Sales Data Analysis Report

Period Covered: Brazilian E-Commerce Public Dataset by Olist

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Executive Summary

This analysis explores ecommerce performance and why certain product categories underperform. The findings aim to support business decisions in marketing, inventory, and regional strategy.

Key Findings

1. Low-Selling Products Are the Primary Cause

- Underperforming categories are dominated by products with minimal sales volume.
- These low sellers fail to generate sufficient revenue or traction in the marketplace.

The figures below highlight the difference in seller count between top-category products and underperforming category products.

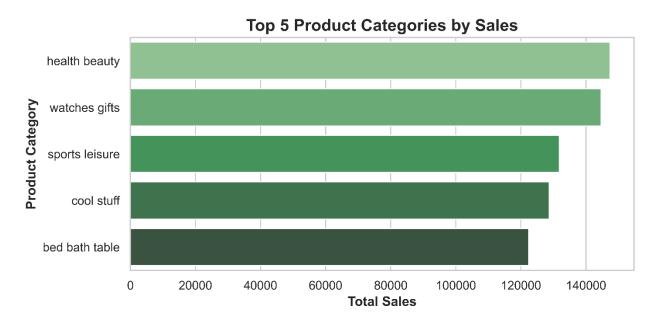


Figure 1: Top 5 Product Categories by Sales

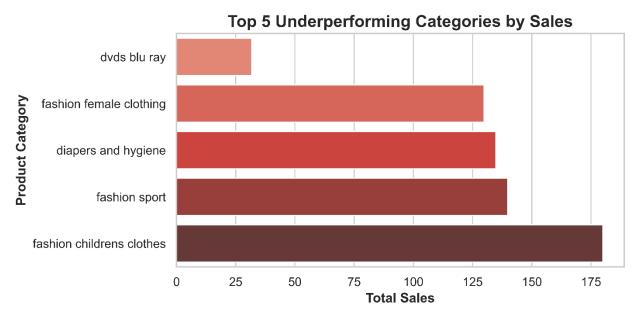
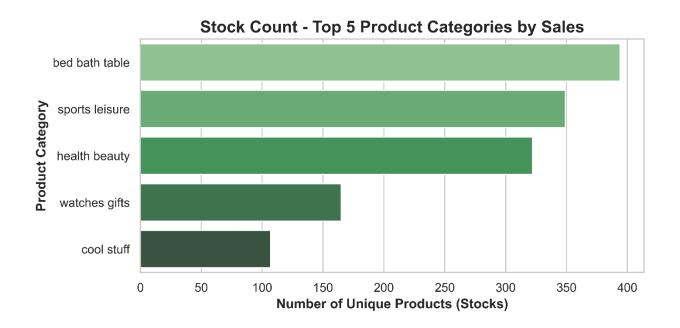


Figure 2: Top 5 Underperforming Product Categories by Sales

2. Not Enough Product Choices

- There are only a few different products available in these categories.
- With fewer options to choose from, customers are less likely to buy something.

The figures below highlight the difference in stock count between top-category products and underperforming category products.



fashion female clothing

fashion sport

dvds blu ray

diapers and hygiene

fashion childrens clothes

0.0

0.5

1.0

1.5

2.0

2.5

3.0

Figure 3: Stock Count of Top-Performing Category Products

Figure 4: Stock Count of Underperforming Category Products

3. Fewer Orders Happen as a Result

• Because the products don't sell well and there aren't many of them, these categories get fewer orders overall.

Number of Unique Products (Stocks)

The low number of orders is a result of the two problems above.

The figures below highlight the difference in order count between top-category products and underperforming category products.

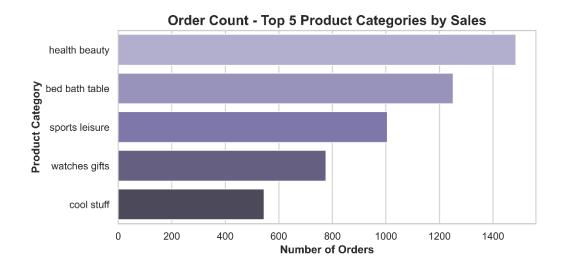


Figure 5: Order Count of Top-Performing Category Products

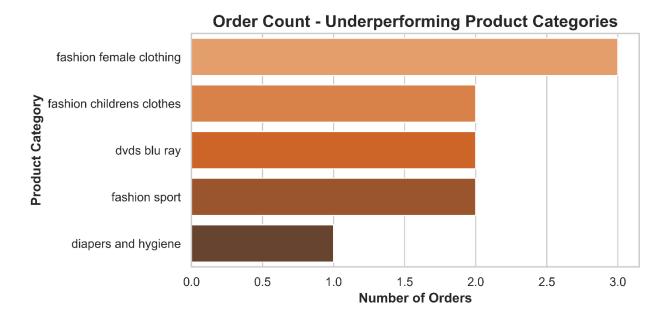


Figure 6: Order Count of Underperforming Category Products

Dashboard Overview (Power BI)

A dashboard was created to visualize and explore these findings further. It includes:

- KPIs: Total Sales, Total Sellers, and Total Orders
- Tables: Top 5 Product Categories by Sales and Top 5 Underperformers Product Categories
- Bar Charts (Horizontal):
 - Seller Count of Top Product Categories
 - Stock Count of Top Product Categories
 - Seller Count of the Top 5 Underperforming Product Categories
 - Stock Count of the Top 5 Underperforming Product Categories
- Business Insight: Summary of the findings

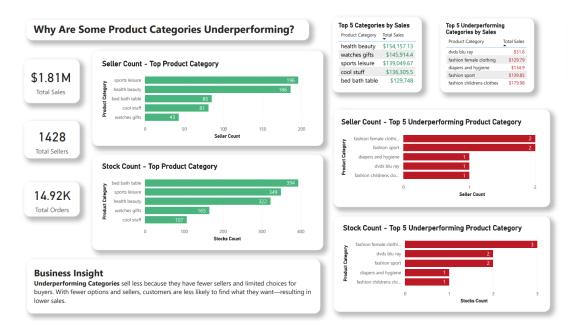


Figure 7: Power BI Dashboard Screenshot

Conclusion

The analysis revealed that underperformance in certain product categories is primarily due to low-selling products and limited product variety. These issues result in fewer orders and ultimately weaker sales. These insights can guide:

- Marketing: Avoid allocating heavy promotion to categories with minimal customer interest or stock.
- **Inventory Strategy:** Expand product variety in promising categories to encourage customer purchases.
- **Sales Strategy:** Focus on top-performing categories with high seller and order volumes to maximize ROI.

Future analysis may explore review scores, customer preferences, or pricing competitiveness to uncover deeper reasons behind low product traction.