Project Report

Amazon Data Analyst Project (2012-2015)

Objective:

The goal of this project was to analyze Amazon's sales and customer data for the years 2012-2015. By cleaning the data and performing various analyses, I aimed to provide valuable insights that can help increase revenue, attract more customers and maximize profits.

Steps Taken in Project:

1. Data Cleaning:

- **What was done**: The data was cleaned by removing errors, duplicates, and missing values.
- **Why it was important**: By cleaning the data it ensures that the analysis is accurate and reliable. This helps to make better decisions based on the data.

2. DAX Measures (Data Analysis Expressions):

- **What was done**: DAX was used to create quick calculations for key metrics such as sales, profit, and loss.
- **Why it was important**: DAX helped to generate these metrics faster and providing stakeholders with quick access of important numbers without doing manual calculations.

Key Insights:

1. Sales and Profit Analysis:

- **Total Sales**: $13 million
- **Average Profit**: $2 million
- **Best State for Sales**: England (this state had the highest sales)

Impact:

- These numbers show that Amazon's business is performing well especially in England. Stakeholders can focus on expanding sales in this region.

2. Product and Market Analysis:

- **Top 10 Best-Selling Products**: These products had the highest sales.
- **Sales by Year, City, Region, and Market**: The data showed where and when the highest sales occurred.
- **Top Countries for Sales**: This identified the countries where Amazon had the most sales.

- **Top 5 Products with Losses**: These products caused the most losses.
- **Top Categories**: The categories that customers bought the most.

Impact:

- By focusing on best-selling products and profitable markets, stakeholders can increase their sales. They can also reduce losses by analyzing and adjusting the pricing or marketing strategies for products causing losses.

3. Customer Analysis:

- **Total Number of Customers**: The total number of customers who made purchases.
- **Average Discount**: The average discount offered on purchases.
- **Top 10 High-Spending Customers**: These customers spent the most money.
- **Customer Growth by Year**: This showed how the number of customers grew each year.

Impact:

- By understanding customer behavior, stakeholders can create targeted marketing campaigns to attract more customers and retain high-spending customers. For example by offering special deals to top customers can improve customer loyalty.

How These Insights Help Stakeholders:

1. Increase Revenue:

- **Actionable Insight**:We should focus on top-selling products and profitable regions like England. Run marketing campaigns to promote these products and expand in these markets.

2. Attract and Retain Customers:

- **Actionable Insight**: We should offer exclusive discounts to top customers. Create loyalty programs to encourage repeat purchases and attract new customers through targeted marketing campaigns.

3. Maximize Profits:

- **Actionable Insight**: We can reduce losses by analyzing products with high losses and adjusting their pricing or marketing strategies. Make sure discounts are offering value without cutting too much into profits.

4. Improve Sales Strategy:

- **Actionable Insight**: Use historical sales data to predict future trends. Focus on growing regions or product categories to stay ahead of the competition.

5. Focus on Customer Growth:

- **Actionable Insight**: Invest in customer retention programs such as loyalty rewards especially in regions with high customer growth potential. This will encourage repeat purchases and customer loyalty.

Conclusion

Overall, this project has provided valuable insights into sales, profits, customer behavior, and more. By using these insights, Amazon stakeholders can make informed decisions to boost sales, attract more customers, and improve profits. The project also demonstrates the importance of data cleaning, analysis, and using the right tools (like DAX) for quick and accurate calculations.