Amazon Sales Report
By: Yogendran

My name is Yogendran a data science student in Southern Alberta Institute of Technology. This project is done as part of a final semester project under the supervision of our instructor Mr. Junaid Qazi. The goal of this project was to master the data integration from Microsoft Excel into Microsoft Power BI and transforming data in it to visualize it for better analytics from all levels of users in an industry ranging from the executive level (1.2), departments (1.3) and also the customer (1.4).

The company I choose for this project is Amazon. Its one of the biggest e-commerce companies to exist with a lot of competitors around them. Since it's a giant company with big stock counts and big revenue turnover, Amazon has a very big database with them. So, the year I choose to analyze was the year 2011-2014 where sales and profit turnover was outstanding compared the years before and after. Data was sourced from a free platform 'kaggle'. The dataset is complete with all the information's needed to form a Power BI dashboard and create an entity diagram where it shows the relationships with all the attributes. Attributes are as follows for this dataset:

-Order Date
-Ship Date
-Email ID
-Geography
-Category
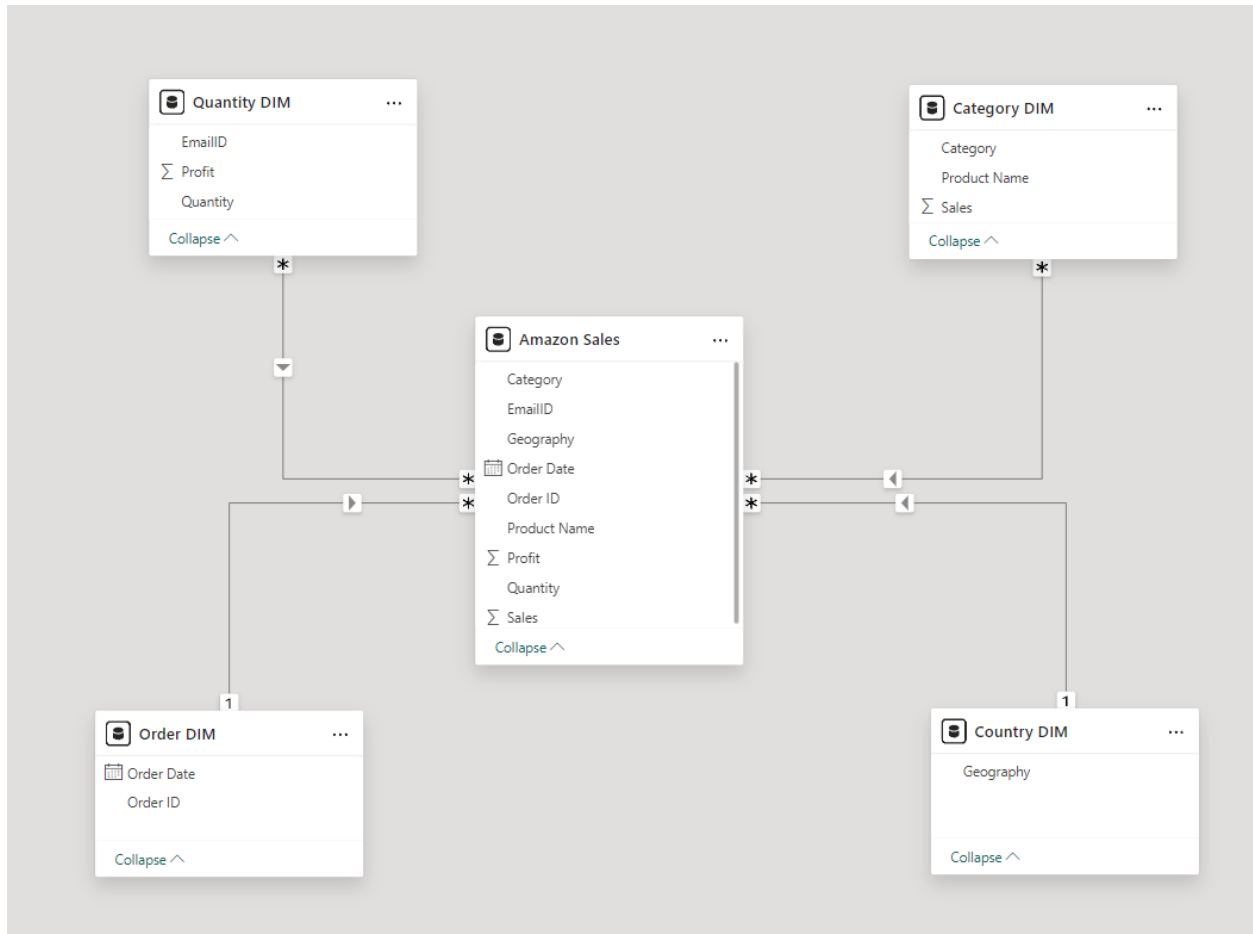-Product Name
-Sales, Quantity, Profit

I choose this dataset mainly for its source which is very reputable for its accuracy and its quality, where is has lesser null values and it has very minimal errors and inconsistencies. This dataset is also scalable as it can be used for many purposes such as e-commerce, finance and even for media consumption. So, this dataset would be very easily integrated into analysis tools and even different visualization tools.

My goal to complete this project is to better visualize the data set to find out the best product which brings best sales and profit turnover for Amazon. Moreover, I would like to make this visualization to assess and provide suggestions for Amazon on how to generate new revenue streams using the analytical data and dashboard done. In addition, this Power Bi project is done to promote ease of use dashboards for the use of Amazon management, operational departments and the end users who are the customers.
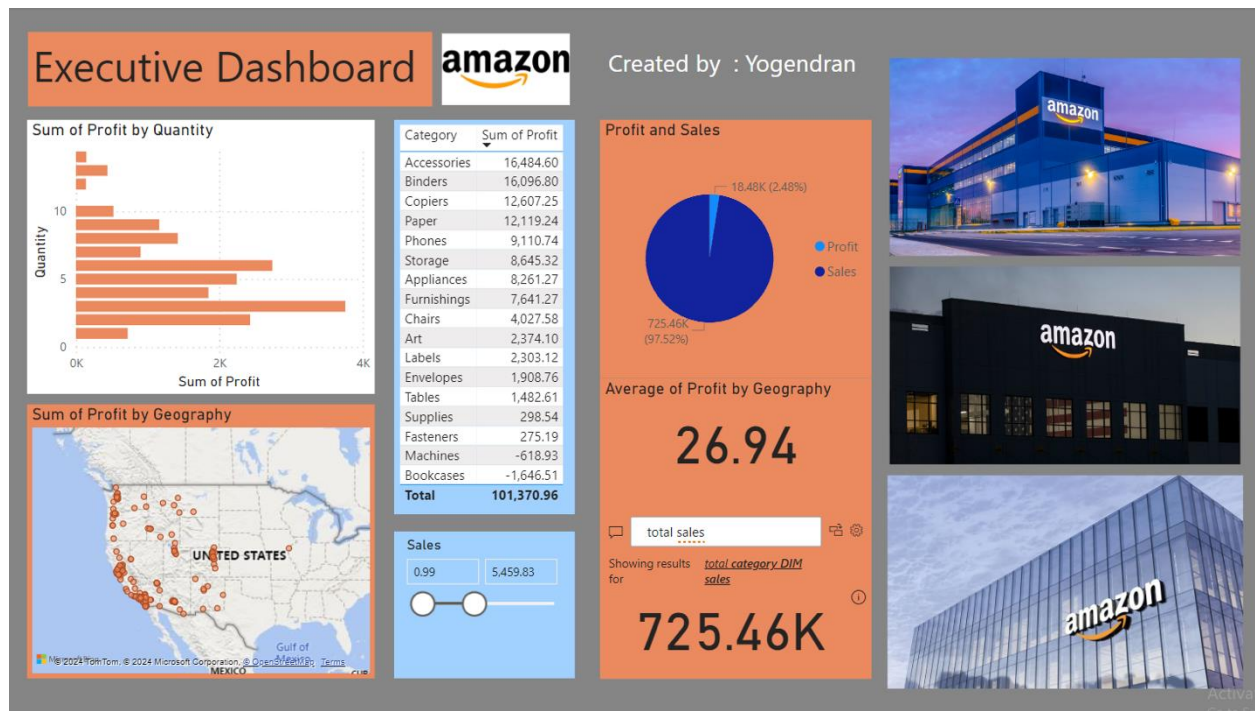
The process used was as follows:

1.First I installed and open Power BI
2.Imported the dataset from Kaggle by adding the excel file into Power BI
3.Selected the tables I wanted to import
4.Transformed data to create a star schema model (1.1)
5.Finally create dashboard according to requirements (1.2,1.3,1.4)
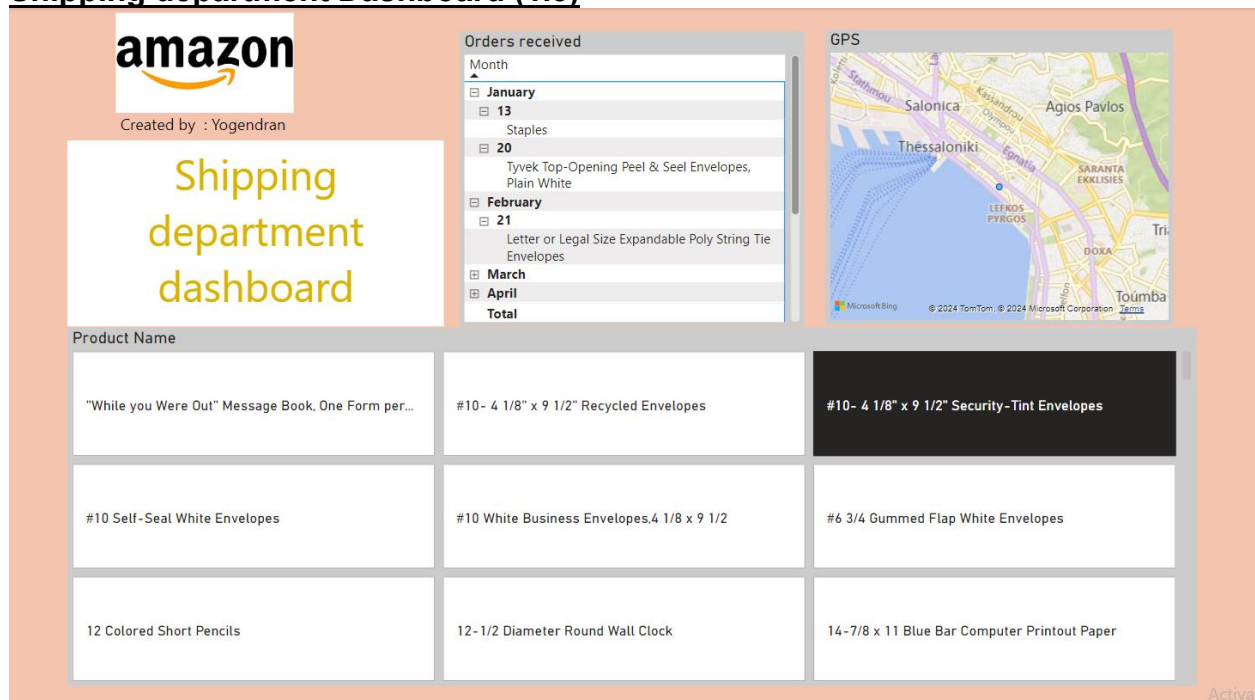
Star schema model (1.1)

This is the model made for Amazon sales which shows the parent and child fields.
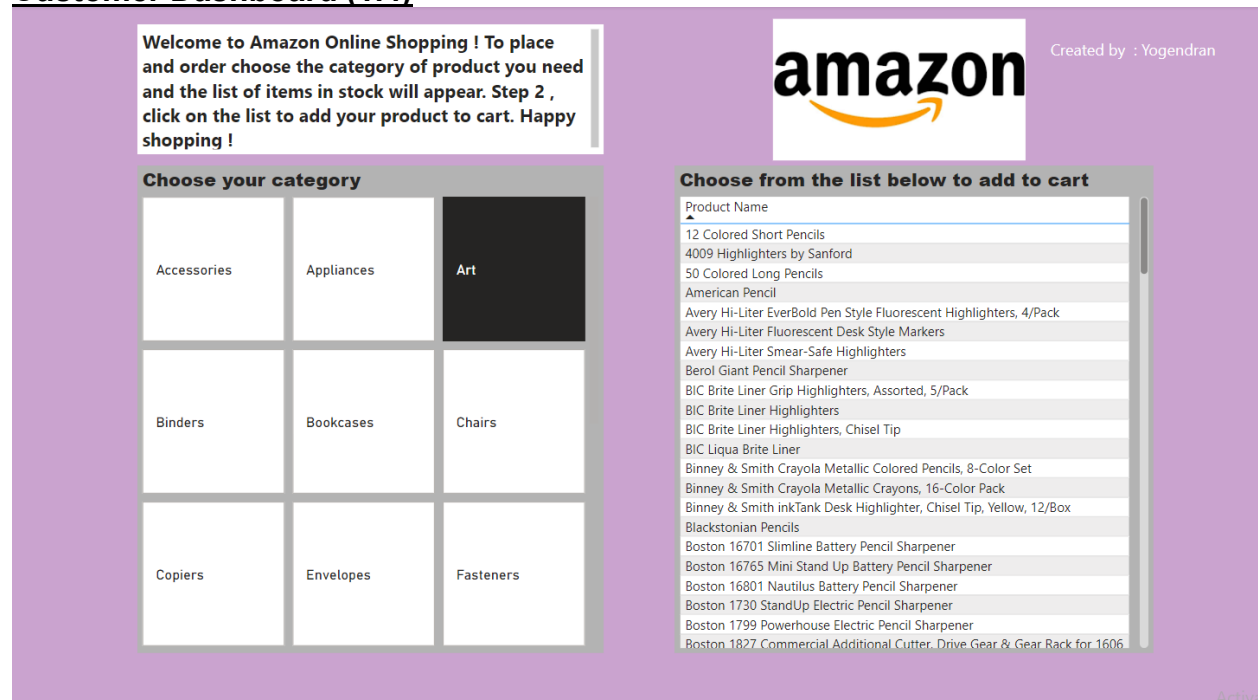
Executive Dashboard (1.2)

Dashboard for the use of CEO's, Mangers, supervisors and any decision makers in the company.

Shipping department Dashboard (1.3)

This dashboard is for the shipping team to track their orders and delivery location.

Customer Dashboard (1.4)

This dashboard is for customers who want to place an order with its category menu.

All in all, this project is a success as many data very analyzed for Amazon's use. With this project we could identify new target markets and product capabilities while optimizing revenue with analytical data. This also eases Amazon to be on track with its company statistics.