**Executive Summary – E-Commerce Sales & Customer Insights Project**

This project presents a comprehensive analysis of the **Brazilian E-Commerce Public Dataset by Olist**, aiming to uncover key sales trends, customer behaviors, and business performance indicators.

The analysis followed a **full end-to-end data analytics workflow** using **Python for data preprocessing** and **Power BI for visualization and reporting**.  
Data was cleaned, merged, and structured into a unified dataset containing sales, product, and customer information.

**Key Insights**

* The highest revenue comes from categories such as *cool\_stuff*, *moveis\_decoracao*, and *pet\_shop*.
* Sales volume shows consistent growth across months, with peaks during **November and December**.
* **São Paulo** remains the top-performing region, contributing the largest share of total sales.
* The **average delivery time** is within 7–9 days, indicating efficient logistics performance.
* A small group of **high-value customers** contributes a significant portion of total revenue, suggesting potential for loyalty programs.

**Business Impact**

These findings provide actionable insights for strategic decision-making in marketing, logistics, and customer retention.  
The Power BI dashboard allows stakeholders to **monitor performance KPIs**, explore **sales patterns**, and **identify growth opportunities** at a glance.

**Tools Used**

* **Python (Pandas, NumPy)** – for data cleaning and transformation
* **Excel** – for intermediate data validation
* **Power BI** – for dashboard creation and business storytelling
* **DAX** – for calculating KPIs such as Total Sales, Average Order Value, and Delivery Time

**Conclusion**

This project demonstrates how data analytics can transform raw e-commerce data into valuable business insights.  
The interactive Power BI dashboard enables data-driven decisions to improve customer experience, operational efficiency, and sales strategy.