

Amazon Sales Data Analysis Report

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Objective

To create a report on Sales Trend Year-wise, Month-wise to understand the factors directly affecting the sales and gain competitive advantage acquiring good chunk of market share.

Data Description

The dataset consists of following columns:

1. **Discount Amount:** Discount on every ordered item
2. **Date:** Ordered Date
3. **Item:** Name of the item ordered
4. **List Price:** The price at which the item is listed.
5. **Sales Amount:** Total amount of sales for particular item.
6. **Sales Cost Amount:** Amount spent for conversion of Sale
7. **Sales Margin Amount:** Margin amount on each item sold
8. **Sales Quantity:** Total number of items sold
9. **Sales Representative:** Representative under whom sale is completed.

Tools Used



NumPy



pandas



Excel



Power BI

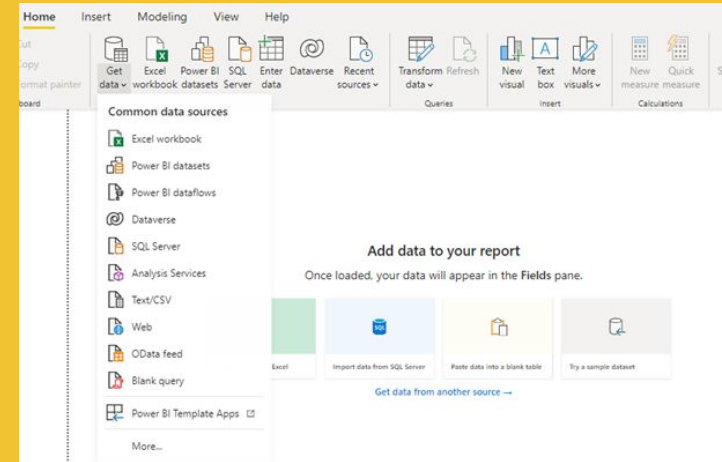
- **Programming Language: Python**
- **Python Libraries: Numpy, Pandas**
- **Business Intelligence Tools: Excel, Power BI**

Data Import & Data Cleaning

- Import the given excel file in Jupyter Notebook for cleaning.
- Data Cleaning is a crucial as the dataset has impurities such as missing values or incorrect data types.
- We used Pandas library in Python to impute/remove missing values and make dataset ready for creating visual reports.

Data Importing in Power BI

- In Power BI, we have options to connect to our dataset via various options such as SQL Server, MYSQL, excel or CSV files.
- We have our clean data in CSV file. We will import it in Power BI with import data option and start working with it.



Data Transformation in Power BI

- Once the data is imported in Power BI, we do 'transform data' i.e. using Power Query editor to perform certain operation on to the data.
- Ensuring correct data types, creating custom/conditional columns are some fundamental task performed in Power Query.

Amazon Sales Data Analysis - Power Query Editor

Home Transform Add Column View Tools Help

Query Errors - 15/02/2017

Amazon Cleaned Sales Data

Applied Steps

Source

Promoted Headers

Removed Columns

Changed Type

Inserted Year

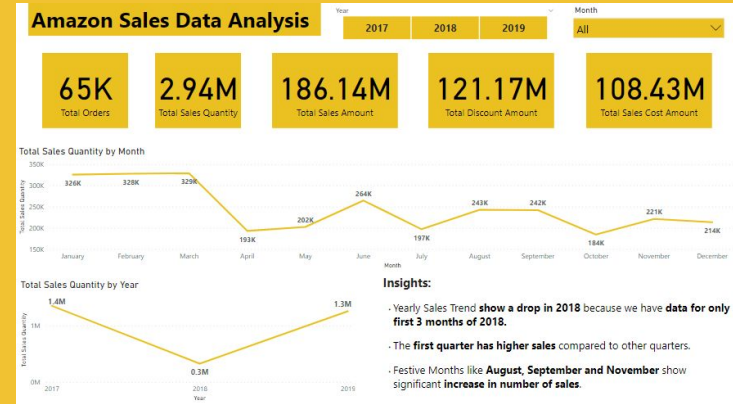
Inserted Month

Inserted Quarter

Key	Discount Amount	Invoice Date	Item Class
1 10002220	888.79	14/07/2017	P01
2 10002220	109.73	17/08/2017	P01
3 10004516	86627.94	27/06/2017	P01
4 10007066	871.654	01/06/2017	P01
5 10009056	608.08	16/06/2017	P01
6 10009056	424.8	18/06/2017	P01
7 10009056	11492.8	18/06/2017	P01
8 10009056	10482.1	18/06/2017	P01
9 10009056	404.1465	18/06/2017	P01
10 10009060	1287.3476	16/06/2017	P01
11 10009060	4764.33	16/06/2017	P01
12 10009033	-626.64	10/06/2017	P01
13 10009033	0	20/06/2017	P01
14 10009045	0	17/12/2017	P01
15 10009052	91	14/05/2017	P01
16 10009007	786.6	06/12/2017	P01
17 10010884	499.44	19/06/2017	P01
18 10010884	409.77	08/07/2017	P01
19 10010884	186.41	08/07/2017	P01
20 10010884	349.78	08/07/2017	P01
21 10010884	825.53	08/07/2017	P01

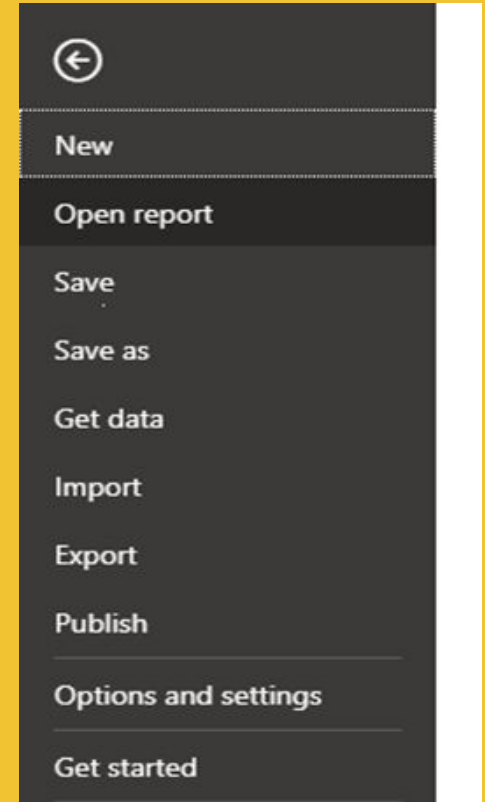
Building Visuals in Power BI

- A report is created in Power BI with various charts depicting Sales insights for particular year, month and so on.
- We created Slicers, Data Cards, Sales Trend for Year and Month, Table for top ordered item, top performing sales representatives and relationship between different variables.



Deployment in Power BI

- In Power BI, You can directly publish the report online to your workstation. If you do not have the work email-id then you can save the file in '.pbix' version. This helps another viewer see your work and understand the story or insights you're communicating.



Thank You