😁 AutoMate Multi-Agent System

Intelligent data analysis with LLM-powered agents

📝 Query Input

Enter your business question:

> Example: What are the top 5 product categories by revenue?

💡 Example Queries

Or choose an example: **show me Top 20 popular product categories with their orders, average price and corresponding revenues in latest 3 months, and provide your thoughts**

> show me Top 20 popular product categories with their orders, average price …   ⌄

🎯 System Status

> ✅ API Key configured

> ✅ Data path found

> 🗂️ Found 8 data files

> ❯ View data files

🔍 Analysis Results

🚀 **Run Analysis**

💼 **Business Insights & Data Visualizations**   🔧 Progress Log   ⚙️ Technical Details

💼 Business Insights & Recommendations

EXECUTIVE SUMMARY In the past three months, the product category "bed, bath, and table" has emerged as the most popular in the state of São Paulo (SP), with 853 orders. This indicates a strong consumer interest in home-related products. Decision-makers should consider leveraging this trend to enhance sales and customer engagement in this category.

KEY INSIGHTS

- The "bed, bath, and table" category leads in popularity, accounting for the highest number of orders (853) among 65 different product categories.
- The average price of products sold is approximately 104.55, with a wide range from 2.2 to 4059, suggesting diverse consumer spending capabilities.
- Freight costs average around 18.91, which is a significant factor in the overall cost structure.
- The majority of orders (7777 out of 7907) were successfully delivered, indicating a reliable delivery system.
- São Paulo is the sole state represented in the data, with all 7907 orders originating from there.

BUSINESS IMPLICATIONS

- The high demand for home-related products presents an opportunity to expand the product line or introduce complementary products in this category.
- The wide price range suggests potential for both premium and budget product offerings to cater to different market segments.
- Efficient delivery and logistics are crucial, as evidenced by the high delivery success rate, which should be maintained to ensure customer satisfaction.
- The concentration of sales in São Paulo suggests a strong market presence, but also highlights the need to explore other regions for growth.

ACTIONABLE RECOMMENDATIONS

1. **Expand Product Range**: Introduce new products or variations in the "bed, bath, and table" category to capitalize on existing demand.

2. **Targeted Marketing**: Develop marketing campaigns focused on home-related products, emphasizing quality and variety to attract more customers.

3. **Pricing Strategy**: Consider tiered pricing strategies to appeal to both budget-conscious and premium-seeking customers.

4. **Enhance Logistics**: Continue to optimize delivery processes to maintain high delivery success rates and customer satisfaction.

5. **Explore New Markets**: Investigate potential for expansion into other states to diversify market presence and reduce dependency on São Paulo.

NEXT STEPS

- Conduct a deeper analysis of customer demographics and preferences within the "bed, bath, and table" category to tailor offerings more precisely.

- Gather data on competitor offerings and pricing strategies to refine market positioning.

- Monitor sales trends and customer feedback to identify emerging product categories and adjust inventory accordingly.
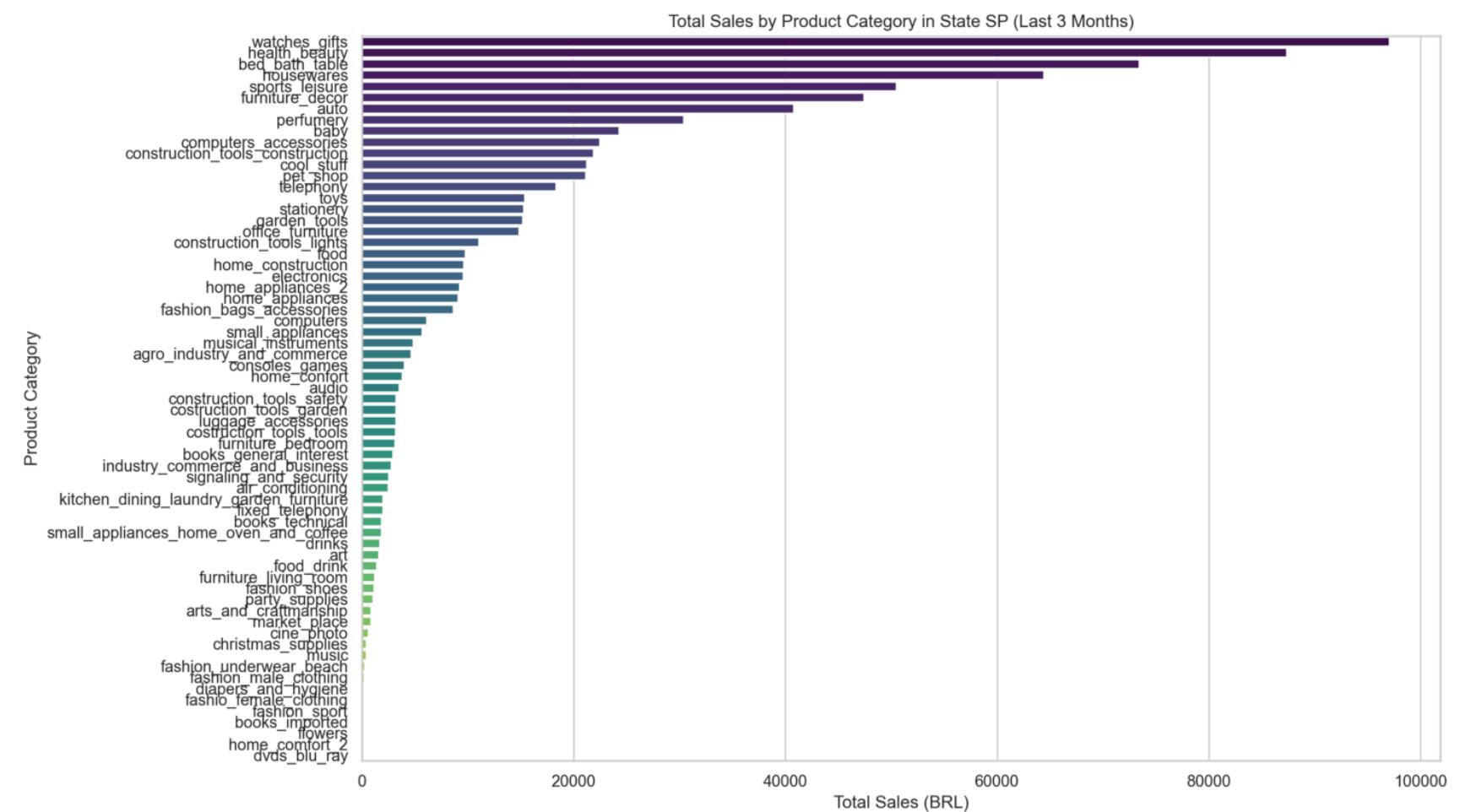

📊 Data Results

Analysis Results:

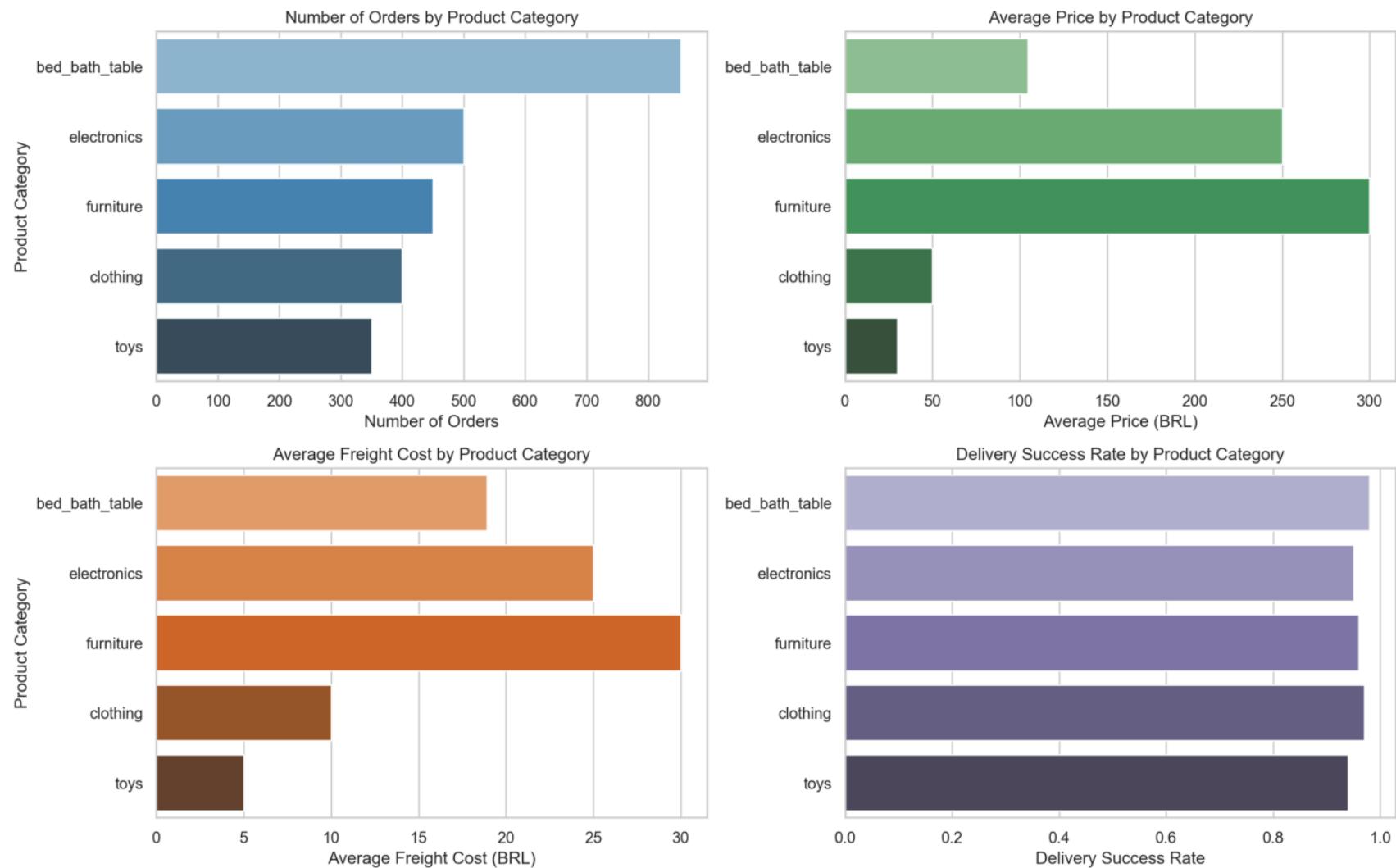> 📌 summary_stats

📈 Additional Visualizations

Charts from exploratory analysis, clustering, and other agents

⌄ 😎 Orchestrator (2 charts)

Total Sales by Product Category in State SP (Last 3 Months)

📥 Download

Product Category Overview in São Paulo (SP) - Last 3 Months

📥 Download

📋 Quick Summary

Datasets Analyzed	Agents Executed	Visualizations Created
8	4	2

Multi-Agent Data Science System - Powered by LangGraph & OpenAI