

Product Sales Analysis - Phase 4: Development Part 2

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Description:

The Product Sales Analysis project, now in its Phase 4, continues to provide valuable insights into product sales data. This phase focuses on leveraging IBM Cognos for data visualization and interactive dashboards to facilitate data-driven decision-making. By understanding sales trends, top-selling products, and customer preferences, this project equips businesses with the tools they need to optimize their product offerings.

Required Tools:

- **IBM Cognos:** For creating interactive dashboards and reports.
- **Python (optional):** For data preprocessing and analysis.

Key Objectives:

In Phase 4, the project aims to achieve the following objectives:

1. **Create Interactive Dashboards:** Utilize IBM Cognos to design interactive dashboards and reports.
2. **Visualize Insights:** Display key insights, such as top-selling products, sales trends, and customer preferences.
3. **Identify Peak Sales Periods:** Derive insights on when peak sales periods occur.

Data Source:

The project continues to use the same dataset “ <https://www.kaggle.com/datasets/ksabishek/product-sales-data>”.

Visualizations and Insights:

This phase involves the creation of interactive dashboards and reports using IBM Cognos. The following insights and visualizations are expected:

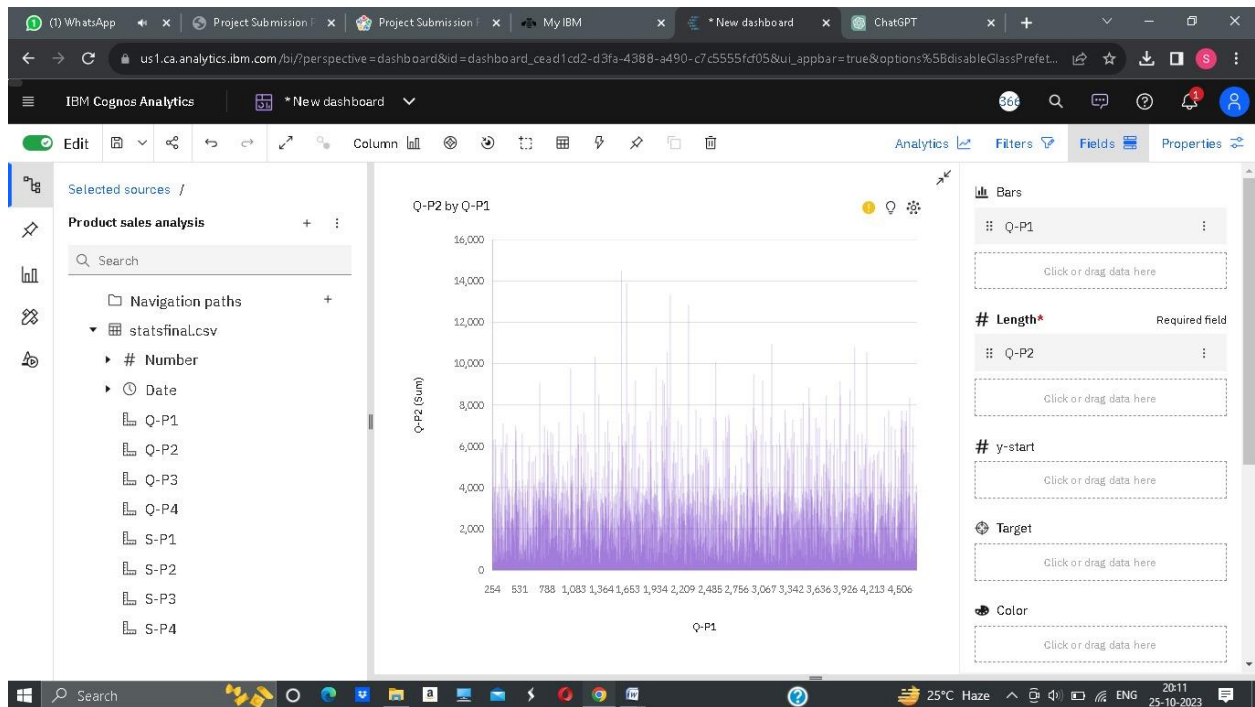
1. Top-Selling Products: Visualizations that highlight the products with the highest sales.
2. Sales Trends: Interactive reports that show sales trends, helping to identify growth patterns and fluctuations.
3. Customer Preferences: Dashboards revealing customer preferences for specific products.
4. Peak Sales Periods: Insights on when peak sales periods occur.

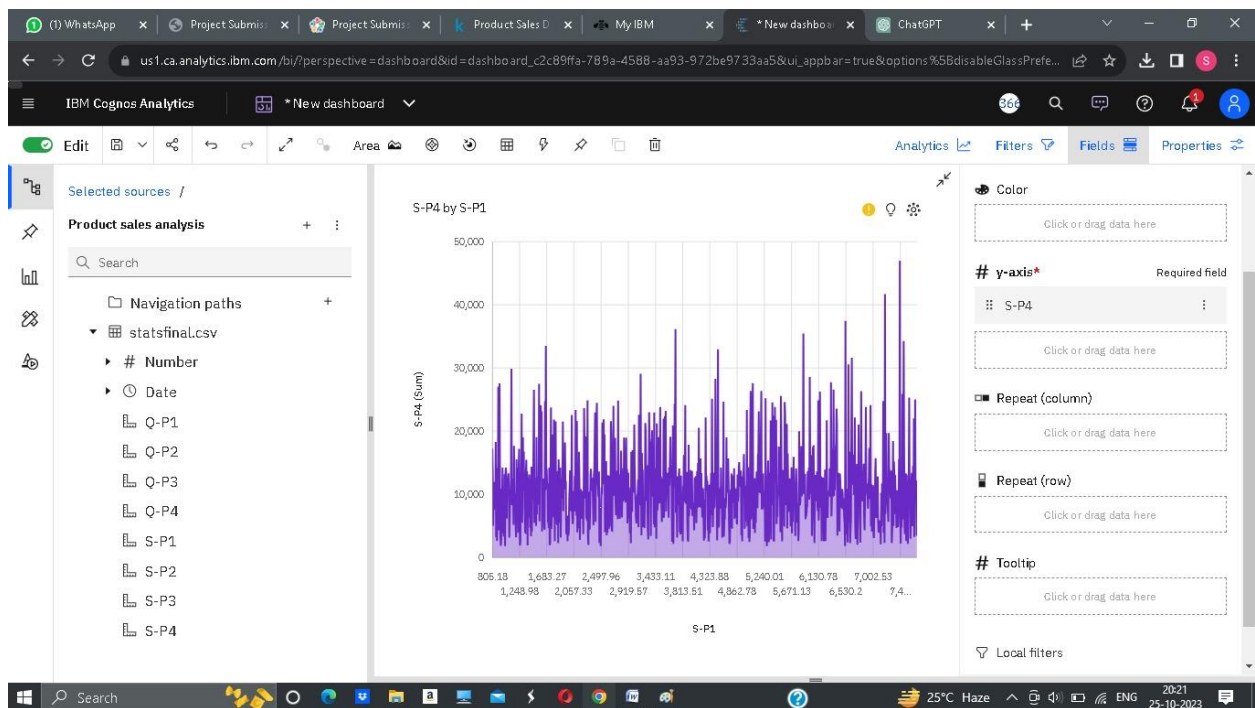
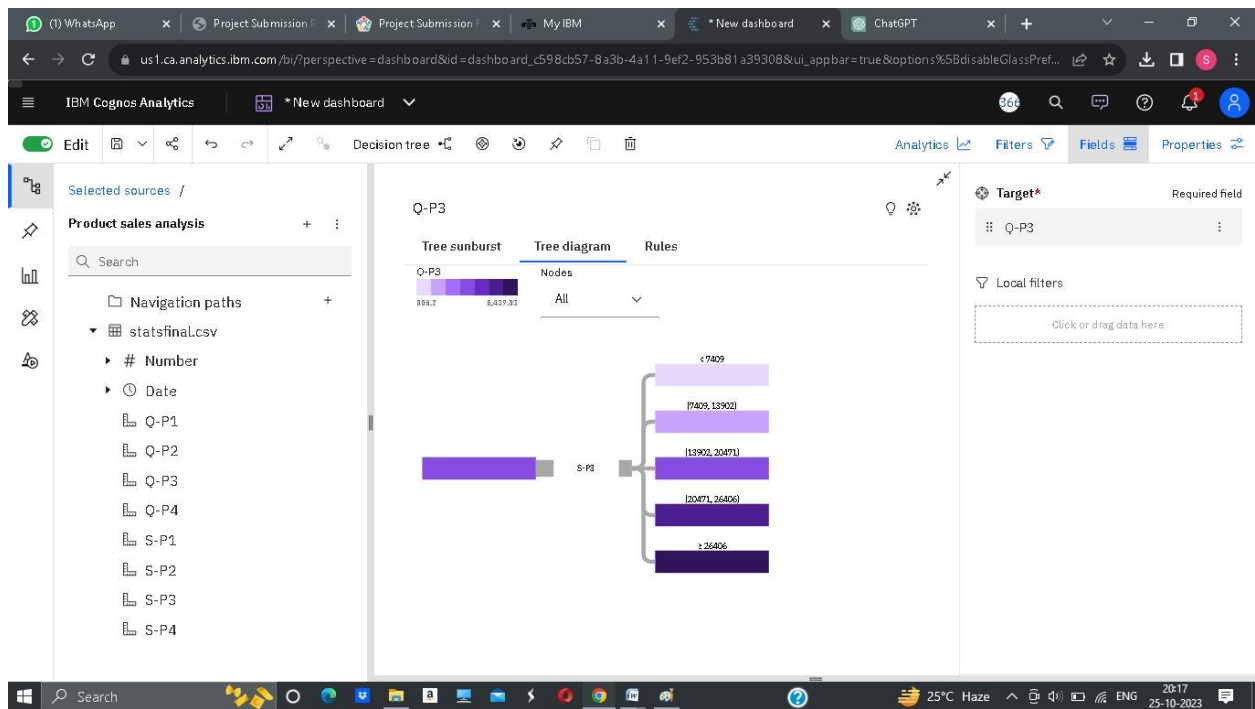
Actionable Insights:

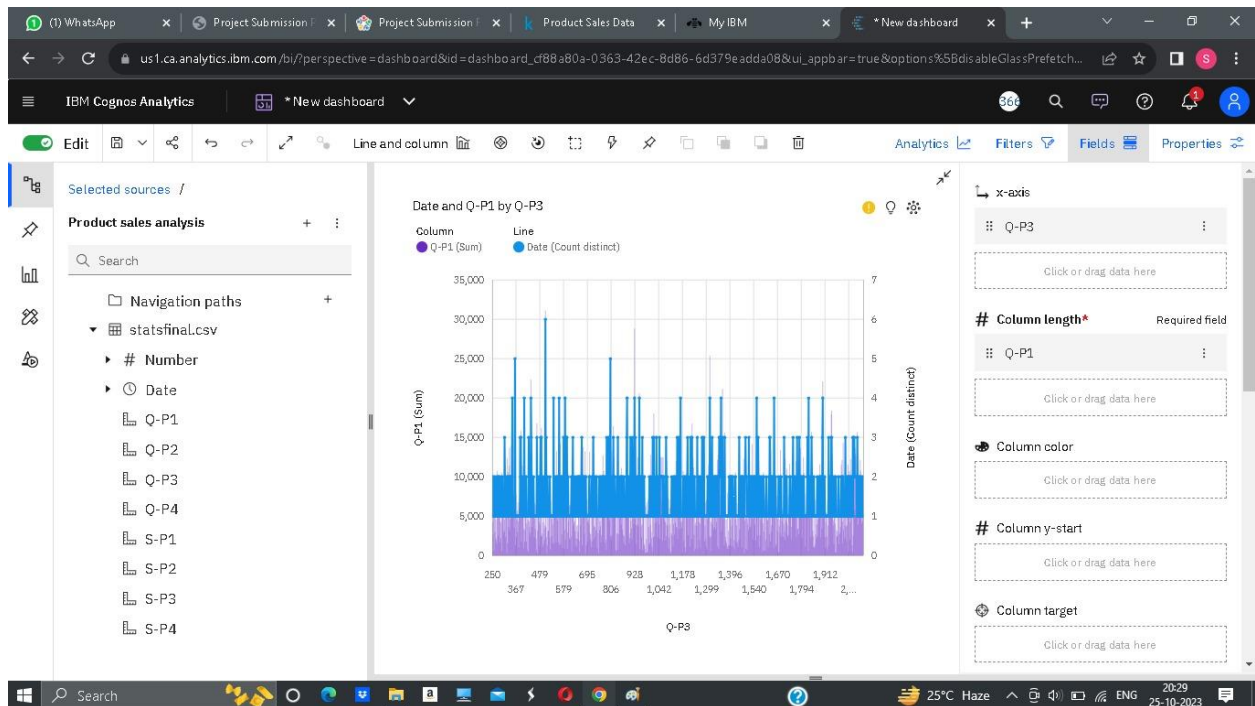
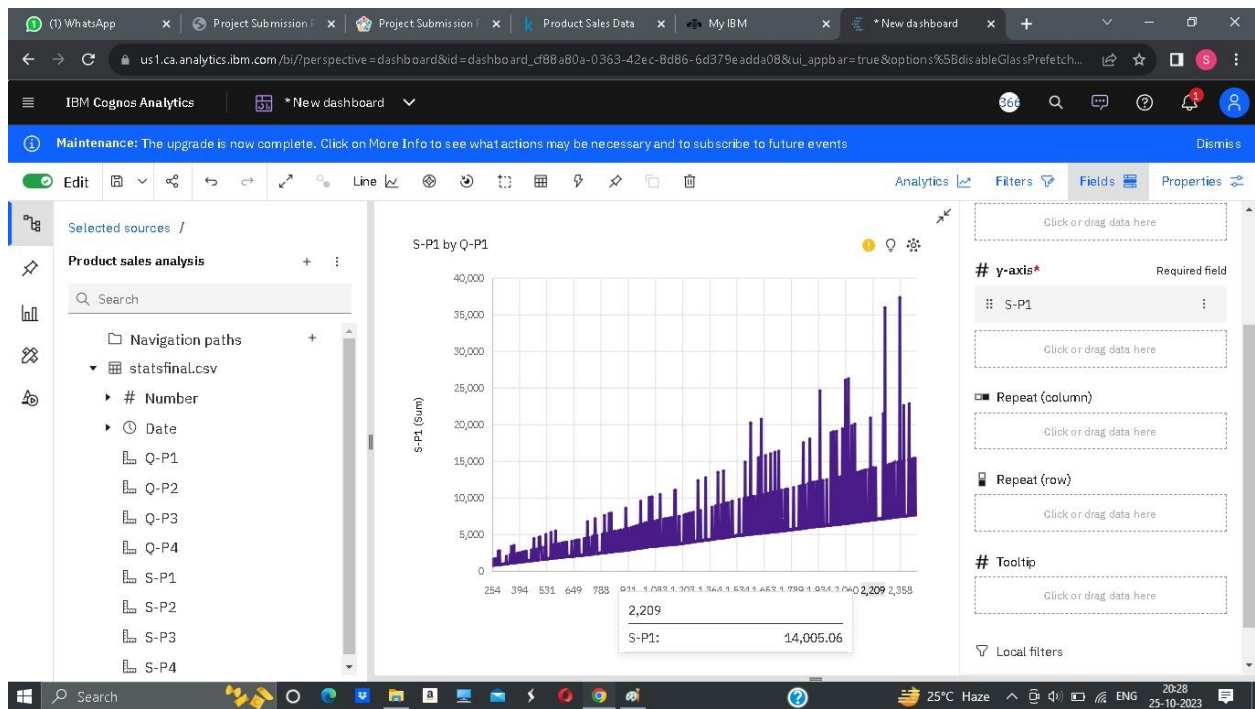
Based on the visualizations and insights derived, the project aims to provide actionable recommendations. For example:

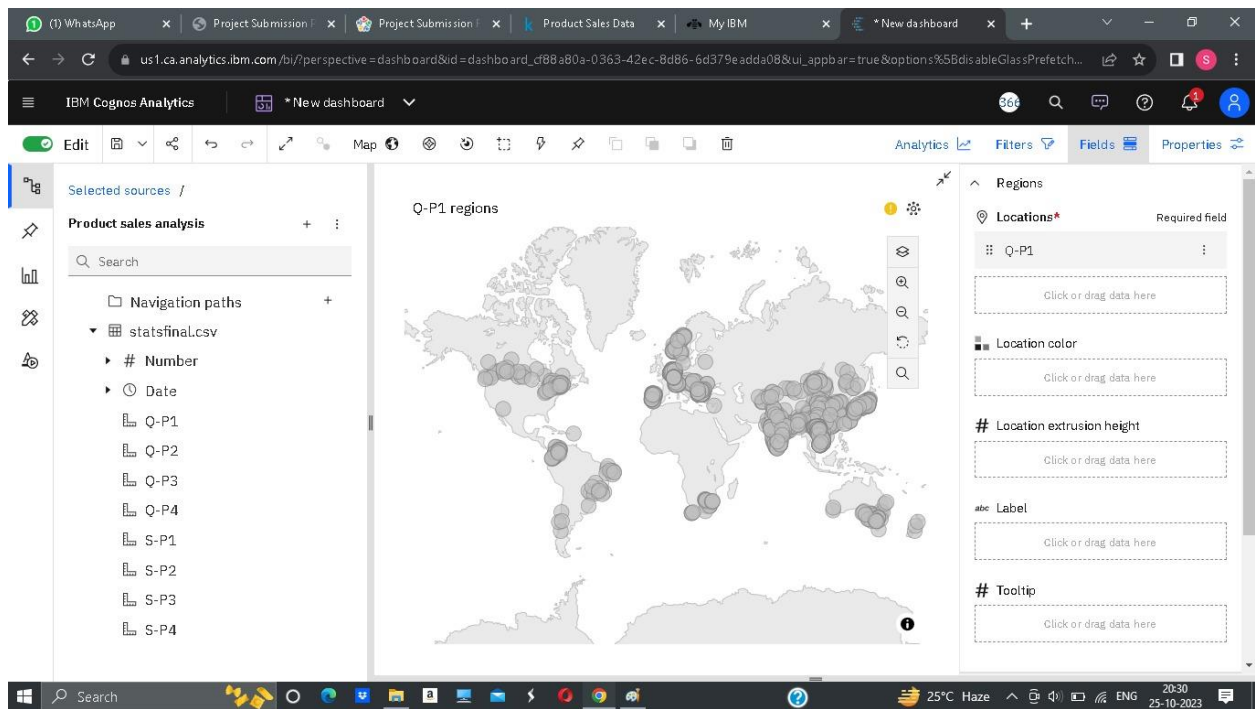
- Identify products with the highest sales and strategize to meet the demand.
- Analyze sales trends to optimize inventory and marketing efforts.
- Understand customer preferences and target specific product categories.
- Use peak sales period information to plan marketing campaigns effectively.

Visualizations using IBM Cognos









Conclusion:

The Product Sales Analysis project in Phase 4 builds upon the foundation established in earlier phases. By integrating IBM Cognos for data visualization and interactive dashboards, it empowers businesses to make data-driven decisions with a focus on sales trends, product performance, and customer behavior. This project helps organizations react to market trends more effectively and boost their sales and revenue through actionable insights.