**E-COMMERCE SALES PERFORMANCE DASHBOARD - OLIST BRAZIL**

**Project Objective:**  
The goal of this project is to create an interactive Power BI dashboard that analyses e-commerce sales performance. It helps business teams monitor revenue, profit, product trends, and customer behaviour to make data-driven decisions for marketing, sales, and inventory management.

**Business Problem / Opportunity:**  
The e-commerce company has a large volume of sales and customer data but lacks a clear way to track and analyse performance. Managers cannot easily identify top-performing products, high-value customers, or underperforming regions.  
By creating a Power BI dashboard, the company can visualize sales trends, understand customer behaviour, and make better business decisions to increase profitability and efficiency.

**Target Audience:**  
The primary audience for this dashboard includes the Sales and Marketing teams, Operations Managers, and Company Executives.

* **Sales Team** – to track product-wise and regional sales performance.
* **Marketing Team** – to analyze customer behavior and plan campaigns.
* **Operations Managers** – to monitor delivery performance and order status.
* **Executives / Management** – to review overall revenue, growth, and customer satisfaction trends for strategic decisions.

**Scope:**  
The project focuses on analyzing sales performance, customer behavior, and delivery trends from the Olist Brazilian E-commerce dataset.

**Included:**

* Data assessment and cleaning of all 9 CSV files
* Creation of relationships and data model in Power BI
* Dashboard showing key KPIs (Sales, Orders, Revenue, Reviews)
* Visualization of sales by product, state, and category
* Basic insights and recommendations

**Excluded:**

* Predictive analytics or machine learning
* Real-time data streaming or automation
* Integration with external APIs or live databases

**Data Source(s):**  
The dataset used in this project is the **Olist Brazilian E-commerce Public Dataset**, available on **Kaggle**.  
It contains detailed information about orders placed on Olist, including customers, sellers, products, payments, reviews, and delivery data.

**Source:** [Kaggle – Brazilian E-Commerce Dataset by Olist](https://www.kaggle.com/datasets/olistbr/brazilian-ecommerce)  
**Format:** 9 CSV files  
**Total Size:** ~40–50 MB  
**Total Records:** Over 100,000 orders  
**Tables Included:**

* olist\_orders\_dataset.csv
* olist\_order\_items\_dataset.csv
* olist\_order\_payments\_dataset.csv
* olist\_order\_reviews\_dataset.csv
* olist\_customers\_dataset.csv
* olist\_sellers\_dataset.csv
* olist\_products\_dataset.csv
* olist\_geolocation\_dataset.csv
* product\_category\_name\_translation.csv

**Key Metrics / KPIs:**  
The dashboard will focus on the following business performance metrics:

**Sales & Revenue Metrics:**

* Total Revenue (sum of order item prices)
* Total Orders (number of unique orders)
* Average Order Value (Total Revenue ÷ Total Orders)

**Customer Metrics:**

* Total Customers
* Repeat Customers (if any)
* Average Review Score

**Product & Seller Metrics:**

* Top 10 Best-Selling Products
* Top 5 Performing Sellers
* Category-wise Sales

**Operational Metrics:**

* On-time Delivery Rate
* Average Delivery Time (Order to Delivered Date)
* Orders by State/Region (for map visualization)

**Deliverables:**  
The following files and documents will be created and submitted during the project:

**Day 1:**

* BRD\_Submitted.pdf (Business Requirements Document)
* Power BI file with all 9 CSVs loaded (Olist\_Sales\_Dashboard.pbix)

**Day 2:**

* Column\_Assessment.xlsx (Dataset quality & structure analysis)
* cleaned\_dataset.csv (Processed dataset ready for modeling)

**Day 3:**

* FRD\_Submitted.pdf (Functional Requirements Document)
* Dashboard\_Mockup.pptx (Dashboard design prototype using Canva/Figma/PPT)

**Day 4:**

* Draft Power BI Dashboard (dashboard.pbix)
* Initial Data Model

**Day 5:**

* Final Dashboard Export (dashboard\_export.pdf)
* Analysis\_Report.pdf (with insights & recommendations)
* README.md (Project summary and instructions)

**Timeline / Milestones:**  
The project will be completed over 5 days as per the following plan:

**🗓️ Day 1 – Dataset Selection & Loading**

* Download and organize the Olist dataset
* Load all 9 CSV files into Power BI
* Create Business Requirements Document (BRD\_Submitted.pdf)

**🗓️ Day 2 – Data Assessment & Cleaning**

* Perform column-wise data assessment
* Identify missing values and inconsistencies
* Clean and merge data into a single dataset (cleaned\_dataset.csv)

**🗓️ Day 3 – Functional Requirements & Mockup Design**

* Prepare Functional Requirements Document (FRD\_Submitted.pdf)
* Create Dashboard Mockup in Canva or PowerPoint

**🗓️ Day 4 – Dashboard Development (Draft)**

* Build initial Power BI dashboard
* Establish relationships and DAX measures
* Review and refine visuals

**🗓️ Day 5 – Finalization & Reporting**

* Finalize dashboard and export PDF report
* Prepare Analysis\_Report.pdf and README.md
* Submit complete project deliverables

**Notes / Assumptions for project:**

1. **Data Assumptions**
   * All 9 CSV files from Kaggle are accurate and consistent.
   * Dates in order\_purchase\_timestamp are in correct format; no timezone adjustments needed.
   * Payment values are in Brazilian Real (R$) and do not require currency conversion.
2. **Business Logic Assumptions**
   * Only delivered orders are considered for revenue and sales KPIs.
   * Customer satisfaction is measured using order review scores (1–5).
   * Freight costs are treated as an operational expense, not included in revenue.
3. **Project Scope Assumptions**
   * Dashboard will focus on sales, customers, sellers, products, and geolocation; no external marketing data included.
   * Analysis period is limited to 2016–2018 as per dataset.
   * Insights are based solely on historical data; no predictive modeling included.
4. **Technical / Data Constraints**
   * Geolocation dataset has 1M+ rows; map visualizations may require aggregations for performance.
   * Some product categories may contain missing or untranslated names; handled via product\_category\_name\_translation.csv.
   * Duplicates and missing values are cleaned as per Day 2 process.