Project Summary

This project focused on analysing a real-world e-commerce dataset to uncover key business insights and performance trends. The dataset included information from various tables such as Customer Reviews, Order Items, Orders, Payments, Products, and Sellers.

We utilized **SQL Server** for data cleaning, transformation, and table joins. **Power BI** was used to create interactive dashboards and visuals.

The primary goal was to analyse **sales performance**, **customer behaviour**, **product popularity**, and the **impact of reviews and delivery times** on overall business outcomes.

The final analysis provided a comprehensive view of customer engagement, revenue generation, and operational efficiency. The dashboard delivers critical insights for stakeholders, enabling more informed, data-driven business decisions.

**Key Metrics (KPIs)**

* **Total Revenue:** ₹1,60,08,872.12
* **Total Orders:** 99,441
* **Total Customers:** 99,441
* **Average Order Value (AOV):** ₹160.99
* **Average Rating:** ⭐ 4.09
* **Average Delivery Days:** 12.50 days

**Key Insights**

**1. Customer Behaviour – Repeat vs. One-Time Buyers**

* Repeat customers contributed significantly to total revenue, showing strong brand loyalty.
* One-time customers represent a valuable opportunity for future retention and engagement strategies.

**2. Revenue and Sales Trends**

* Sales and revenue increased steadily over time, with noticeable seasonal peaks.
* The Average Order Value remained consistent, reflecting stable purchasing patterns.

**3. Impact of Ratings and Reviews**

* Products with an average rating of **4 stars or more** had noticeably higher sales volumes.
* A higher number of reviews enhanced product credibility and buyer trust.

**4. Top Product Categories**

* Categories such as **Electronics**, **Apparel**, and **Books** generated the highest revenue.
* Some emerging product categories showed a rising trend in customer interest.

**5. Delivery Time vs. Customer Satisfaction**

* Faster delivery times were associated with higher customer satisfaction ratings.
* Late deliveries often resulted in lower review scores, impacting overall product perception.