ANALYZING AMAZON SALES DATA

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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

CustKey -	1	-0.022	-0.077	0.034	-0.0079	0.055	0.0044	0.019	0.019	0.018	-0.0073	0.032	-0.16
Discount Amount -	-0.022	1	0.01	-0.045	0.075	-0.0069	0.75	0.43	0.39	0.46	0.048	0.085	0.0013
Invoice Number -	-0.077	0.01	1	0.0033	0.011	-0.67	0.0036	-0.0013	0.0026	-0.0075	-0.018	0.00072	0.0026
Line Number -	0.034	-0.045	0.0033	1	-0.077	0.0012	-0.069	-0.068	-0.065	-0.07	-0.099	-0.059	-0.049
List Price -	-0.0079	0.075	0.011	-0.077	1	-0.007	0.026	-0.0099	-0.014	-0.0022	0.96	-0.096	0.0029
Order Number -	0.055	-0.0069	-0.67	0.0012	-0.007	1	8e-05	0.0042	-0.00081	0.012	0.02	-0.00013	0.0054
Sales Amount Based on List Price -	0.0044	0.75	0.0036	-0.069	0.026	8e-05	1	0.92	0.9	0.91	0.013	0.64	0.029
Sales Amount -	0.019	0.43	-0.0013	-0.068	-0.0099	0.0042	0.92	1	0.99	0.97	-0.011	0.82	0.039
Sales Cost Amount -	0.019	0.39	0.0026	-0.065	-0.014	-0.00081	0.9	0.99	1	0.93	-0.016	0.86	0.037
Sales Margin Amount -	0.018	0.46	-0.0075	-0.07	-0.0022	0.012	0.91	0.97	0.93	1	-0.0012	0.72	0.042
Sales Price -	-0.0073	0.048	-0.018	-0.099	0.96	0.02	0.013	-0.011	-0.016	-0.0012	1	-0.092	0.033
Sales Quantity -	0.032	0.085	0.00072	-0.059	-0.096	-0.00013	0.64	0.82	0.86	0.72	-0.092	1	0.049
Sales Rep -	-0.16	0.0013	0.0026	-0.049	0.0029	0.0054	0.029	0.039	0.037	0.042	0.033	0.049	1
	CustKey -	t Amount -	Number -	Number -	List Price -	r Number -	List Price -	s Amount -	t Amount -	ר Amount -	ales Price -	Quantity -	Sales Rep -

- 0.75

- 0.50

- 0.25

- 0.00

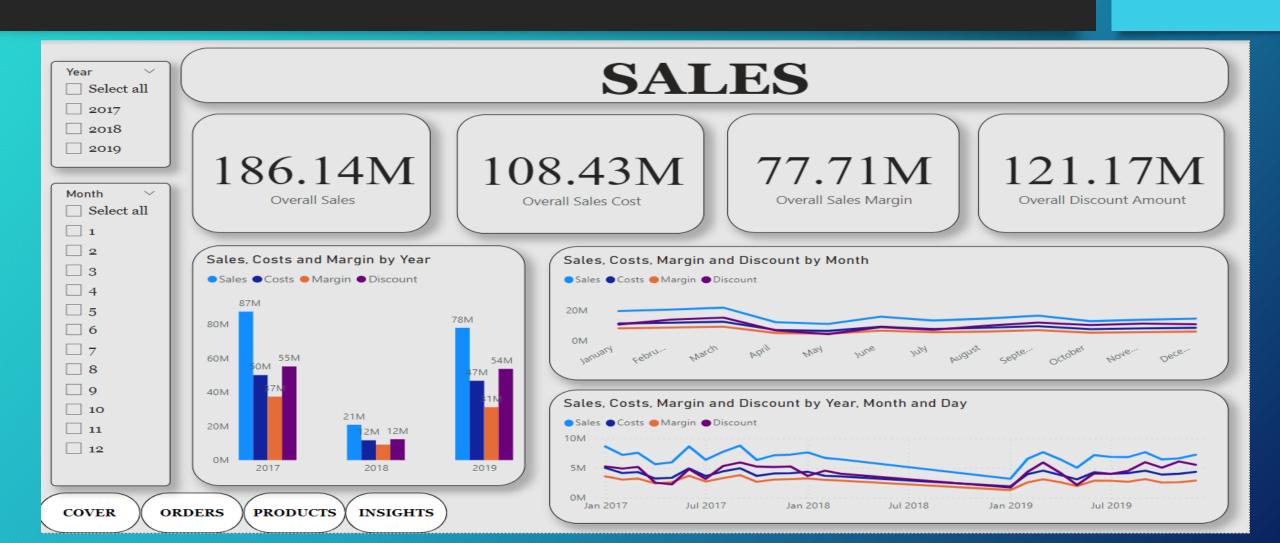
- -0.25

- -0.50

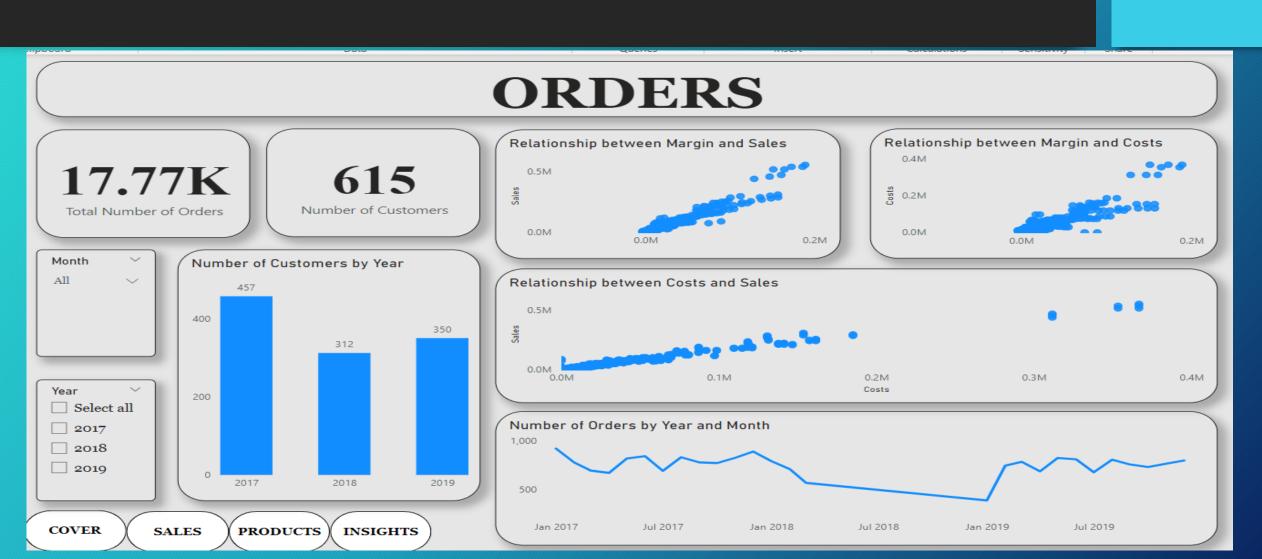
- -0.75

- -1.00

Sales Report



Orders Report



Products Report

PRODUCTS

Year ∨

Select all

2017

2018

2019

650

Number of Products

3M

Total Quantity Sold





Item	Total Quantity	Total Number of Orders ▼
Better Fancy Canned Sardines	17594	1648
Ebony Prepared Salad	9533	1471
Moms Sliced Turkey	8121	1192
Imagine Popsicles	5921	1191
Discover Manicotti	7228	1126
Red Spade Foot-Long Hot Dogs	2855	1075
High Top Dried Mushrooms	376909	1072
Big Time Frozen Cheese Pizza	27420	947
Cutting Edge Foot-Long Hot Dogs	12902	942
Bravo Large Canned Shrimp	4943	941
Red Spade Low Fat Bologna	3726	902
Bravo Canned Yams	2716	861
Red Spade Turkey Hot Dogs	3934	858
Atomic Mint Chocolate Bar	1980	852
Ebony Squash	10553	762
Thresher Spicy Mints	1886	744
Fast Dried Apples	9512	731
Nationeel Salted Pretzels	12210	713



SALES

ORDERS

INSIGHTS

COVER

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)