Shopping Trends Analysis Report

Problem Statement

The objective of this analysis is to evaluate the location-specific performance of Roots by analyzing customer satisfaction and sales growth over the past four seasons. The goal is to identify the highest-performing locations and uncover the factors contributing to their success. Specifically, the study aims to:

1. Identify the location with the highest average customer satisfaction.
2. Determine the location with the highest sales growth and assess the product categories driving this growth.

This analysis is crucial for enhancing service quality and revenue generation by replicating successful strategies across underperforming locations.

Analytical Tools

Two primary tools were used to conduct this analysis:

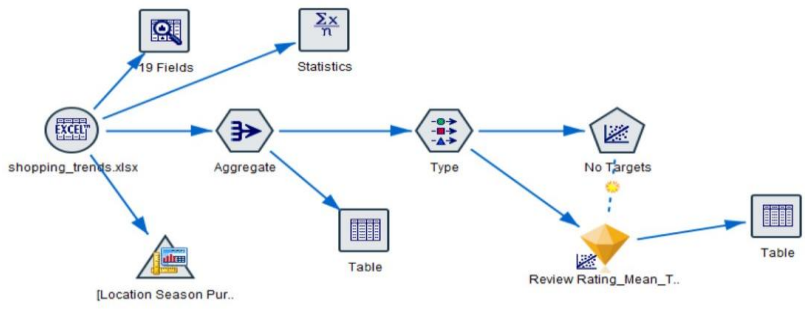
- **SPSS:** Employed to analyze customer satisfaction data by calculating key metrics and visualizing trends.
- **COGNOS:** Utilized for analyzing sales growth, identifying regional trends, and uncovering product-specific insights.

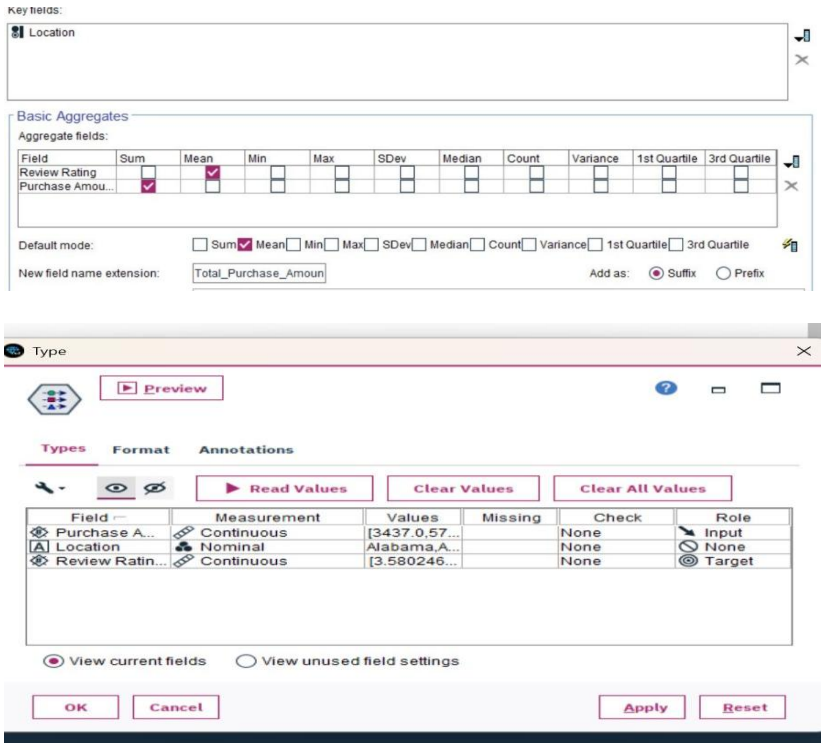
SPSS Analysis

Data Source and Processing

The dataset used for this analysis, "shopping_trends.xlsx," contains 19 fields. The data underwent preprocessing to ensure consistency and meaningful insights. Key steps included:

- **Aggregation:** Data was grouped by location, and key metrics were calculated:
    - **Review Rating Mean:** To assess customer satisfaction.
    - **Purchase Amount Sum:** To measure total sales.





- **Statistical Analysis:** Key metrics like purchase amounts and review ratings were summarized, and visualizations such as heatmaps and tables were created to highlight seasonal and regional trends.

	Location	Review Rating_Mean_...	Purchase Amount (USD)...
1	Kentucky	3.752	4402.000
2	Maine	3.842	4388.000
3	Massachusetts	3.715	4384.000
4	Rhode Island	3.737	3871.000
5	Oregon	3.765	4243.000
6	Wyoming	3.694	4309.000
7	Montana	3.808	5784.000
8	Louisiana	3.773	4848.000
9	West Virginia	3.580	5174.000
10	Missouri	3.747	4691.000
11	Arkansas	3.724	4828.000
12	Hawaii	3.674	3752.000
13	Delaware	3.795	4758.000
14	New Hampshire	3.611	4219.000
15	New York	3.747	5257.000
16	Alabama	3.782	5261.000
17	Mississippi	3.756	4883.000
18	North Caro...	3.814	4742.000
19	California	3.835	5605.000
20	Oklahoma	3.605	4376.000

Purchase Amount (USD)

Statistics

Count	3900
Mean	59.764
Min	20.000
Max	100.000
Range	80.000
Variance	560.998
Standard Deviation	23.685
Standard Error of Mean	0.379

Review Rating

Statistics

Count	3900
Mean	3.750
Min	2.500
Max	5.000
Range	2.500
Variance	0.513
Standard Deviation	0.716
Standard Error of Mean	0.011

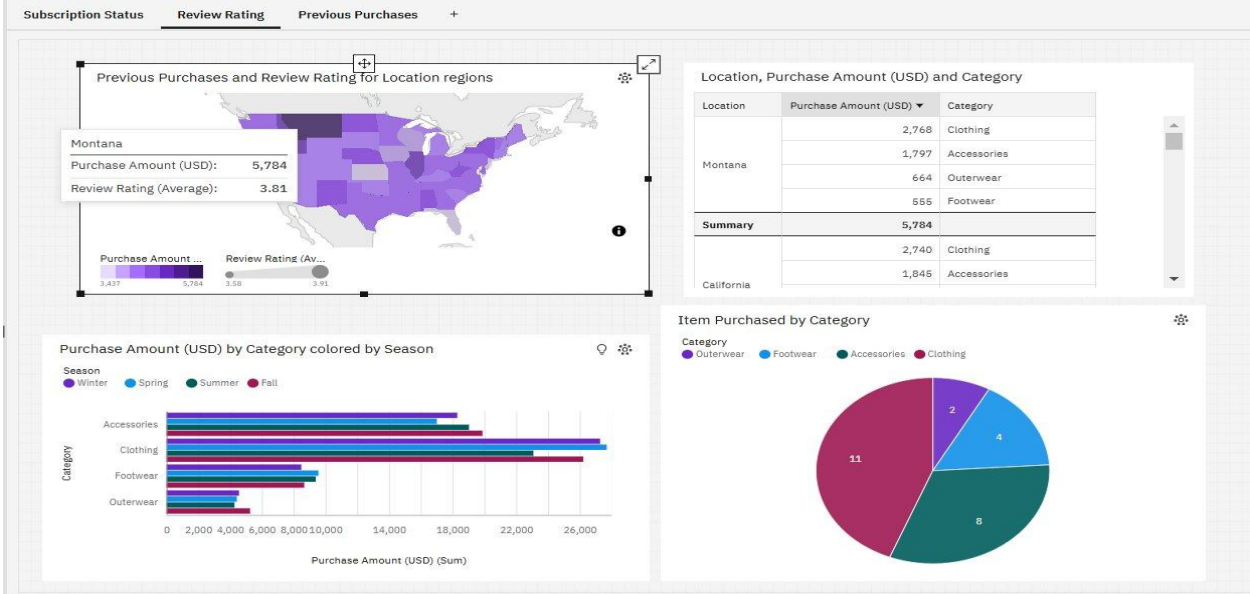
Pearson Correlations

	Purchase Amount (USD)	Review Rating
Purchase Amount (USD)	1.000/Perfect	0.031/Medium
Review Rating	0.031/Medium	1.000/Perfect

Key Insights from SPSS

1. **Customer Satisfaction:**
    - Locations were analyzed for their average customer satisfaction scores over four seasons.
    - Heatmaps revealed significant variability across regions, with certain locations such as California outperforming others in customer satisfaction.
2. **Seasonal Trends:**
    - Purchase amounts varied significantly across seasons. Specific locations showed noticeable peaks during certain periods, indicating opportunities for targeted marketing campaigns.

COGNOS Analysis



Sales Growth and Product Performance

1. **Highest Sales Growth Location:**
    - Cognos identified the location with the highest sales growth, highlighting the product categories driving this success.
2. **Regional Insights:**
    - Sales patterns varied significantly by region, with higher purchase activity in states like Florida and California.
    - The analysis also revealed underperforming regions, pointing to areas where strategic interventions could yield significant improvements.

Correlation Analysis

- **Purchase Amount and Review Ratings:**
    - A very weak correlation (0.031) was observed between purchase amounts and customer satisfaction, suggesting other factors drive sales growth beyond customer satisfaction.

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- **Data Volume:**
    - The analysis was based on 3,900 records, providing robust data for actionable insights.

Recommendations

Based on the insights from SPSS and Cognos, the following strategies are recommended:

1. **Targeted Marketing Campaigns:**
    - Replicate successful practices from high-performing locations by designing location-specific promotions, discounts, or loyalty programs tailored to customer preferences in low-sales regions.
2. **Seasonal Promotions:**
    - Address underperforming seasons with targeted discounts, exclusive product launches, or themed events to drive engagement and sales.
3. **Customer Feedback and Engagement:**
    - Collect direct feedback from customers in underperforming locations to identify specific issues and address them effectively.
    - Enhance customer service through local staff training to ensure high-quality interactions.
4. **Localized Product Offerings:**
    - Introduce products or services catering to the unique needs and cultural preferences of underperforming regions based on customer preferences.

5. **Enhance Online Presence:**
    - Strengthen digital marketing efforts in low-performing areas through targeted ads, regional social media campaigns, and collaborations with local influencers.

Conclusion

This analysis highlights the importance of leveraging data analytics to identify success factors and address performance gaps across locations. By implementing the recommendations outlined above, Roots can enhance customer satisfaction, optimize sales growth, and replicate the success of top-performing locations across its network.