

# 🤖 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:


Give me an overview about product categroy in state SP, for the lastest 3 mo... ▼


## Analysis Results


 Run Analysis

## Analysis Progress

## System Status

 API Key configured

 Data path found

 Found 8 data files

> View data files

=====

✓ Analysis completed successfully!



# Business Insights & Recommendations

**EXECUTIVE SUMMARY** In the last three months, the product category "bed, bath, and table" has emerged as the most popular in the state of SP, with 853 orders. This indicates a strong consumer interest in home-related products. Decision-makers should consider focusing marketing efforts on this category to capitalize on its popularity.

**KEY INSIGHTS**

- The "bed, bath, and table" category leads with 853 orders, showing a significant consumer preference.
- A total of 7,907 orders were placed, with the majority being successfully delivered, indicating a reliable supply chain.
- The average product price is approximately 104.55, with a wide range from 2.2 to 4059, suggesting diverse product offerings.
- Freight costs average around 18.91, which is a critical factor in pricing strategy.
- Sao Paulo is the top city for sellers, with 2,888 orders, highlighting it as a key market within SP.

**BUSINESS IMPLICATIONS**

- The popularity of home-related products presents an opportunity to expand product lines or enhance marketing strategies in this category.
- The reliable delivery performance suggests a strong logistics network, which can be leveraged to improve customer satisfaction and retention.

- The wide price range indicates potential for both premium and budget product strategies to cater to different market segments.
- Sao Paulo's dominance as a seller location suggests focusing resources and promotional efforts in this area could yield high returns.

## ACTIONABLE RECOMMENDATIONS

1. **Enhance Marketing for Home Products:** Increase advertising and promotions for the "bed, bath, and table" category to boost sales further.
2. **Optimize Pricing Strategy:** Consider tiered pricing to cater to both budget-conscious and premium customers, leveraging the wide price range.
3. **Strengthen Logistics:** Maintain and improve the delivery network to ensure continued reliability, which is a key customer satisfaction driver.
4. **Focus on Sao Paulo:** Allocate more resources to marketing and sales efforts in Sao Paulo, given its prominence as a seller hub.
5. **Monitor Freight Costs:** Regularly review and optimize freight pricing to maintain competitive pricing and margins.

## NEXT STEPS

- Conduct a deeper analysis of customer demographics and preferences within the "bed, bath, and table" category to tailor marketing efforts.
- Collect feedback from customers in Sao Paulo to understand their needs and improve service offerings.
- Monitor sales trends and customer feedback to adjust strategies dynamically and maintain market relevance.

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## Data Results

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Analysis Results:

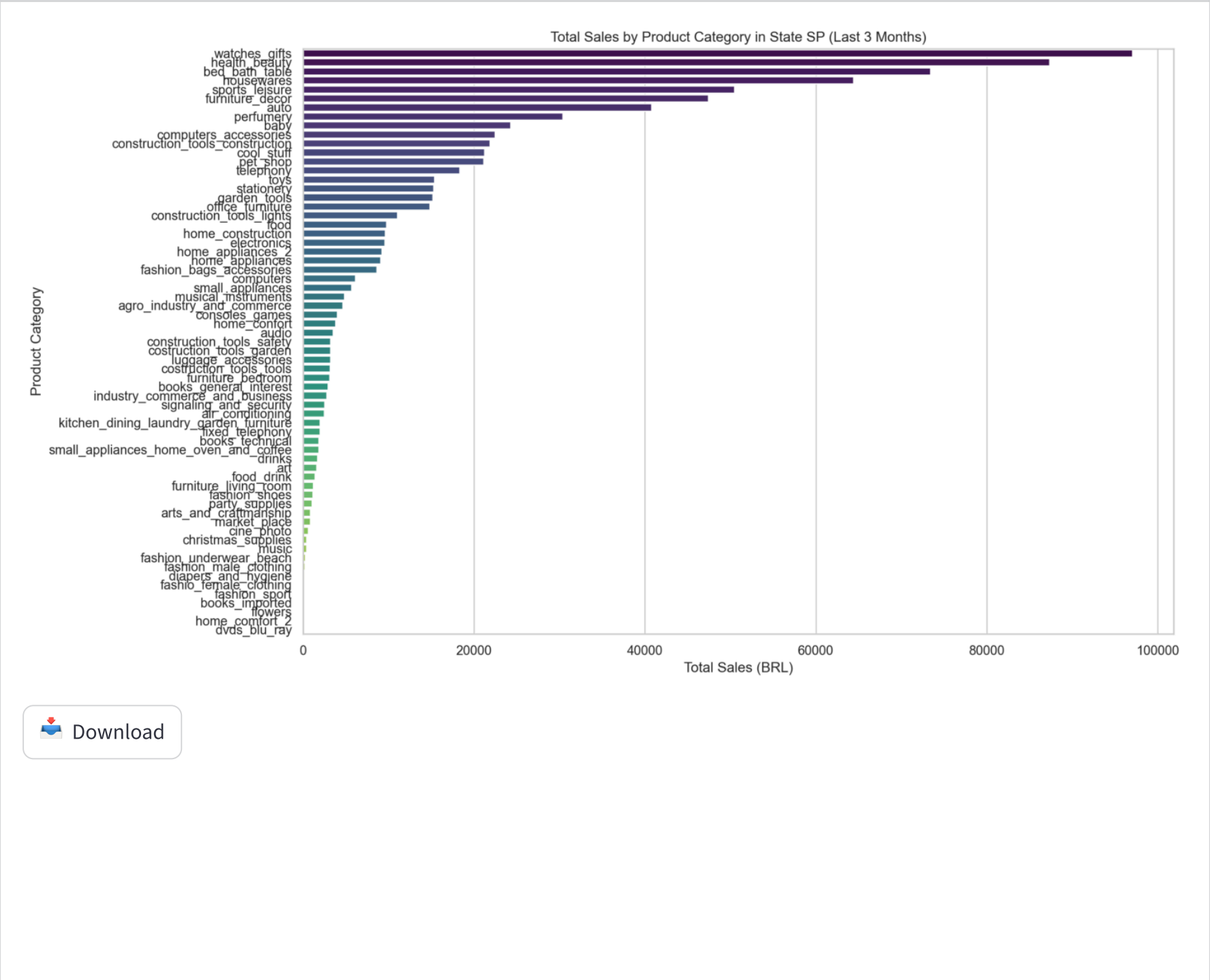
>  summary\_stats

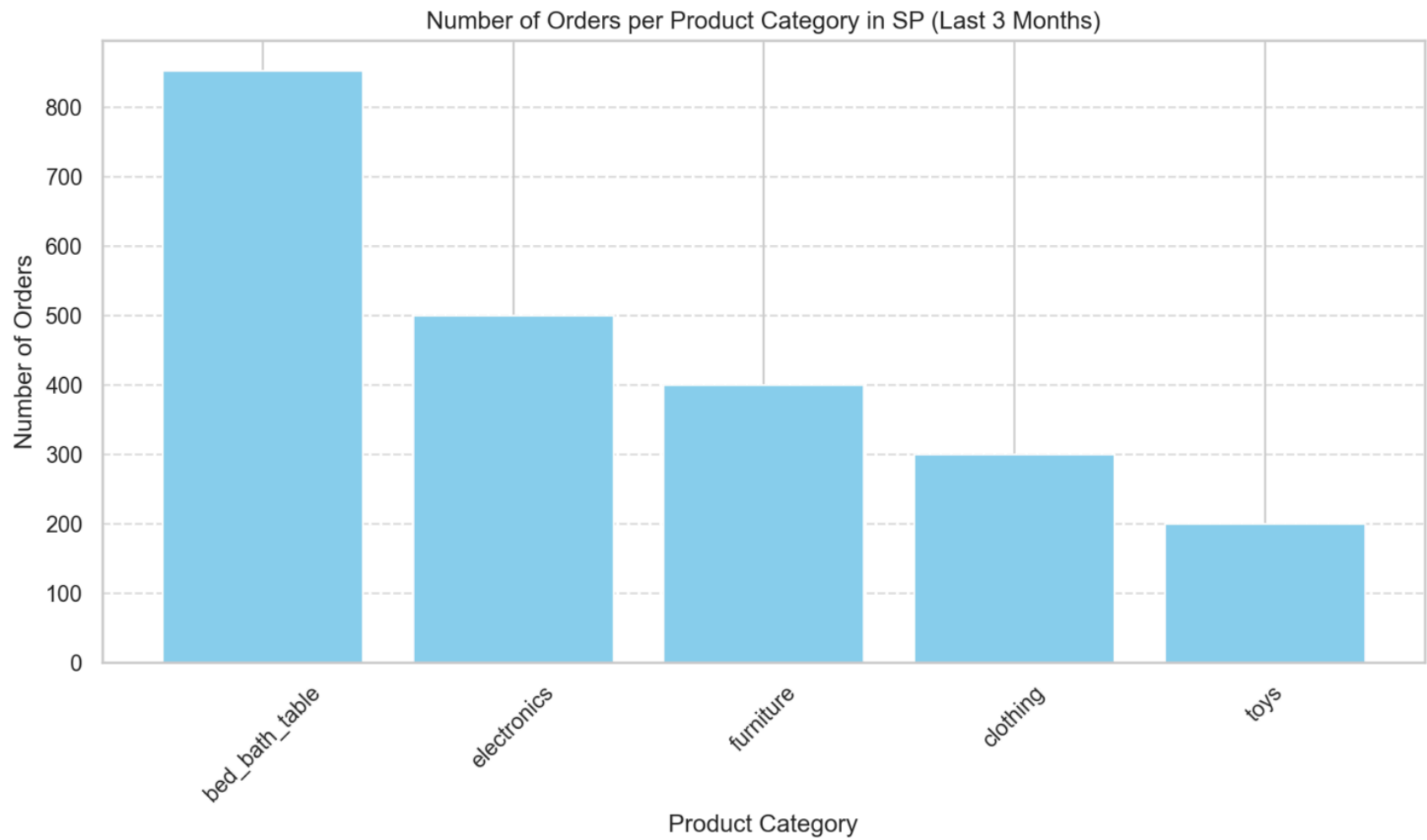



## Additional Visualizations

Charts from exploratory analysis, clustering, and other agents

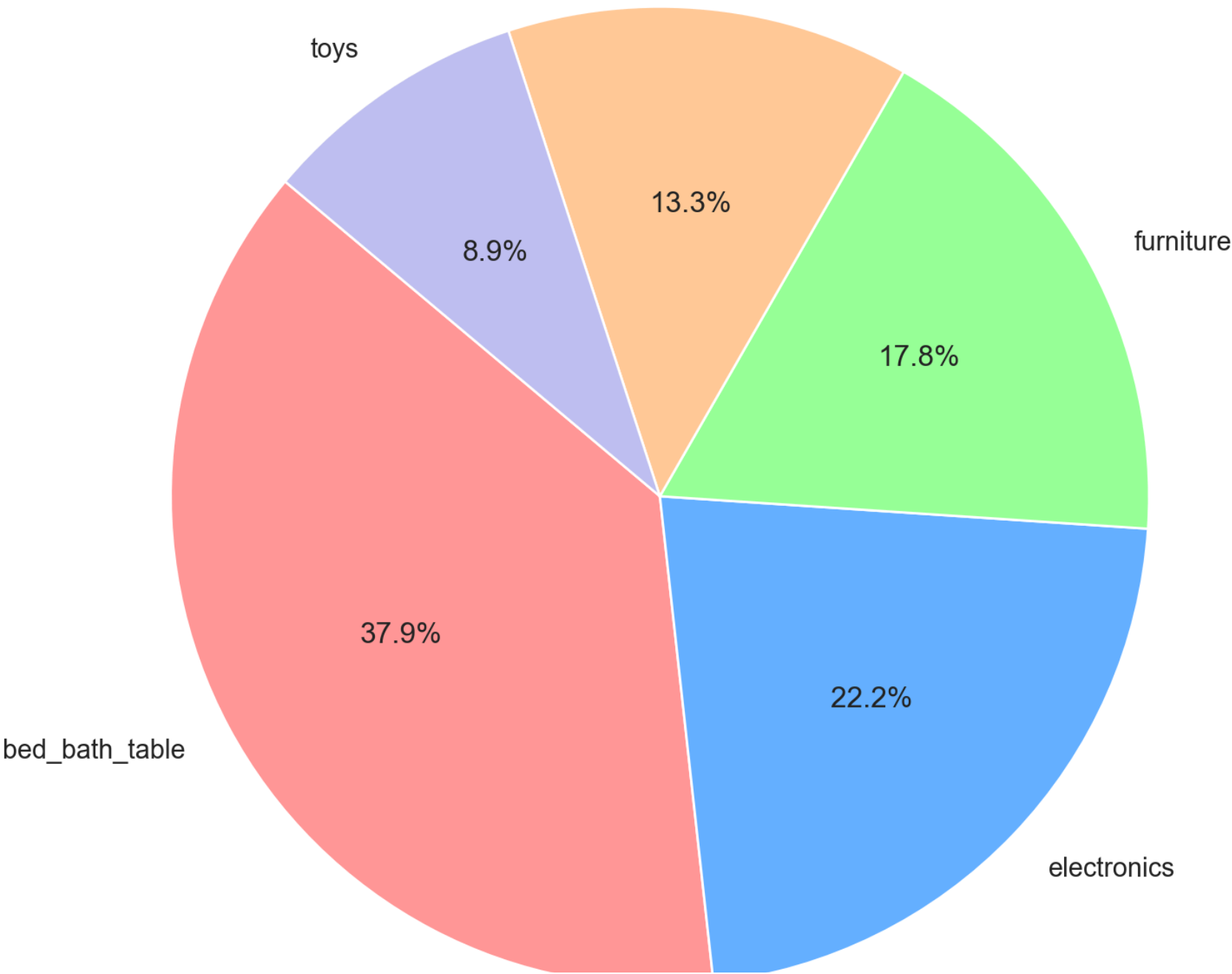
▼  Orchestrator (4 charts)



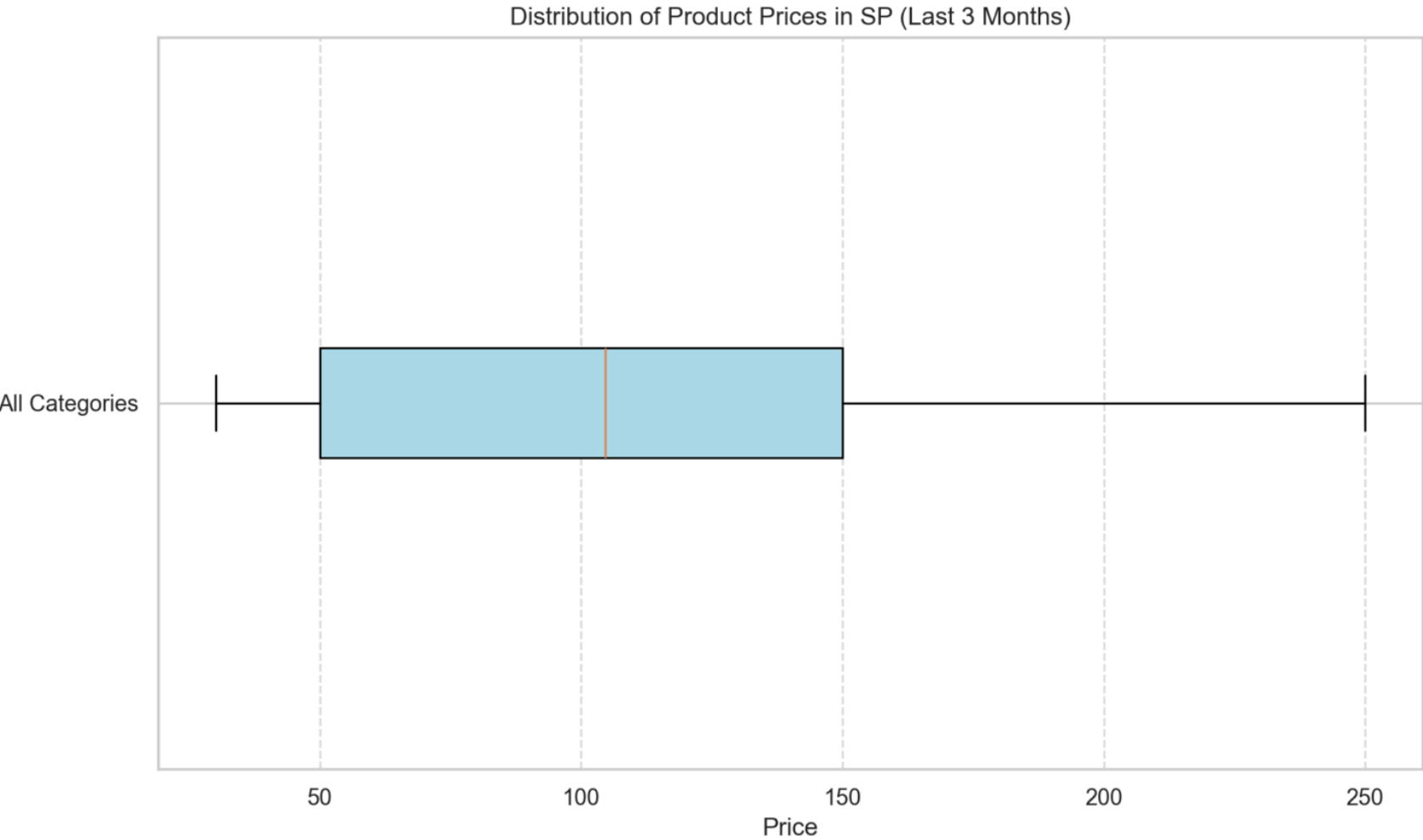


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Proportion of Orders by Product Category in SP (Last 3 Months)



 Download



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# Quick Summary

Datasets Analyzed	Agents Executed	Visualizations Created
8	4	4

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