



E-Commerce Analytics Deep Dive

Comprehensive analysis of customer behavior, sales trends, and revenue patterns from a Brazilian e-commerce database

Geographic Distribution

Customer Reach

Customers span multiple cities across Brazil, with significant concentration in major urban centers

- São Paulo leads customer base
- Strong presence in Rio de Janeiro
- Growing markets in Curitiba, Belo Horizonte



2017 Order Volume

45K

Total Orders

Orders placed throughout 2017

99.99%

Installment Rate

Orders paid in installments





Top Revenue Categories

Bed Table Bath

\$1.71M revenue

10.70% of total sales

Furniture Decoration

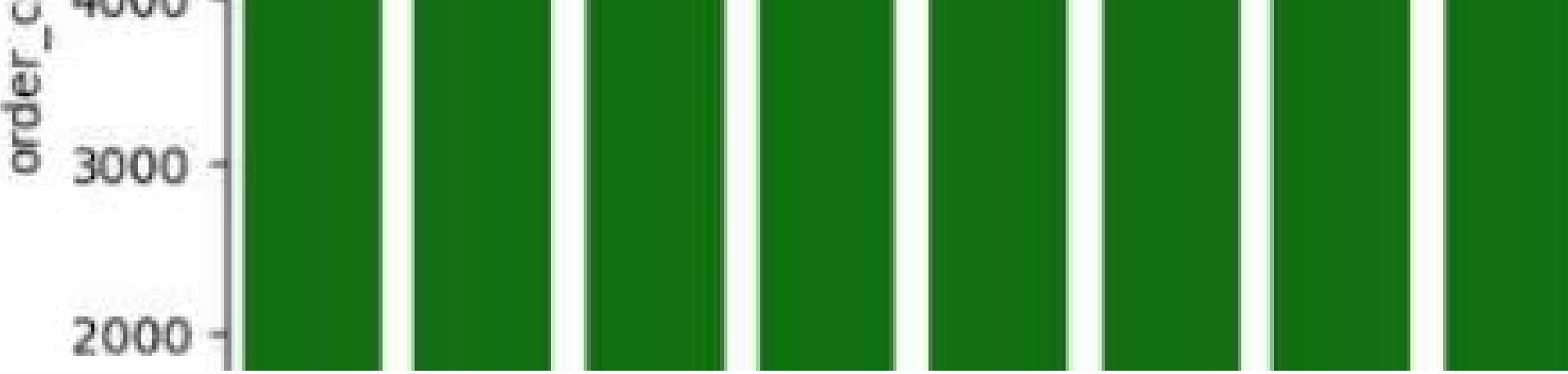
\$1.43M revenue

8.93% of total sales

Health Beauty

Strong performer

10.35% of total sales



2018 Monthly Order Trends

Consistent order volume throughout the year with peak in January



Peak Season

January: 7,269 orders



Steady Performance

6,000-7,000 orders monthly



Consistency

Stable demand across quarters



Customer Purchasing Patterns

Products Per Order

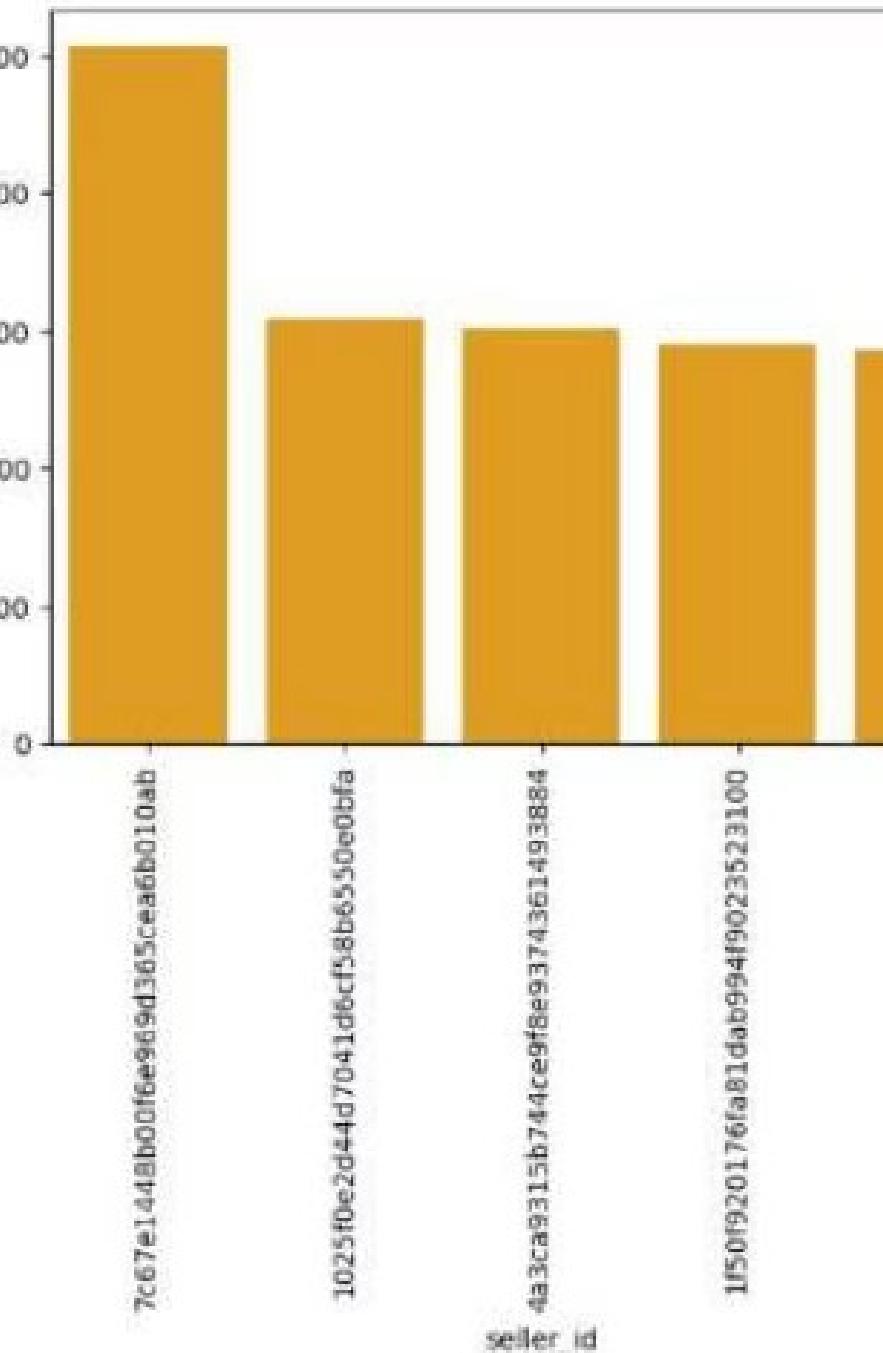
Top cities by average:

1. Padre Carvalho: 7.0
2. Celso Ramos: 6.5
3. Datas: 6.0
4. Candido Godoi: 6.0

Price Correlation

-0.106 correlation between price and purchase frequency

Higher prices slightly reduce purchase frequency



Top Sellers by Revenue

1

Leading Seller

\$500K revenue - dominant market position

2

Strong Performers

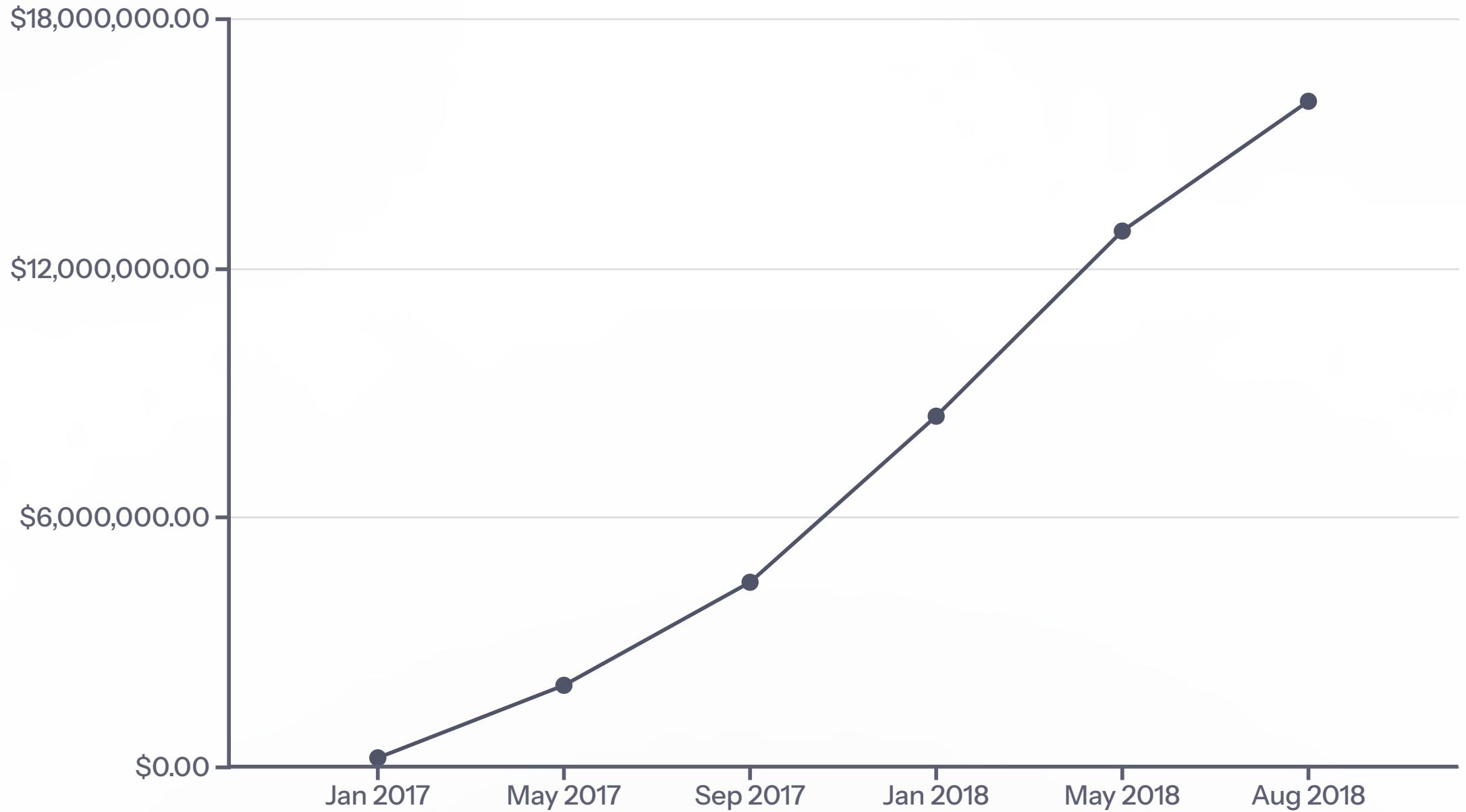
\$280K-\$300K revenue range

3

Competitive Landscape

Top 5 sellers drive significant volume

Cumulative Sales Growth



Steady upward trajectory from \$197K to \$16M over analysis period



Year-Over-Year Growth



2016 Baseline

Initial year establishing foundation

2017 Explosion

12,112.7% growth

Massive market expansion

2018 Maturity

20% growth

Sustainable scaling phase

Top Spenders by Year



2017 Leader

\$13,500 spent

Premium customer segment



2018 Leader

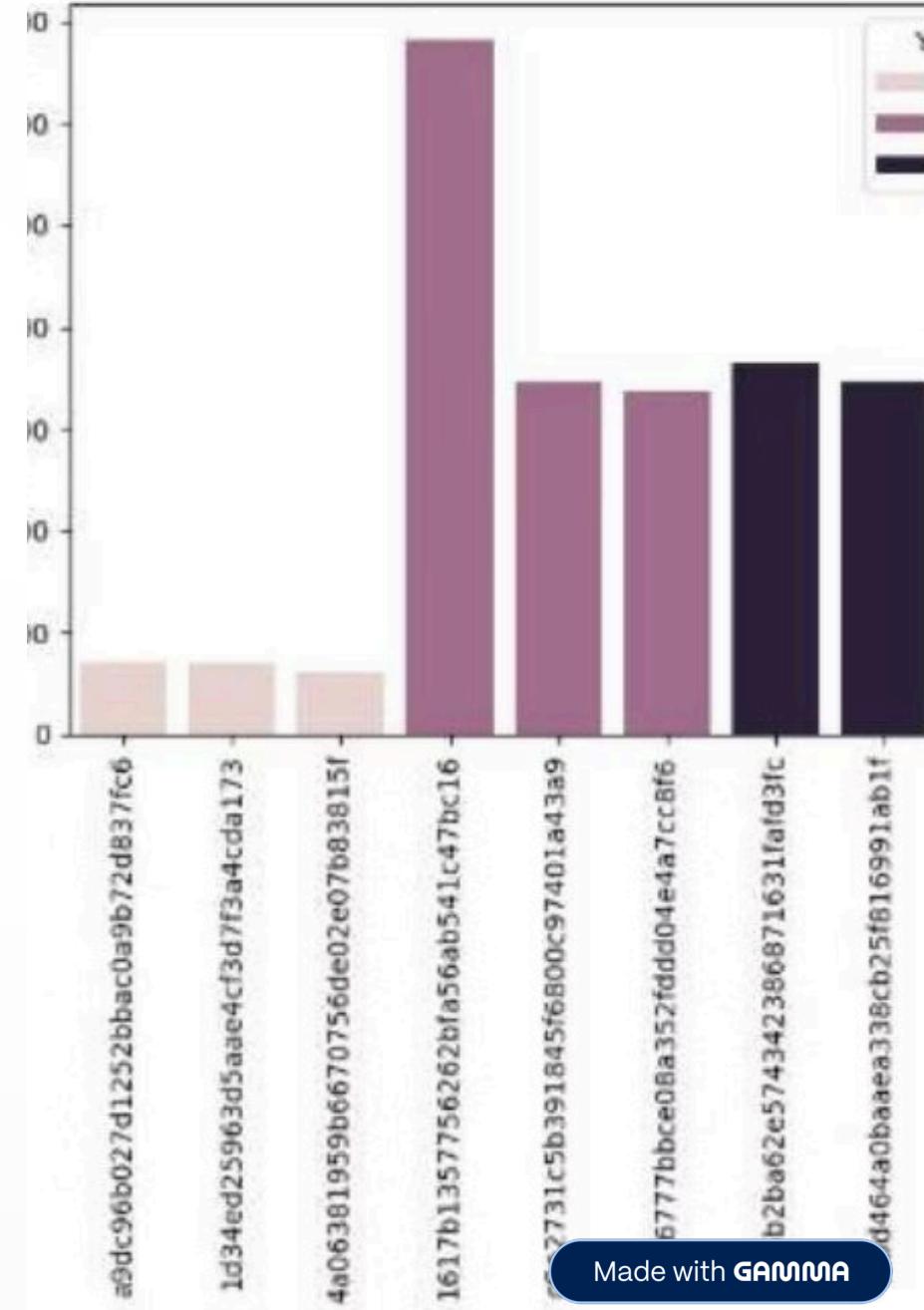
\$7,500 spent

High-value retention



VIP Customers

Top 3 per year drive significant revenue



Business Insights from the E-Commerce Analytics Deep Dive

1. Customer Insights

1.1 Major Urban Centers Drive Customer Base

- São Paulo and Rio de Janeiro dominate customer share.
- These cities should remain the core focus for marketing and faster delivery offerings.

1.2 Strong Growth in Emerging Tier-2 Markets

- Cities like Curitiba and Belo Horizonte show rapid customer acquisition.
- These regions are attractive for:
 - Local warehouses
 - Targeted ads
 - Seller onboarding

1.3 VIP Customers Generate Disproportionate Revenue

- In each year, **top 3 customers account for major revenue contributions.**
- Suggests potential for:
 - VIP loyalty programs
 - Priority delivery
 - Exclusive bundles

2. Sales & Revenue Insights

2.1 Top Categories Are Consistently Driving Revenue

- **Bed, Table & Bath, Furniture Decoration, and Health & Beauty** generate the highest revenue.
- These categories have:
 - High purchase frequency
 - Strong demand stability

Action:

Increase inventory availability, run seasonal bundles, partner with top sellers in these categories.

2.2 Sustainable Revenue Growth Pattern

- 2017 saw **12,000%+ hypergrowth** – likely due to platform scale-up.
- 2018 saw **20% mature growth**, indicating steady market capture.

Action:

Treat 2018 as a baseline for forecasting future performance.

3. Time-Series & Order Behavior Insights

3.1 January Is the Strongest Month

- 2018 peak: **7,269 orders** in January.
- Could be due to:
 - Holiday season spillover
 - Gift returns
 - New Year shopping mindset

Action:

Run biggest promotional campaigns in December-January.

3.2 Stable 6K–7K Orders per Month

- Indicates a consistent, non-seasonal customer demand.
- Reduces risk for inventory planning.

4. Customer Purchasing Patterns

4.1 High Variation in Products per Order by City

Cities like Padre Carvalho and Celso Ramos average **6–7 products per order**, much higher than national average.

Interpretation:

These cities may have:

- Limited local retail options
- Higher dependence on online shopping
- Strong willingness for bulk buying

Action:

Introduce “bulk order” and “free shipping over ₹X” campaigns for high-basket cities.

4.2 Negative Price Correlation (-0.106)

- Higher product price → slightly lower purchase frequency.

- Although weak, it suggests customers are somewhat price-sensitive.

Action:

Use psychological pricing, discounts, and product bundling to improve conversion rates.

5. Seller Insights

5.1 Strong Market Concentration

- Top seller alone generates **\$500K**.
- Next 3–4 sellers are within **\$280K–\$300K** range.

Interpretation:

- A few sellers dominate the marketplace.

- Long tail of sellers contributes much less.

Action:

- Provide growth support to mid-tier sellers.

- Reduce dependence on top sellers by onboarding new vendors in high-demand categories.

6. Cumulative Sales & Market Expansion

6.1 Sales Grew from \$197K → \$16M

- The platform is scaling rapidly with clear market adoption.

6.2 Major Growth Milestones

- 2016: Foundation building
- 2017: Market explosion
- 2018: Stabilization and maturing retention

Action:

Use this trajectory to attract investors and expand operations.

7. Strategic Recommendations (Business-Focused)

- ✓ Optimize inventory in top revenue categories
- ✓ Expand logistics hubs to Tier-2 emerging markets
- ✓ Launch loyalty programs for top-spending customers
- ✓ Drive marketing push every January
- ✓ Promote bulk buying in high basket-size cities
- ✓ Support mid-tier sellers to reduce revenue concentration risk