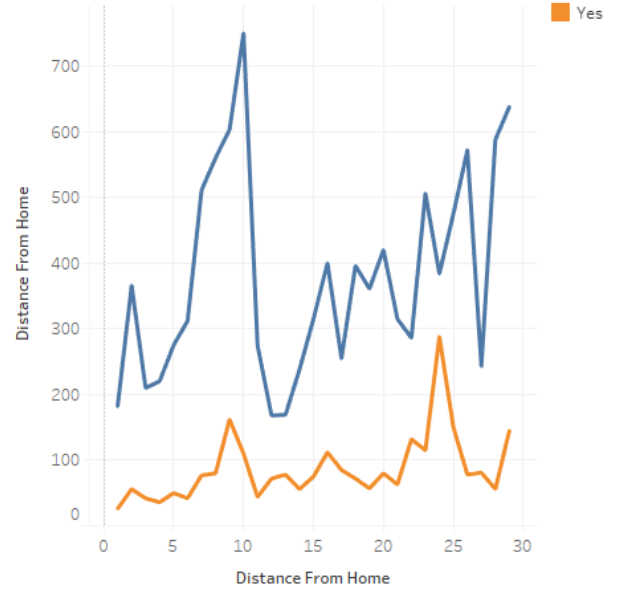

EDu field Attrition rate

age based attrition rate

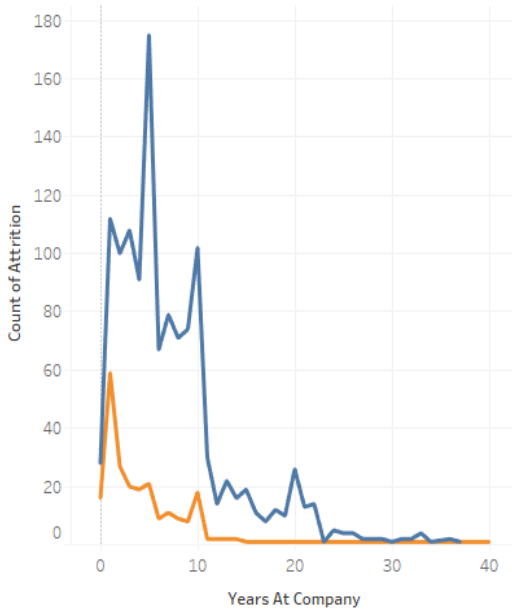## distance from home based attrition rate

Attrition
- No
- Yes

Total working years vs monthly income

age vs monthly income

Attrition
- No
- Yes

years at company vs attrition rate

years in Current role vs attrition rate

Attrition
- No
- Yes
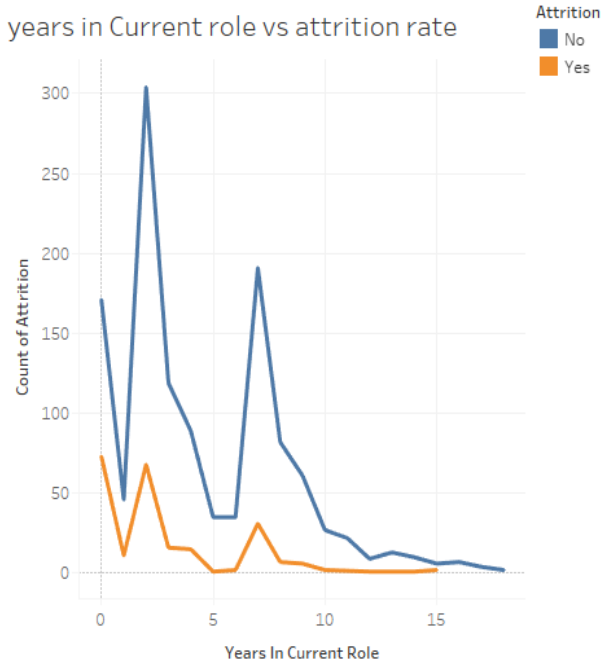
Gender vs job role
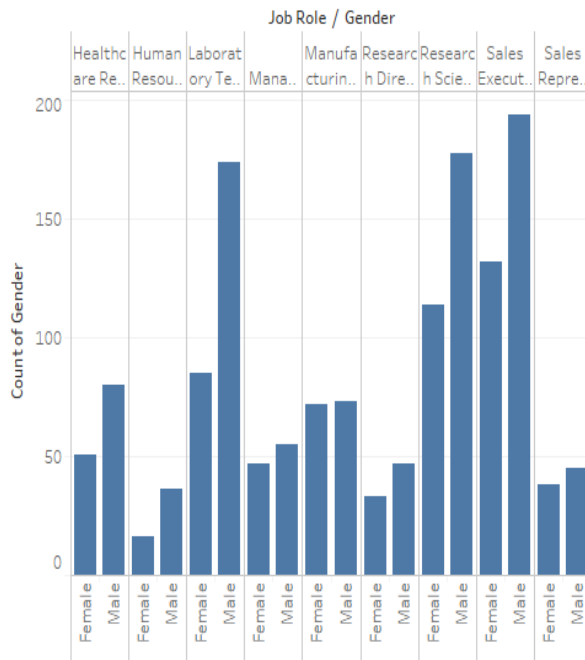
Gender vs Department
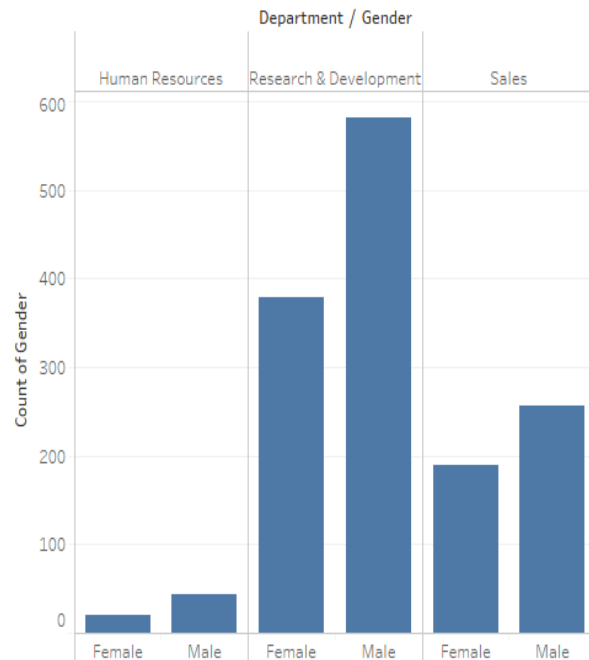
Analysis:
The analysis of both the task is in the Tableau Workbook. I have written story for both after analyzing and visualizing the whole dataset. For the Global Superstore dataset, I have followed the manual (slides) and analyze it accordingly. For the second task which is employee attrition dataset, I have tried to analyze it based on different dimension and in the story portion I have written all the analysis detail that I have analyzed from the dataset.

Link to my Public Tableau:
https://public.tableau.com/app/profile/ayaz.mehmood/viz/globalsuperstoredatasetvisualizedbyAyazMehmood/CompanyKPIandImprovementSuggestion
Global Superstore Dataset

https://public.tableau.com/app/profile/ayaz.mehmood/viz/EmployeeAttritiondatasetanalyzedbyAyazMehmood/Employeeattritionstory
Employee Attrition Dataset