Proposed by
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Olist E-Commerce Performance

Purpose of the Study

Goal

- Analysed 100,000+ orders, 50,000+ customers

- Highlights marketplace strengths and value leakages

- Provides insights to guide merchandising, logistics, finance, and customer experience strategies for the next year

Dataset

- Kaggle's Olist relational database
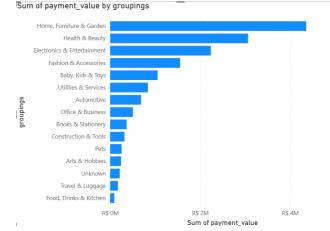
- January 2017 – August 2018 sales history.

Product and Sales

Findings

- Home & decor lead sales R$ 4.3 M

- Arts, Hobbies & Office average R$ 260–290 per

- Electronics & Office drive many return orders
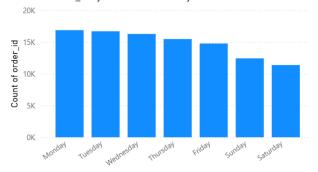
- Saturday orders run 35 % below Tue–Wed

Action Plan

- Increase ads, top-of-search placement

- Offer premium bundles, and Buy-Now-Pay-Later in Arts & Hobbies and Office & Business.

- Add points or "subscribe & save" programs for Electronics and Office.

- Send Friday evening alerts and Saturday free-shipping codes to lift sales.

Sum of payment_value by groupings

Count of order_id by Purchase Weekday

Count of product_id and Count of order_id by groupings

Payment

Sum of payment_value by payment_type

payment_type
- credit_card
- boleto
- voucher
- debit_card

R$ 0.38M (2.37%)
R$ 2.87M (17.92%)
R$ 12.54M (78.34%)

Sum of payment_value by payment_installments
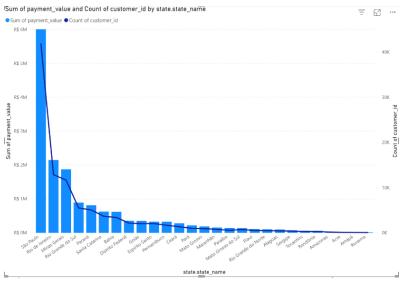
Findings

- Home & Furniture & Garden tops at R$ 4.3 M; Health & Beauty and Electronics & Entertainment R$ 3 M each

- Arts & Hobbies AOV R$ 290

- Total paid value R$ 16.0 M; card payments average 3.8 instalments.

Action Plan

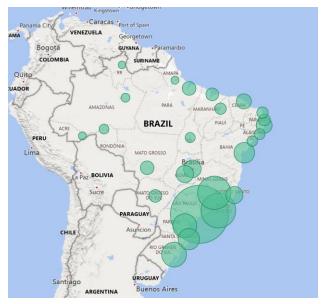- Add a second acquirer or activate Brazil's instant payment system, low-cost payments.

- 0 % interest up to 6x; tiered interest for 7–12x.

- Send reminders; auto-cancel after 48 h if unpaid.

- Give 1 % instant cash-back on debit and meal-voucher payments.

Sum of payment_value and Count of customer_id by state.state_name

Customers and Geolocation

Findings

- Sao Paulo 37 % of revenue (R$ 6 M) and 42 K customers; Rio (13 %) and Minas (12 %) trail behind.

- Top 5 states = 73 % of revenue

- Big baskets, small states: Paraíba, Acre, Rondônia AOV R$ 240–250 vs SP's R$ 150.

- Dense demand along the coast; north/interior pockets are sparse but present.
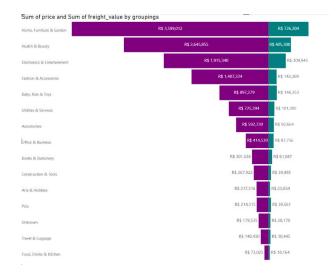
Action Plan

- Add fulfilment hub to speed delivery and defend share.

- Run targeted ads and set free-shipping thresholds to lift orders.

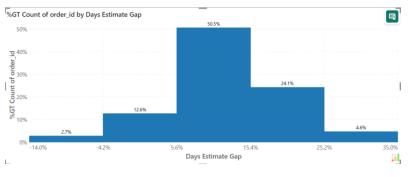- Accelerate seller onboarding to reduce revenue concentration.
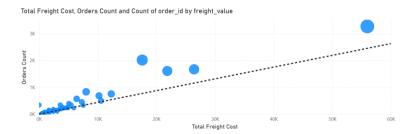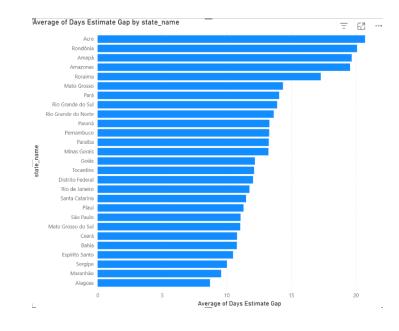
Delivery Performance

Findings

- Shipping is 17–20 % of value in top categories (Home, Health & Beauty, Electronics).

- Arts & Hobbies has the steepest freight-to-price ratio; Food/Drinks the lowest.

- Higher freight doesn't curb order counts

- 96.3 % of revenue comes from "delivered" orders.

- 50.5 % of late orders fall within a 6–15-day slippage band.

Action Plan

- Premium shipping: Offer paid "Same-Week Delivery" for 12-day+ categories

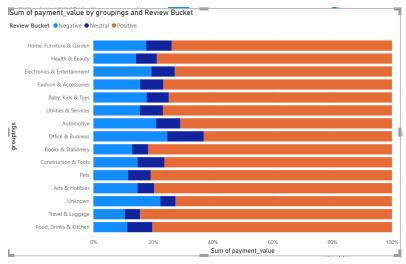- Show freight-to-item ratio and flag when it's below category average.

Sum of price and Sum of freight_value by groupings

	Price	Freight
Home, Furniture & Garden	R$ 3,599,012	R$ 726,204
Health & Beauty	R$ 2,645,855	R$ 405,388
Electronics & Entertainment	R$ 1,915,340	R$ 309,945
Fashion & Accessories	R$ 1,407,224	R$ 142,269
Baby, Kids & Toys	R$ 897,279	R$ 146,353
Utilities & Services	R$ 725,394	R$ 101,395
Automotive	R$ 592,720	R$ 92,664
Office & Business	R$ 414,539	R$ 87,756
Books & Stationery	R$ 301,536	R$ 61,047
Construction & Tools	R$ 267,922	R$ 39,495
Arts & Hobbies	R$ 217,516	R$ 23,054
Pets	R$ 214,315	R$ 39,561
Unknown	R$ 179,535	R$ 28,170
Travel & Luggage	R$ 140,430	R$ 30,445
Food, Drinks & Kitchen	R$ 73,025	R$ 18,164

%GT Count of order_id by Days Estimate Gap

Total Freight Cost, Orders Count and Count of order_id by freight_value
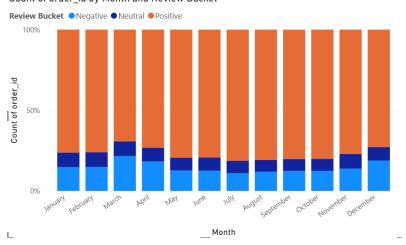
Delivery Performance

Findings

- Acre, Rondônia, Amapa run 18 + days late; Alagoas beats estimates by 11 days.

- Travel & Luggage overruns by 12.6 days; Food & Drinks by 10.6 days.

- Approve 0.5 days, To carrier 2.7 days, Purchase to delivery 12.5 days average.

Action Plan

- Add regional hubs in Acre, Rondônia, Amapa.

- Issue late-shipment scorecards with penalties & bonuses.

Reviews and Sentiment

Findings

- Travel & Luggage 4.33, Office & Business 3.78.

- Positivity stays ≥ 75 % year-round; March & December see more negatives.

- Office & Business hold most neutral/negative revenue; Travel & Luggage the least.

Action Plan

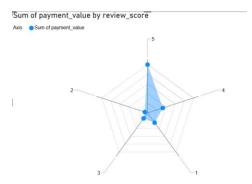- Add extra agents and enable FAQ chatbots for March & December.
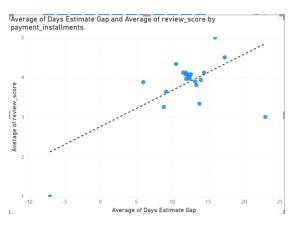
Reviews and Sentiment

Findings

- More than 70 % of revenue are near to 5; less than 10 % below 3 star

- Delivered orders average 4.; other statuses less than 2.6.
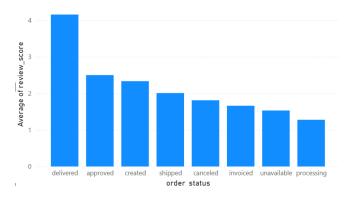
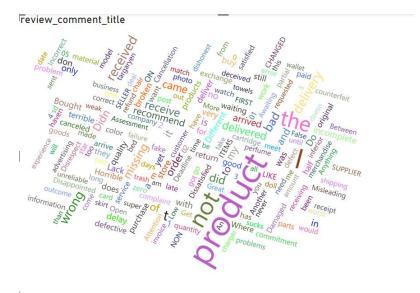- Amapa & Amazonas 4.18; Rio 3.87.

Action plan

- Allow no-questions-asked returns

Sum of payment_value by review_score

Average of Days Estimate Gap and Average of review_score by payment_installments

Average of review_score by order_status

Reviews and Sentiment

- **Finding**
Negatives: delay/missing/wrong items, Positives: recommend/delivery/excellent.

- Overall average 4.16 across 99 k orders.
Action plan
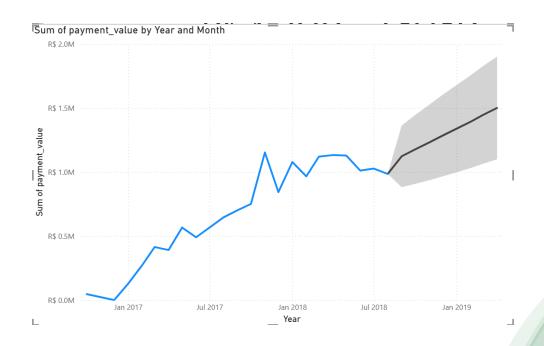
- Faster helpdesk local-language support

Forecasting

Finding

- Marketplace up 45 %by Mar 2019

- Growth: Home & Furniture & Garden, Health & Beauty, Fashion, Auto, Construction, Pets, Arts & Hobbies, Food & Kitchen.

- Stable: Electronics & Entertainment, Baby & Kids & Toys, Office & Business, Books & Stationery.

- Decline: Utilities & Services, Travel & Luggage.

Action Plan

- Re-stock best-sellers quickly; keep safety stock to avoid sell-outs.

- Bundle accessories with main items to raise basket size without heavy discounts.

Sum of payment_value by Year and Month

Key wins

- Focus ad spend & inventory on Home, Health & Beauty, and Electronics

- Weekend push notifications + free-shipping

- Accessories add-ons raise margin while keeping prices stable.

- Micro-fulfilment hub near Sao Paulo and cross-docks in Acre and Rondonia and Amapa

- Late-shipment scorecards drive on-time performance to 98 %.

- Auto-cancelling unpaid Boletos after 48 h frees inventory faster.

- Loyalty points and "subscribe & save" for Electronics & Office.

- No-questions returns on top-5 orders states

Thank you