ANALYZING AMAZON SALES DATA

created by: Shahbaz Akram | Data Science Intern

Objective

Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits. Sales management today is the most important function in a commercial and business enterprise.

Benefits

This analysis helps to make better business decisions, understand customer behavior and their order habits. We can have a view of Sales Trend.

It helps to manage resources easier.

Problem Statement

Developing a report by Extracting-Transforming-Loading of data which contains sales trend with respect to year and month.

Finding relationships through data to understand and analyze the information.

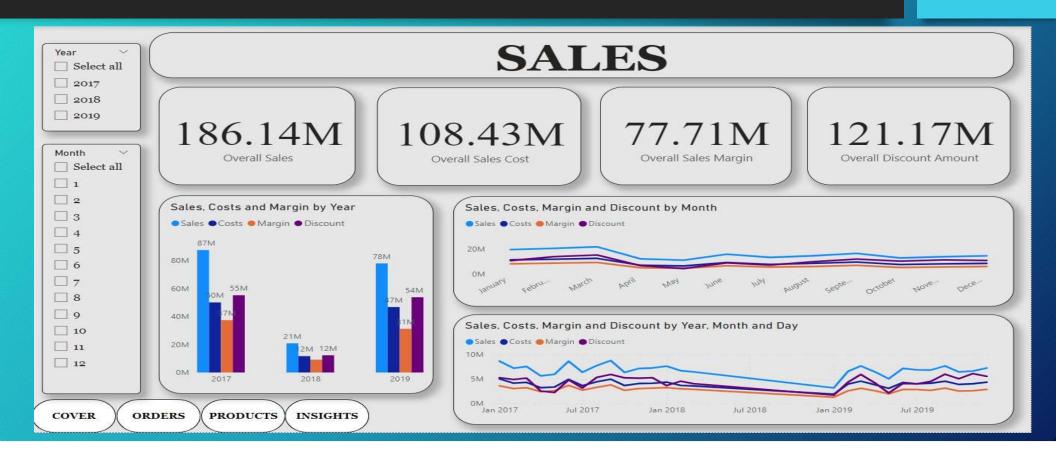
Data Pre-Processing

The raw dataset was loaded into Pandas dataframe. The dataset was explored, organized and cleaned. The missing values were removed / replaced. New, required columns were created. The correlation between the features were checked. The cleaned dataset was loaded into Power BI and the analysis were continued.

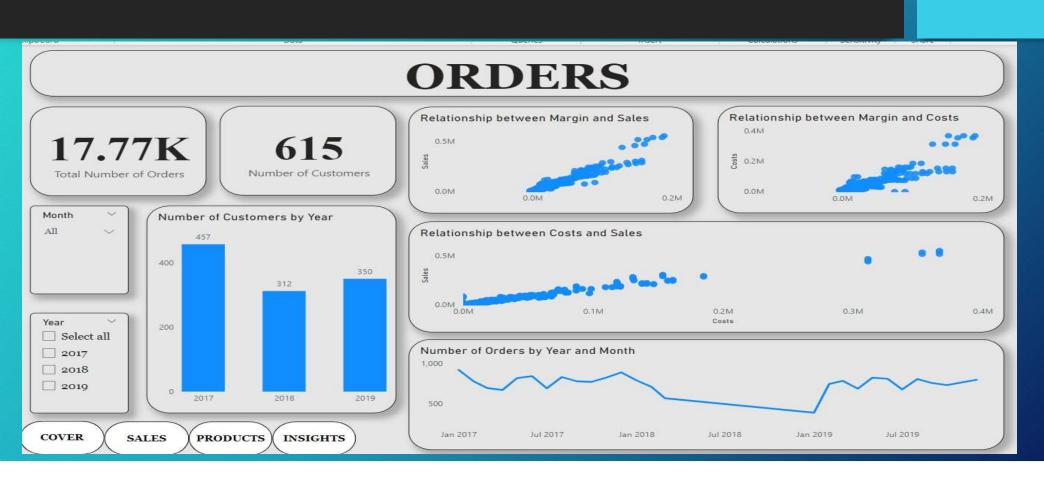
Correlation



Sales Report



Orders Report



Products Report

PRODUCTS Year Number of Items by Year and Month Select all 650 2017 **3M** 2018 2019 Number of Products Total Quantity Sold 0K Jan 2017 Jul 2017 Jan 2018 Jul 2018 Jul 2019 Month Top 5 Items with the Highest Revenue Total Quantity Total Number of Orders Select all Better Fancy Canned Sardines 17594 1 High Top Dried Mushroon 1471 Ebony Prepared Salad 9533 Moms Sliced Turkey 8121 1192 2 Imagine Popsicles 5921 1191 3 Tell Tale Red Delcious Apples 3.59M Discover Manicotti 7228 1126 1075 **4** Red Spade Foot-Long Hot Dogs 2855 High Top Dried Mushrooms 376909 1072 □ 5 Better Large Canned Shrimp Big Time Frozen Cheese Pizza 27420 947 6 Cutting Edge Foot-Long Hot Dogs 12902 942 Bravo Large Canned Shrimp 4943 941 □ 7 Fast Mini Donuts Red Spade Low Fat Bologna 3726 902 8 Bravo Canned Yams 2716 861 Red Spade Turkey Hot Dogs 3934 858 9 Ebony Corn on the Cob 0.58M 852 Atomic Mint Chocolate Bar 1980 10 Ebony Squash 10553 762 Thresher Spicy Mints 1886 744 11 Fast Dried Apples 9512 731 12 ORDERS Nationeel Salted Pretzels 713 COVER SALES INSIGHTS 12210

Insights

- Total Sales: 186M, Total Costs: 108.4M, Total Margin: 77.7 M, Total Discount: 121M, Total Number of Orders: 17.7K, Number of Customers: 615, Number of Products: 650, Total Quantity: 3M
- The Highest Revenue (8.66M) was generated in January 2017, the Lowest Revenue (3.1M) was generated in January, 2019
- March (22M) and February (20M) have Higher Sales than other months
- 2017 has the Highest Number of Customers: 457
- Biggest Amount of Orders (924) was in January 2017
- Positive Correlation was found between: Sales Cost, Sales Margin, Cost Margin, Quantity Margin, Quantity Cost, Quantity Sales

Insights

- The Most Number of Items were sold in September 2017: 2946
- The Item with Biggest Sold Quantity: Better Large Canned Shrimp, 590343
- The Item Which was Ordered the Most: Better Fancy Canned Sardines, 1648
- Top 5 Items which Generated the Highest Revenue: High Top Dried Mushrooms (11.3M), Tell Tale Red Delcious Apples (3.6M), Better Large Canned Shrimp (3.32M), Fast Mini Donuts (2M), Ebony Corn on the Cob (0.6M)