

# E-Commerce Insights Report – Brazilian Olist Dataset

## Executive Summary

This project analyzes Brazilian e-commerce data from the Olist platform to uncover customer behavior, sales trends, delivery performance, and payment preferences. The analysis highlights revenue concentration, logistics impact on customer satisfaction, and opportunities for improving repeat purchases.

## Dataset Overview

- **Source:** Kaggle – Brazilian Olist Dataset
- **Records:** ~100k orders
- **Time Period:** 2016–2018
- **Key Tables Used:**
  - Orders
  - Customers
  - Order Items
  - Payments
  - Reviews
  - Products
  - Sellers

## Business Questions Answered

- How does revenue trend monthly?
- Which product categories generate highest revenue?
- Does late delivery impact review score?
- Which states contribute most to sales?
- What is customer retention rate?
- Which regions have highest churn?

## Key Insights

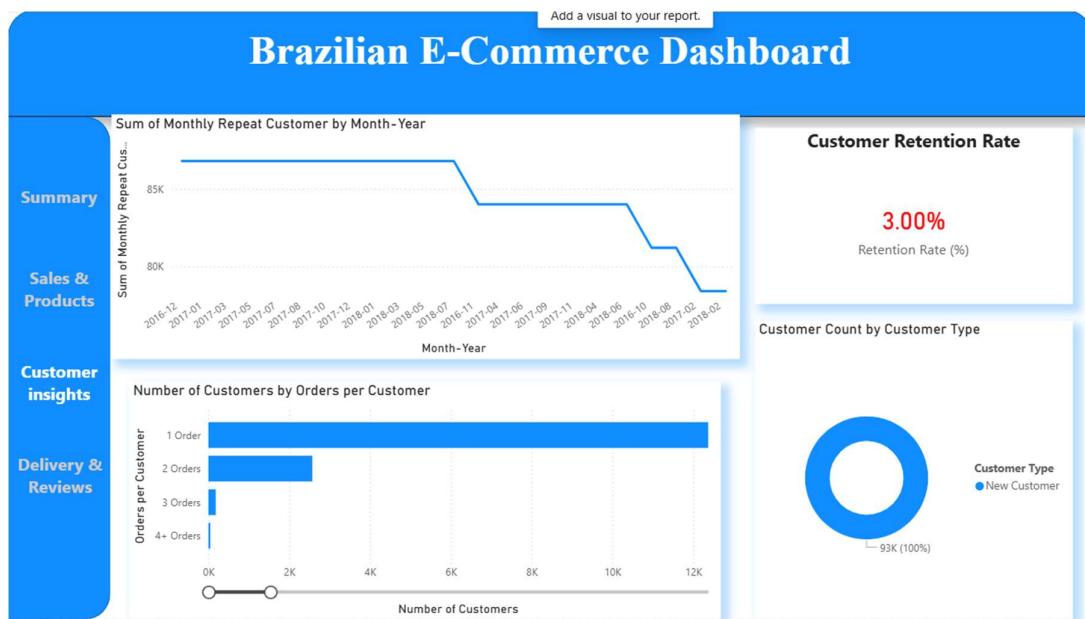
- Revenue shows a consistent upward trend with seasonal spikes, indicating growing platform adoption.
- Electronics and furniture-related categories contribute the highest revenue, suggesting strong demand for high-ticket items
- Majority of customers are one-time buyers, indicating potential to improve retention strategies
- Most deliveries occur within 7–15 days, but long-tail delays may negatively affect customer satisfaction.
- Orders with longer delivery times tend to receive lower review scores, highlighting delivery performance as a key satisfaction driver
- Total revenue reflects overall business scale and growth potential.
- Low retention indicates opportunity for loyalty programs.
- Majority of reviews are 4–5 stars, but delayed deliveries reduce ratings

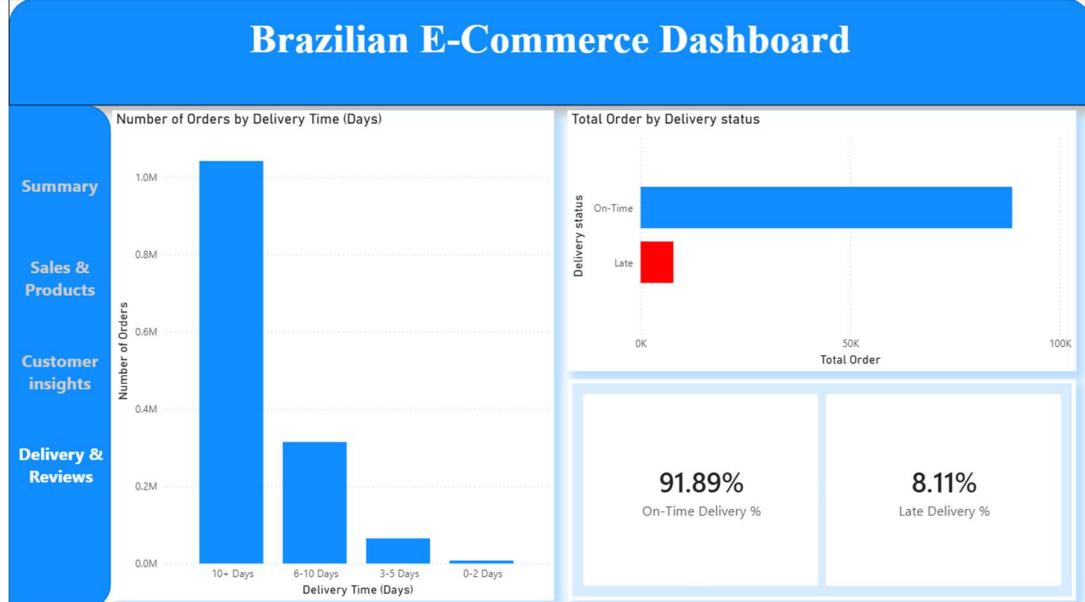
## KPIs Summary

KPI	Value
Total Orders	96454
Total Revenue	\$ 16,110,491.56
Avg Order Value	\$ 167.03
Total Customers	96454
Repeat Customer Rate	3.00%
Churn Rate	97.00%

## Visualization Used

- Monthly Revenue Trend (Line Chart)
- Top Product Categories by Revenue (Bar Chart)
- Top Customers and Orders by Revenue (Bar Chart)
- Customer count by Customer type (Pie Chart)
- Number of Order by Delivery Time (Clustered column Chart)





## **Business Recommendations**

- Increases Average Order Value (AOV)
- Launch loyalty programs (points, cashback on second order)
- Provide discounts on second purchase within 30 days
- Introduce faster delivery badges for reliable seller
- Use positive reviews in marketing campaigns
- Reward sellers with consistently high ratings

## **Limitations**

- Dataset is limited to Brazilian market
- Customer demographics are limited

## **Conclusion**

This analysis highlights key operational and customer experience challenges within the Olist platform. Addressing delivery efficiency and customer retention can significantly improve revenue and customer satisfaction.