**Project Report: Interactive Business Insights Dashboard**

**Prepared for:** GUVI & HCL Virtual Internship (PowerBI)

**Project Title:** E-Commerce Sales Dashboard

**1. Dataset Source and Description**

The data used for this project is the **Brazilian E-Commerce Public Dataset by Olist**, sourced from Kaggle. This is a comprehensive, real-world dataset containing information on over 100,000 orders placed on the Olist e-commerce marketplace between 2016 and 2018. The dataset is anonymized and consists of multiple relational tables, including detailed information on orders, products, customers, sellers, payments, and shipping logistics. Its multi-table structure and significant volume make it an ideal choice for developing a robust data model and performing in-depth business analysis in Power BI.

**2. Business Problem**

As a Business Intelligence Analyst, the primary objective was to design and develop an interactive Power BI dashboard to provide key insights into Olist's business operations. The dashboard is intended for stakeholders such as sales managers, marketing teams, and logistics coordinators to help them make informed, data-driven decisions.

The dashboard addresses several key business questions:

* What are the overall sales trends and revenue performance over time?
* Which product categories and geographic regions are the most profitable?
* Who is the top-performing seller within the marketplace?
* How efficient is the order fulfilment and delivery process, and are there logistical challenges in specific regions?

**3. Key Insights Discovered**

The two-page interactive dashboard reveals several critical insights into the company's sales and operational performance, reflecting a total revenue of **$13.59M** across **98.67K** orders.

**Page 1: Sales & Orders Overview**

This page provides a high-level summary of the company's commercial performance.

* **Significant Revenue Growth:** The "Annual Revenue Trend" chart shows strong year-over-year business growth. Revenue increased substantially from **$6.2M in 2017** to **$7.4M in 2018**, indicating a period of successful market expansion.
* **Key Product Categories Drive Sales:** The "Total Revenue by Product Category" chart highlights that a few key categories are the primary drivers of sales. The top-performing categories are **Boutique ($1.3M)**, **Watches ($1.2M)**, and **Personal Care ($1.0M)**. This allows the marketing team to focus efforts on these high-value segments.
* **High Order Fulfilment Rate:** The "Order Status Distribution" chart shows a highly efficient core fulfilment process. A remarkable **97.02%** of all orders (**96.48K**) are successfully "Completed," while only a small fraction of **2.98%** (**2.96K**) are marked as "Incomplete."

**Page 2: Seller & Logistics Performance**

This page offers a deeper analysis of the **3,095 sellers** and the company's operational efficiency.

* **Top Sellers are Geographically Concentrated:** The "Top Seller Cities by Revenue" chart reveals that the highest-performing sellers are located in major economic hubs. Sellers from **São Paulo** are the dominant force, generating revenue significantly exceeding **$0.4M**. This suggests that seller recruitment and support efforts could be most effective in these key urban areas.
* **Strong but Improvable Delivery Performance:** The dashboard shows a strong overall on-time delivery rate of **91.89%**. However, the "Delivery Status Distribution" chart specifies that **7.83K orders (7.87%)** were delivered late. This KPI flags a crucial area for operational improvement to enhance customer satisfaction and loyalty.
* **Geographic Revenue Concentration:** The "State-wise Revenue" map visually confirms that sales are heavily concentrated in the southeastern region of Brazil, with **São Paulo** being the most critical market. This insight is crucial for strategic decisions regarding inventory management, marketing campaigns, and logistics.

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