

## **Project Title: Amazon Sales Data Analysis**

### **Project Purpose/Objective:**

The primary objective of this project is to analyze and gain insights from Amazon sales data. By performing data analysis and visualization, the project aims to uncover patterns, trends, and key factors influencing sales performance on the Amazon platform.

### **Project Scope:**

The project scope encompasses the collection, cleaning, and analysis of Amazon sales data. It includes visualizing various aspects of the data to provide actionable insights to Amazon stakeholders and decision-makers.

### **Key Features/Components:**

1. Data Collection: Gathering sales data from Amazon's databases or sources.
2. Data Cleaning: Preprocessing and cleaning the data to ensure its accuracy and consistency.
3. Exploratory Data Analysis (EDA): Conducting in-depth analysis to understand data patterns.
4. Data Visualization: Creating informative visualizations using Python libraries (pandas, numpy, matplotlib, seaborn).
5. Sales Performance Metrics: Calculating and presenting key performance metrics such as revenue, growth, and customer behavior.
6. Product Category Analysis: Analyzing sales trends and performance within different product categories.
7. Price and Discount Analysis: Investigating the impact of pricing and discounts on sales.
8. Customer Behavior Analysis: Understanding customer preferences, buying habits, and reviews.
9. Time Series Analysis: Examining sales trends over time to identify seasonality or growth patterns.

### **Target Audience/Users:**

Amazon data analysts and business stakeholders responsible for making data-driven decisions related to sales strategies, product management, and customer engagement.

### **Technologies/Tools Used:**

- Python: Main programming language for data analysis.
- Libraries: pandas, numpy, matplotlib, and seaborn for data manipulation and visualization.
- Jupyter Notebooks: For interactive data exploration and analysis.

**Notable Achievements or Outcomes:**

The project has successfully completed a comprehensive analysis of Amazon sales data, providing valuable insights into sales performance, customer behavior, and product category trends. The outcomes of this analysis can guide strategic decisions to optimize sales strategies and enhance customer experiences on the Amazon platform.