AMAZON SALES ANALYSIS

DETAILED PROJECT REPORT

RAVIKUMAR SURAM

PROJECT DETAIL

PROJECT TITLE	AMAZON SALES ANALYSIS
TECHNOLOGY	BUSINESS INTELLIGENCE
DOMAIN	E-COMMERCE
PROJECT DIFFICULTY LEVEL	ADVANCED
PROGRAMMING LANGUAGE	PYTHON
TOOLS USED	JUPYTER NOTEBBOOK, POWER-BI

OBJECTIVE

- The goal of this project is to analyse the sales trend of Amazon in various countries and present it to the sales management. So that they can take the necessary steps to improve the methods of distribution to reduce cost and to increase profits. To do EDA and to extract the meaningful insights from the data based on the given information.

PROBLEM STATEMENT

- Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits.
- Find key metrics and factors and show the meaningful relationships between attributes.

ARCHITECTURE

RAW DATA COLLECTION

IMPORTING REQUIRED LIBRARIES IN JUPYTER NOTEBOOK

LOADING DATASET

HANDLING MISSING VALUES

HANDLING OUTLIERS

DATA CLEANING

EDA

MODELLING

IMPORTING CLEANED DATA TO POWER-BI

INSIGHTS

DEPLOYMENT

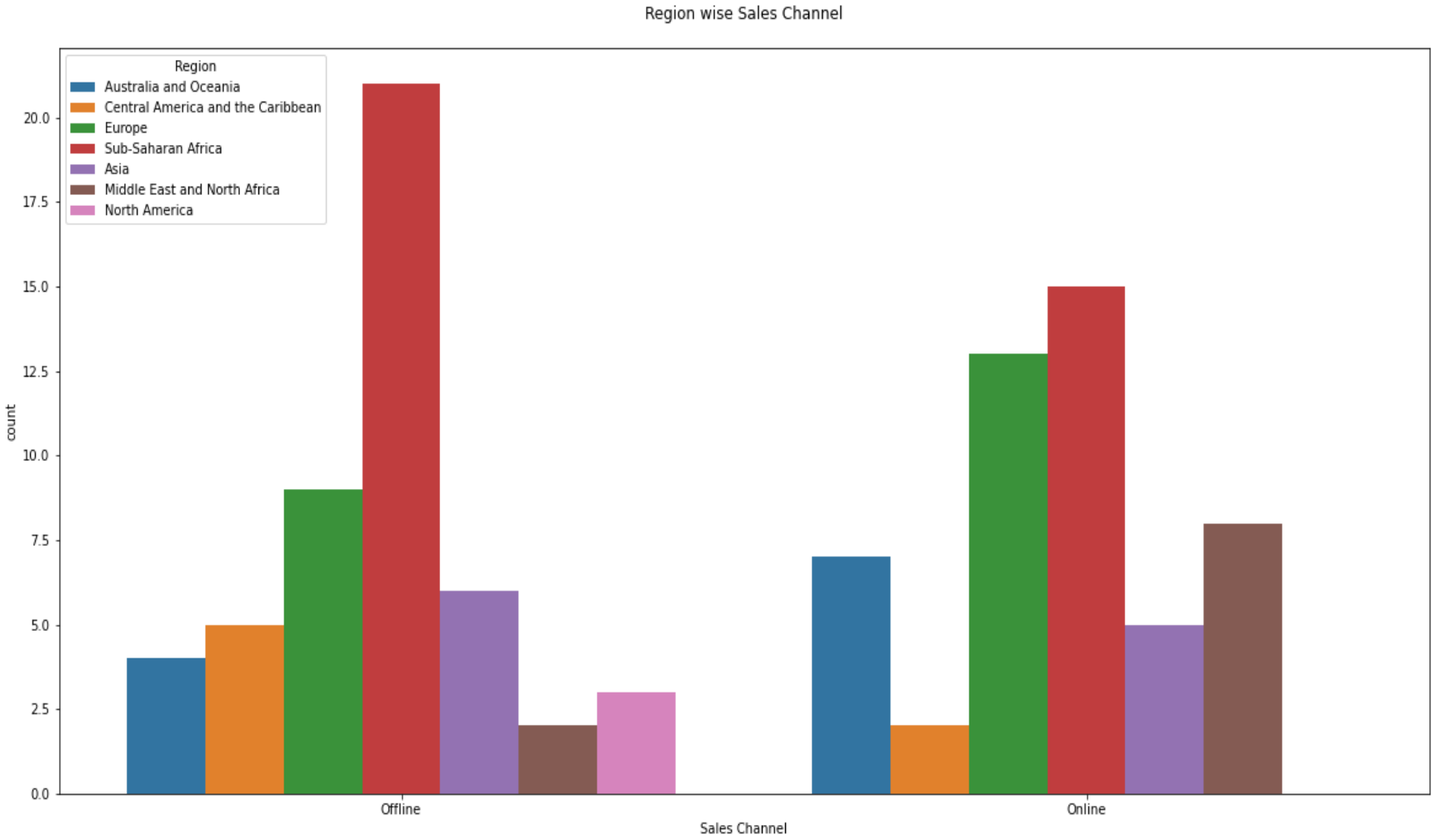
REPORTING

DATASET INFORMATION

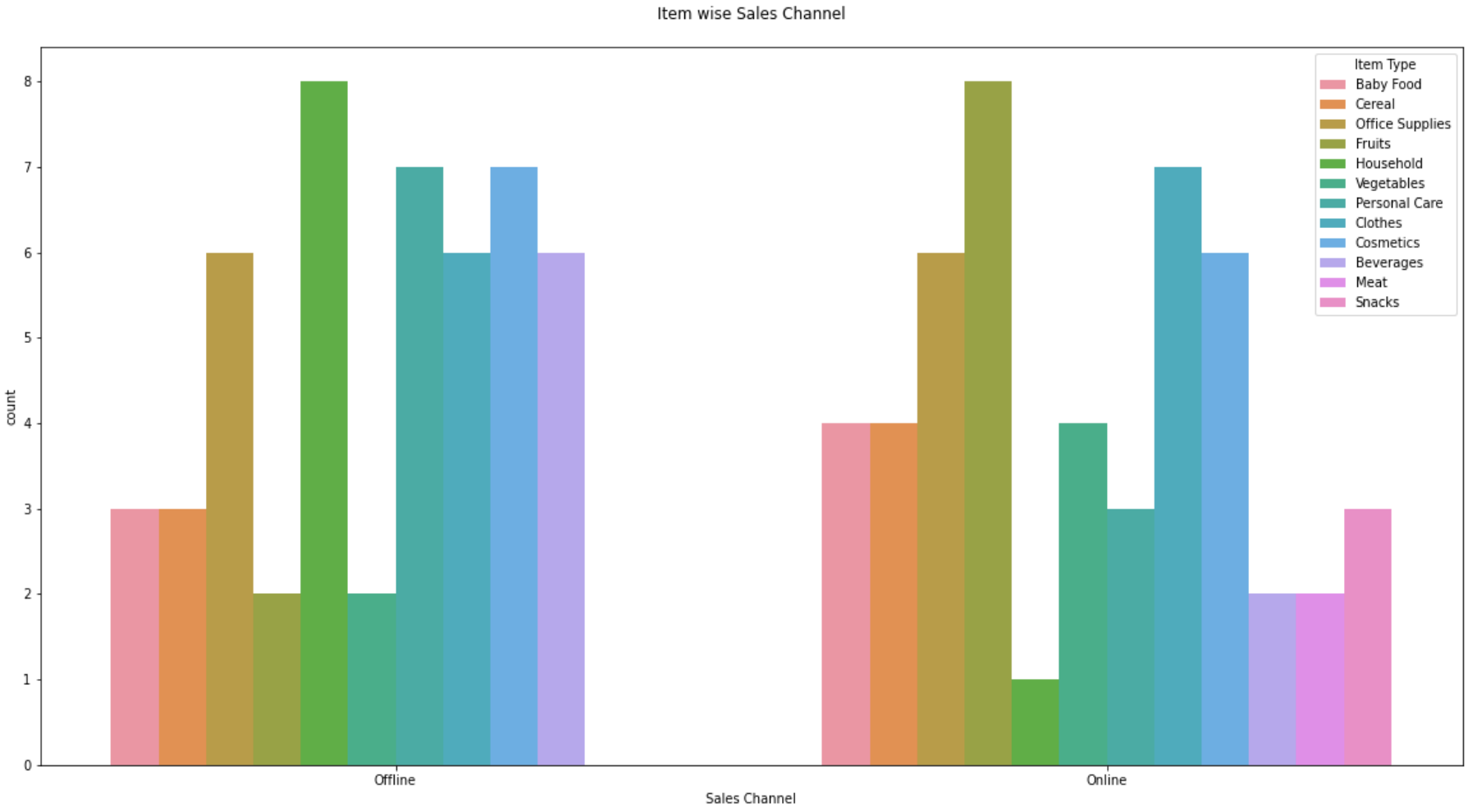
- Region: Categorical data (The regions where amazon is selling the products.)
- Country: Categorical data (Country names)
- Item type: Categorical data (products name)
- Sales channel: Categorical data (offline/online)
- Order priority: Categorical data (H,C,L,M)
- Order date: Date (day when order was placed)
- Order id: Integer (generated order number for each order)

- Ship date: Date (day when product was shipped)
- Units sold: Integer (quantity of the product)
- Unit price: Float (selling price for one unit of product)
- Unit cost: Float (manufacturing cost of the product)
- Total revenue: Float (sales = units sold * unit price)
- Total cost: Float (total units *price)
- Total profit: Float (profit = Total revenue – Total cost)

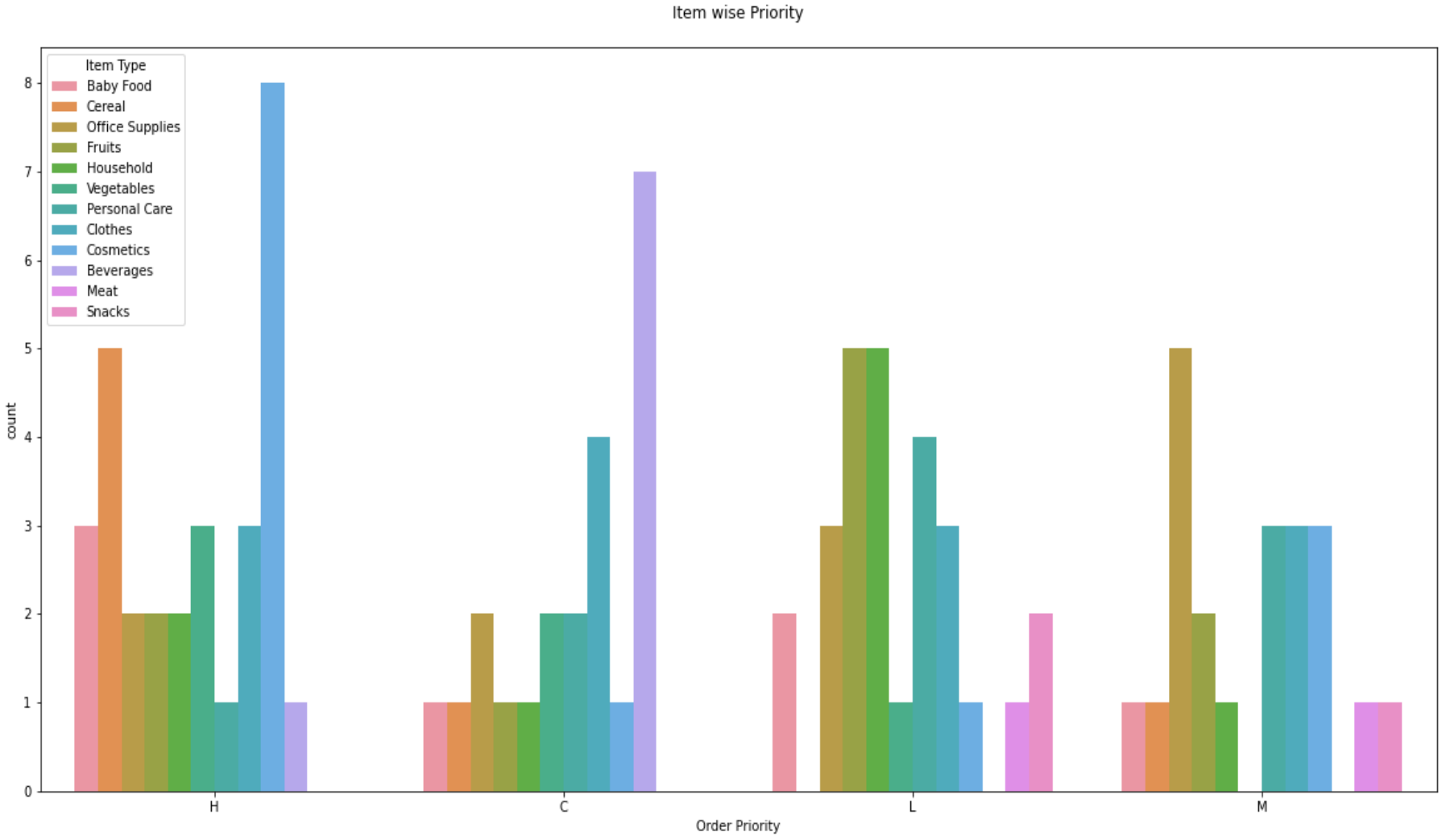
Region by Sales-Channel



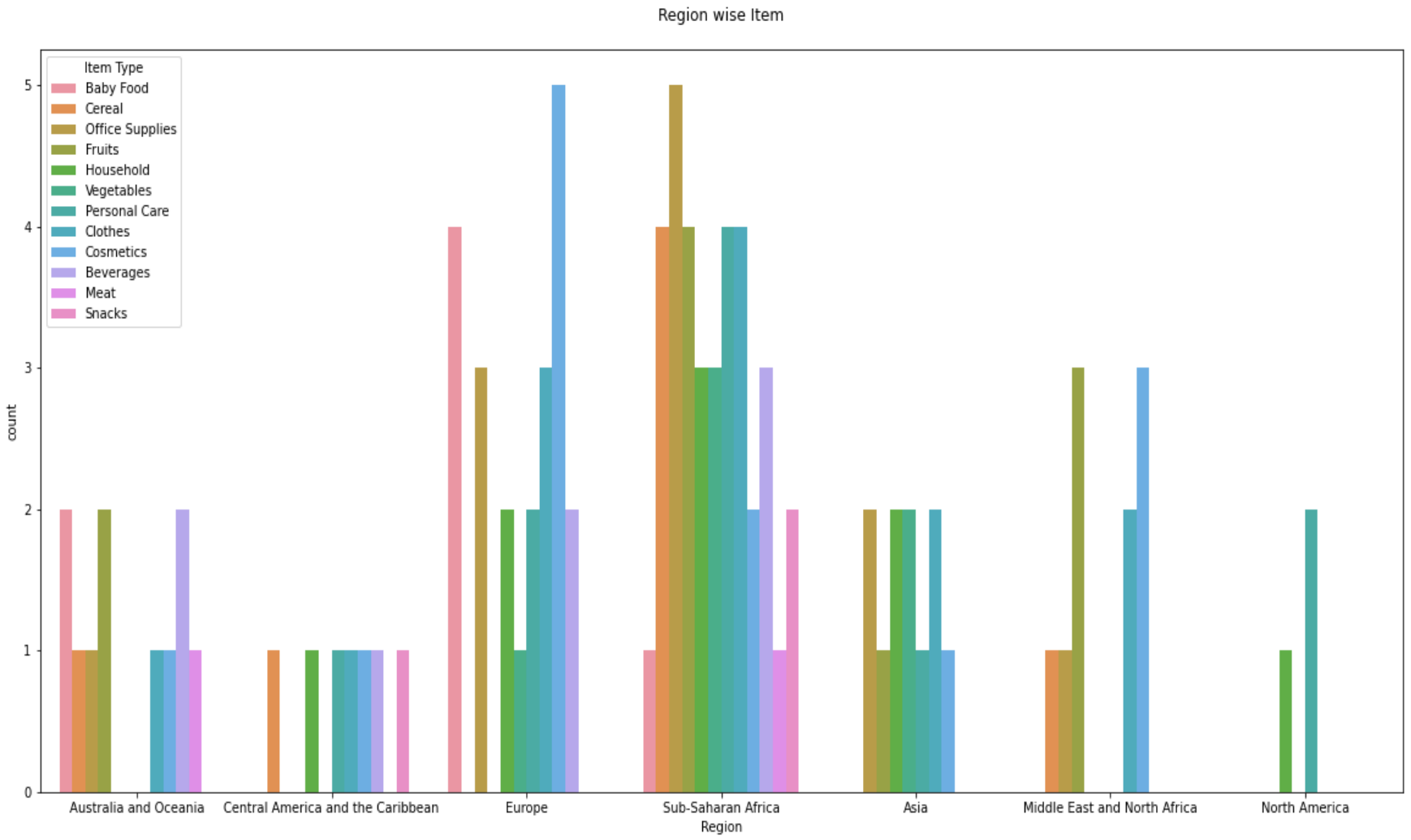
Items by Sales-Channel



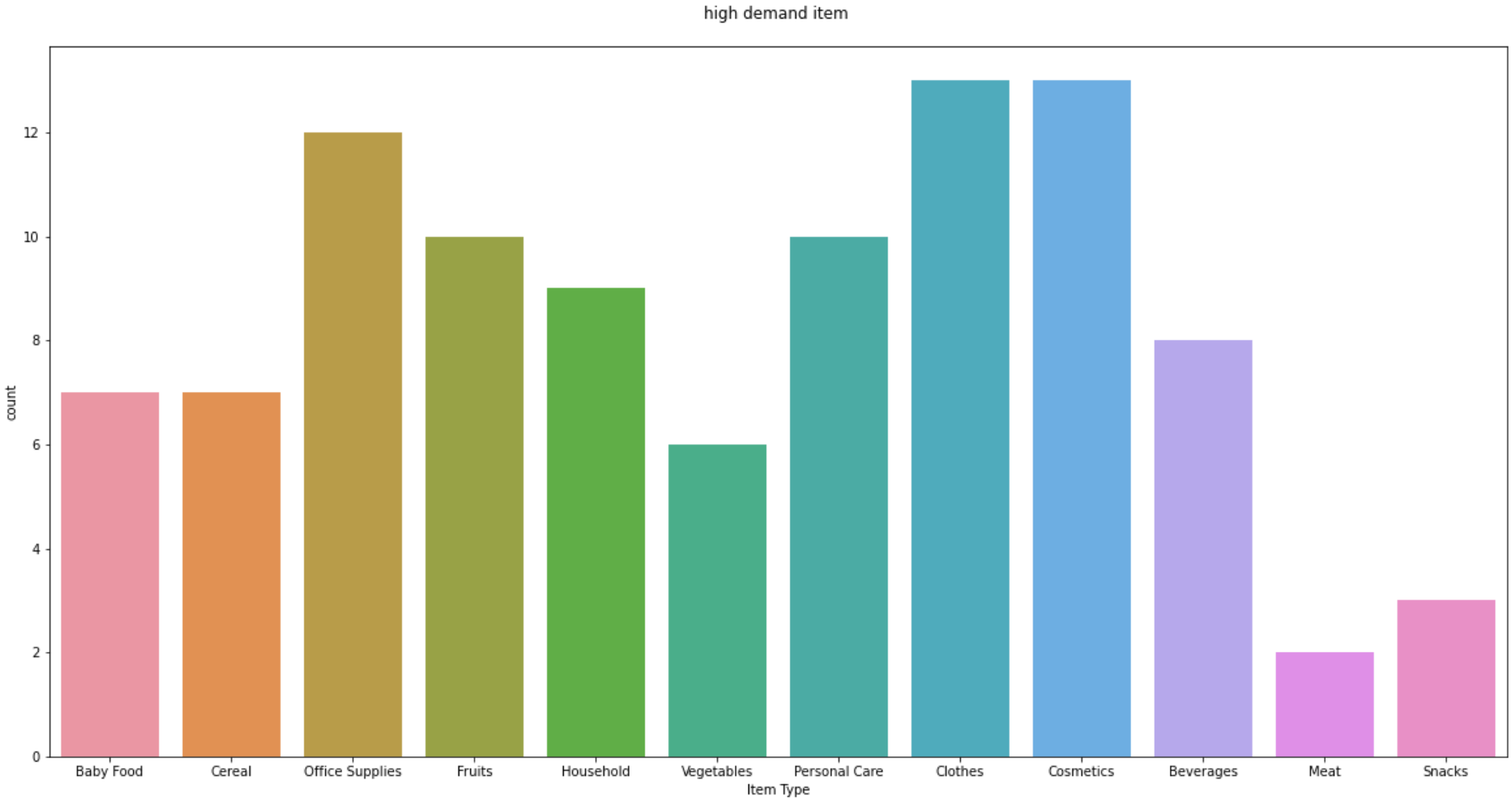
Items by Order-Priority



Items by Region



High demand Item-Type



KPIs (Key Performance Indicators)

Key indicators displaying a summary of amazon sales analysis

1. Sales by Year
2. Sales by Month
3. Sales by Year-Month
4. Top selling regions
5. Top selling items

Conclusion :

1. Online presence is very less in Central America and the Caribbean.
2. Presence of offline & online is good in Sub-Saharan Africa.
3. Cosmetics is the most profitable segment.
4. Clothes and Cosmetics are the most demanding products.
5. Middle East and North Africa contributing for more profit.

Q & A

1. What is the source of data?
Ans. The dataset is provided by iNeuron.

2. What is the type of data?
Ans. Data has the numerical , float and categorical values.

3. What is the approach you followed?
Ans. Refer to slide 5 for better understanding.

4. What are the changes you made in the data?
Ans. Didn’t changed values, however changed the data type of ‘Order Date’ and ‘Ship Date’, derived date and year from ‘Order Date’.

5. Which libraries you used?
Ans. Used Pandas, Numpy, Matplotlib, and Seaborn.

Thank You

Ravikumar Suram