

Olist E-Commerce Data Analysis

Executive summary

This document presents an executive summary of the Olist E-Commerce Data Analysis project, outlining key findings and recommendations to improve business performance. The analysis leverages SQL and Power BI to derive actionable insights from Olist's Brazilian e-commerce dataset.

Project Overview

Project Type: SQL + Power BI

Dataset: Brazilian E-Commerce - Olist

Date Range: Oct 2016 – Aug 2018

Business Objective: Analyze customer behavior, revenue performance, delivery efficiency, and payment risk to optimize business strategies.

Key Metrics Snapshot

A high-level overview of the key performance indicators (KPIs) extracted from the Olist e-commerce data:

Metric	Value
Total Customers	36,775
Repeat Customers	474 (1.29%)
Total Revenue	2,208,071.41
Average Order Value	160.09
Average Delivery Time	~12 days

Top 3 Insights

Key insights derived from the analysis, highlighting areas for improvement and strategic focus:

- Low Customer Retention:** The repeat customer rate is only 1.29%, indicating a significant opportunity to improve customer loyalty.
- Delivery Delays Impact Satisfaction:** Longer delivery times are correlated with lower customer satisfaction scores.
- Revenue is Seasonal:** Sales trends exhibit predictable peaks and valleys, suggesting opportunities for targeted promotions.

Revenue Performance

- Top Categories:** Health & Beauty, Bed, Bath & Table, Watches & Gifts.
- Trend:** Stable growth with year-end peaks, showing seasonality

Payments & Risk

- Most Used Payment Method:** Credit Card.
- Highest AOV:** Credit Card.
- Risk:** Higher cancellation frequency with credit cards.

Business Recommendations

Based on the insights, the following recommendations are proposed to enhance business performance:

- Launch Loyalty Programs:** Implement strategies to incentivize repeat purchases and increase customer retention.
- Improve Logistics:** Optimize delivery processes to reduce delivery times and improve customer satisfaction.

Next Steps

Further analysis and exploration will focus on the following areas:

- Analyze Customer Lifetime Value (CLV) to identify high-value customers.
- Evaluate Seller Performance to optimize marketplace dynamics.
- Investigate Logistics Efficiency to streamline delivery processes.

Tools Used

The following tools were utilized in the data analysis process:

- SQL
- Power BI
- Excel

Summary

This executive summary provided a concise overview of the Olist e-commerce data analysis project. Key insights highlighted the importance of customer retention, delivery efficiency, and revenue seasonality. The recommendations outlined offer actionable strategies for improving business performance and driving growth. The next steps involve deeper dives into CLV, seller performance, and logistics to further refine business strategies.