# **Product Sales Analysis**

# **Project Description:**

Phase 4: Development Part 2: In this part you will continue building your project.

### **Data Collection:**

Gather relevant sales data, which may include data on product sales, sales transactions, customer information, and more.



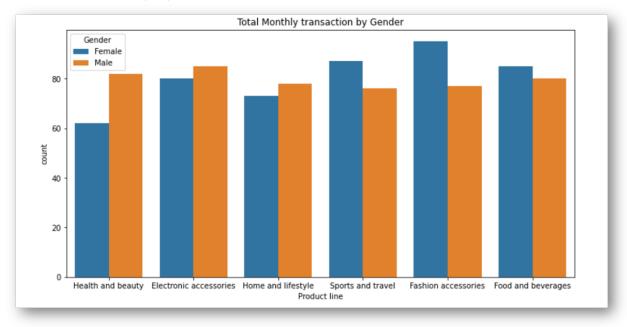
# **Data Cleaning and Preparation**

- Clean and preprocess the data to ensure it's accurate and consistent. This step may involve handling missing data, removing duplicates, and standardizing data formats.

# Roadmap for Data Preparation Store Roadmap for Data Preparation Store Store

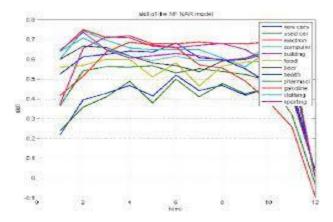
### **Data Exploration**

- Start by exploring the data to get a general understanding of it. Calculate basic statistics, create histograms, and visualize the data to identify any trends or outliers.



### Sales Trends

- Use time-series analysis to identify sales trends over a specific period. Visualize this data with line charts, area charts, or bar charts.
  - Analyze seasonality and fluctuations in sales to identify peak sales periods.



### **Top-Selling Products**

- Create visualizations such as bar charts or pie charts to identify the top-selling products.
- Analyze which products contribute the most to overall sales revenue.



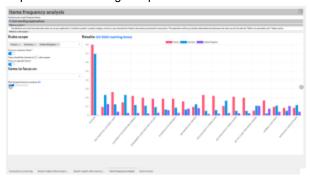
### **Customer Preferences**

- Explore customer data to understand their preferences. This may involve analyzing which products are often purchased together or segmenting customers based on their buying habits.
  - Create customer personas to identify the characteristics of different customer segments.



**Market Basket Analysis** 

- Use techniques like market basket analysis to understand which products are frequently bought together. This can help with cross-selling and product recommendations.



## **Inventory Management**

- Ensure that your analysis provides insights into inventory management. This includes identifying slow-moving products that may need promotion or clearance.



This graph/chart is linked to excel, and changes automatically based on data. Just left click on it and select "Edit Data".

# **Product Lifecycle Analysis**

- Analyze the lifecycle of products, from introduction to growth, maturity, and decline. This can help in making decisions regarding product discontinuation or innovation.

