

Business Intelligence Insights from the Brazilian E-Commerce Ecosystem (Olist Public Dataset)

Supervised By: Dr Zulkifl Hassan
Co-Supervised By: Hussain Ijaz

(Department of Computer and Software Engineering)

Author: Abdullah Farukh Sanani
Co-Author: Aitsam Atif

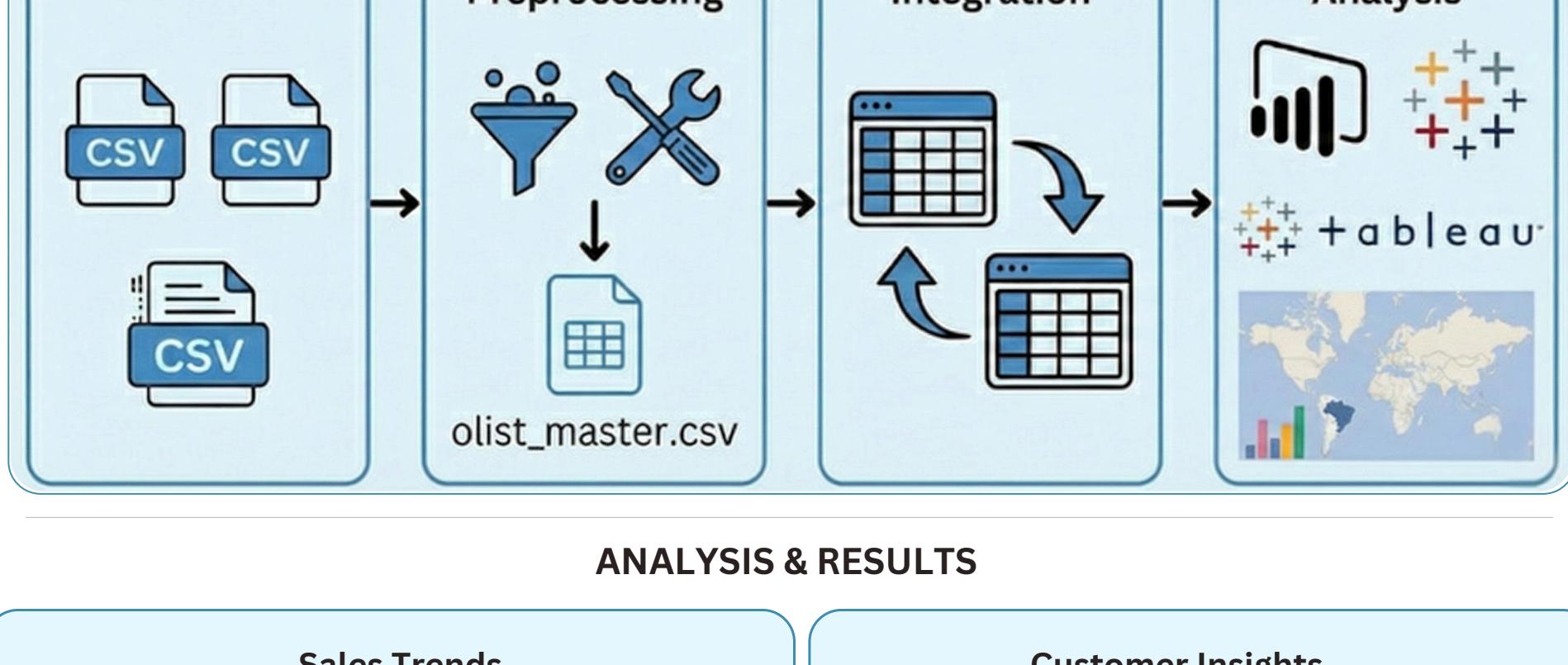
ABSTRACT

- About:** Analysis of Brazilian e-commerce using Olist data platform.
- Why:** To identify key business and customer behavior drivers.
- How:** Integrated 9 tables across 74 diverse product categories.
- Result:** Logistics and payments strongly impact business growth and satisfaction.

LITERATURE REVIEW

- Previous Work:** Focused on isolated metrics and basic EDA without linking data to business strategy.
- Our Contribution:** Integrates sales, logistics, and customer data into a unified dashboard to prove how delivery performance scales revenue.

METHODOLOGY



ANALYSIS & RESULTS

Sales Trends

Total Orders
98.67K

Total Revenue
\$20.31M

Average Order Value (AOV)
\$205.8271

Average Basket Size (ABS)
1.14

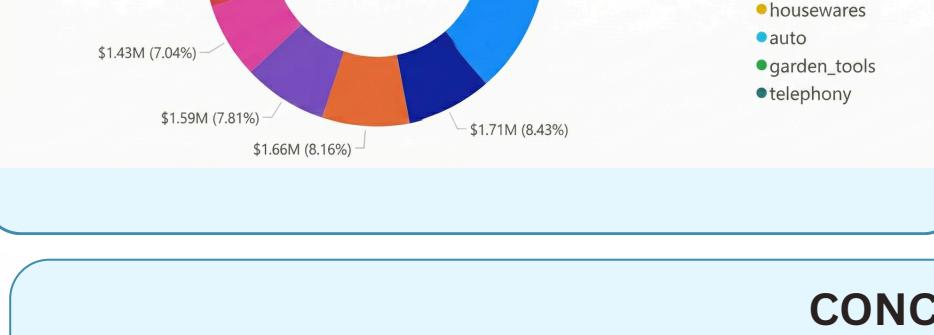
Monthly Order Volume



Order Volume by Product Category

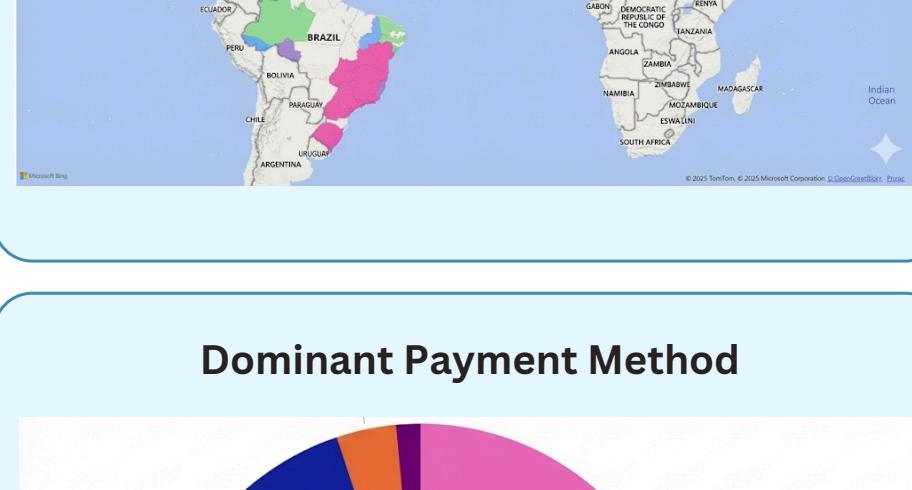


Revenue by Product Category

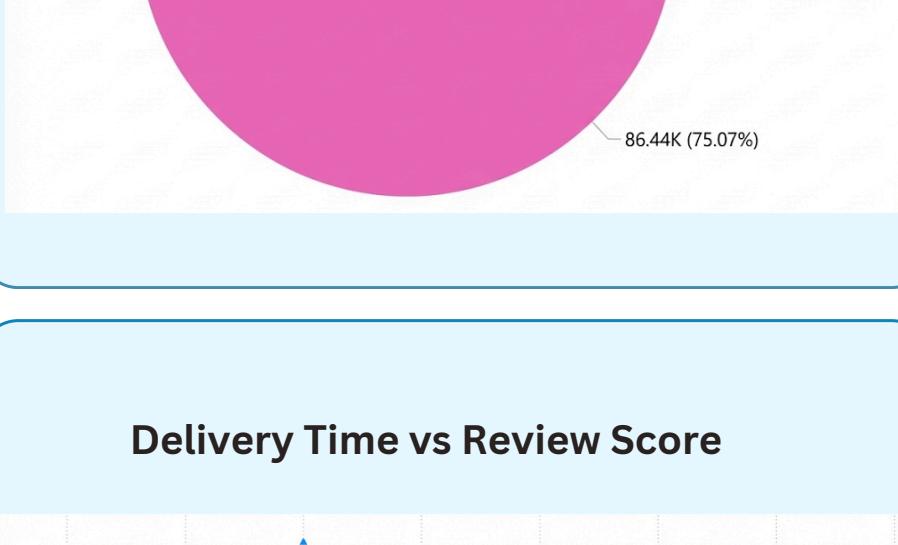


Customer Insights

Customer States By Revenue



Dominant Payment Method



Delivery Time vs Review Score



CONCLUSION

- E-commerce shows strong growth in Brazil, concentrated in major states.
- Delivery performance has a medium impact on customer satisfaction.
- Credit card is the dominant payment method.
- Strategic focus on logistics and popular categories (Top 10 out of 74 total) can boost performance.

REFERENCES

- Olist Brazilian E-Commerce Public Dataset (Kaggle)
- Python (Pandas, Matplotlib, Seaborn)
- Power BI
- Tableau
- Stack Overflow

<https://www.kaggle.com/datasets/olistbr/brazilian-e-commerce>

<https://docs.python.org/3/>

<https://learn.microsoft.com/en-us/power-bi/>

https://help.tableau.com/current/pro/desktop/en-us/gettingstarted_overview.htm