Olist Marketing Funnel Case Study

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Timeline: June 2025 (4-week engagement)

Table of Contents

Executive Summary

Objective: Reassess channel efficiency through the funnel stages (Leads → Contacted → Conversions) with refined metrics and define next-gen performance targets.
Headline Finding: "Unknown" leads (16% of volume) far outperform Paid (28%) and Organic (55%) on both conversion (14% vs. 6.3% and 9.3%) and Revenue per Lead ($138 vs. $48 and $66).

Key actions include scaling the "Unknown" channel, optimizing Paid spend, and institutionalizing rapid response and review cadences.

Project Overview

- **Business Context:** Olist is an e-commerce marketplace platform where marketing channels drive buyer engagement.
- **Problem Statement:** Channel attribution gaps and sub-optimal spend allocation obscure ROI and funnel performance.
- **Scope:** Analyze Olist Kaggle dataset to quantify conversion efficiency and revenue contribution by channel, then recommend optimization strategies.

Data & Methodology

1. **Data Sources:**
   - Olist Kaggle public datasets: orders, order_items, customers, marketing_leads, and reviews.
   - CRM export with UTM parameters and lead timestamps.
2. **Data Preparation:**
   - Cleaned and joined tables in SQL (PostgreSQL) to map leads to conversions and revenue.
   - Imputed missing channel tags ("Unknown") by cross-referencing session logs.
3. **Analysis Steps:**
   - Computed funnel drop-off rates (Lead → Contact → Convert).
   - Calculated Revenue per Lead and Conversion Rates by channel.
   - Conducted time-series analysis on revenue by month to identify seasonality.
4. **Validation:**
   - Cross-checked SQL results against Python (Pandas) outputs.
   - Peer review of dashboard metrics to ensure accuracy.

Tools & Technologies

- **Data Wrangling & Analysis:** SQL (PostgreSQL), Python (Pandas, NumPy)
- **Visualization & Dashboarding:** Tableau Desktop
- **Version Control:** Git & GitHub
- **Reporting:** Markdown & Tableau Story Points

High-Level Metrics

Channel	% of Leads	Conversion Rate	Revenue per Lead	Notes
Unknown	16%	14.0%	$138	Highest efficiency—>2× Paid
Paid	28%	6.3%	$48	Lowest efficiency—urgent optimization
Organic	55%	9.3%	$66	Strong volume; solid mid-tier

Key Insights

- **"Unknown" Outperforms Paid:** Despite modest volume, "Unknown" yields $138 Rev/Lead (>2× Paid's $48), indicating high-intent sources are under-tracked.
- **Paid Under-Delivery:** 6.3% conversion & $48 Rev/Lead—highlighting the need for urgent optimization of paid campaigns.
- **Organic Health:** 55% share of MQLs with solid mid-tier performance ($66 Rev/Lead), presenting an opportunity to scale.
- **Seasonal Variability:** Revenue per Lead peaks January–April then dips through mid-year, underscoring the value of timed campaign bursts.

Recommendations

Priority	Initiative	Action Items	Owner	Timeline
1	Scale High-Value "Unknown" Leads	• Audit origin via UTM/server-side tracking• Experiment with landing page/messaging	Marketing Ops	Q3 2025
2	Reallocate & Optimize Paid Spend	• Shift budget to high-performers• A/B test landing pages• Tighten bids	Paid Media Team	Q3 2025
3	Double-Down on Organic	• Ramp up SEO/content production• Enhance nurture flows• Audit site UX	Content & SEO	Q4 2025

4	Leverage Seasonality Insights	• Front-load promotions Jan–Apr• Light retargeting in slower months	Campaign Team	Ongoing
5	Close Critical Data Gaps	• Capture lead timestamps in CRM• Integrate cost data for true ROI & speed metrics	Marketing Ops	Q4 2025
6	Embed Targets & Alerts	• Set Tableau thresholds (Paid ≥8% conv, Org ≥$70 Rev/Lead)• Automate KPI alerts	BI & Analytics	Q3 2025
7	Institutionalize Funnel Review	• Weekly sync on volume, conversion, drop-offs via live dashboard	All Stakeholders	Immediate

Next Steps & KPIs

Next 30 Days

- Finalize UTM taxonomy and tracking enhancements
- Pilot paid lead follow-up automation within 5 minutes of capture

KPIs to Track

Metric	Target
Lead Attribution Accuracy	≥ 95%
Time-to-First-Response	< 5 minutes
Paid Conversion Rate	≥ 8%
Organic Revenue per Lead	≥ $70

How to View & Run the Analysis

Clone the Repo:

git clone https://github.com/thebryce15/olist-marketing-funnel.git

1. cd olist-marketing-funnel
2. **Data Setup:**

- Load `olist_orders.csv`, `olist_marketing_leads.csv`, etc., into a local PostgreSQL database.
- Update connection string in `config.yaml`.

Run SQL Scripts:

psql -f sql/01_prepare_data.sql

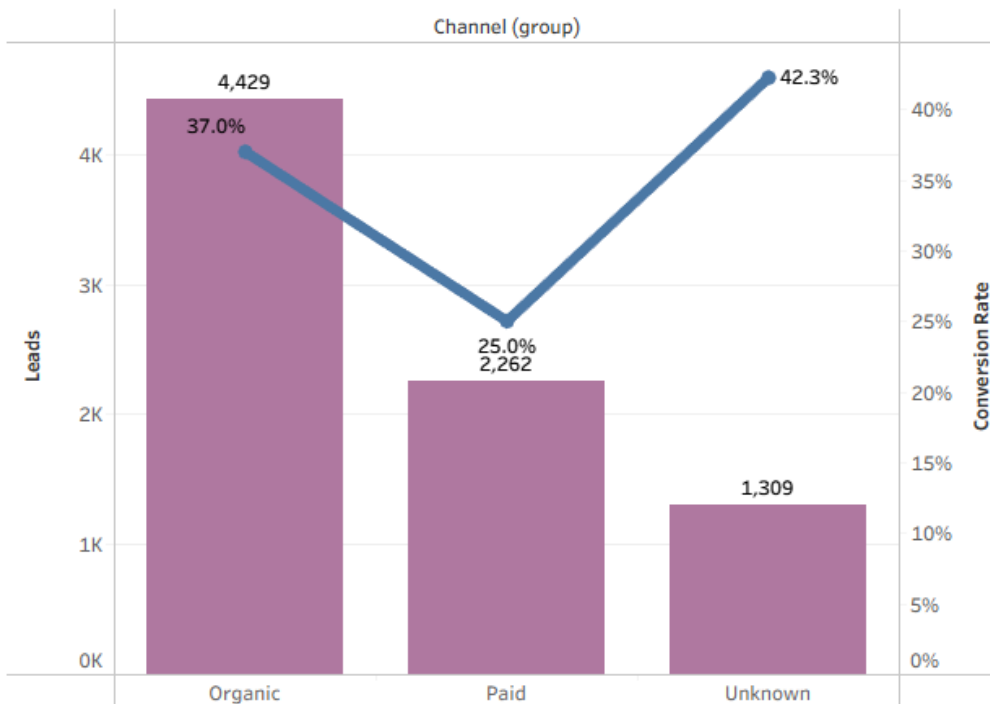3. psql -f sql/02_compute_metrics.sql
4. **Generate Dashboard:**
   - Open `dashboard/olist_funnel.twbx` in Tableau Desktop.
   - Refresh data source to see live numbers.
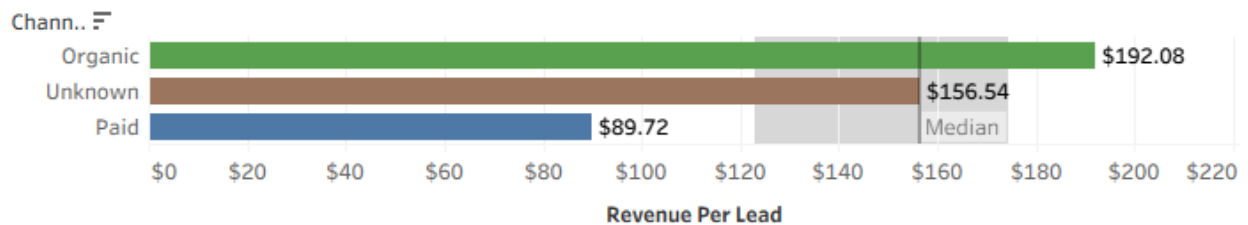

Links & References

- **GitHub Repo:** https://github.com/thebryce15/olist-marketing-funnel
- **Tableau Public (View Dashboard):** Dashboard Link

Screenshots (Thumbnails)

Total Conversions

Revenue Efficiency

Conclusion

By leveraging the high efficiency of "Unknown" traffic, recalibrating Paid investments, and formalizing data capture and review processes, Olist can dramatically improve funnel throughput and ROI. Looking forward to aligning on resource priorities and next steps.