



Insights from the "Shipping Costs by Product" Visualization

This visualization offers several key insights based on the comparison of **Shipping Baseline** and **Shipping What-If** values across various products. Here's a breakdown of potential observations and actionable insights:

1. High Variance in Shipping Costs

- **Observation:** Some products, such as "Taste of the Wild" and "Memory Foam Pet Bed," have significantly higher **What-If Shipping Costs** compared to their **Baseline Shipping Costs**.
- **Insight:** These products might be subject to increased transportation costs due to their size, weight, or packaging inefficiencies. The higher projected costs could indicate potential challenges in shipping optimization.

2. Minimal Differences for Some Products

- **Observation:** For products like "Pet Hair Remover" and "Rechargeable Pet Camera," the **Baseline** and **What-If** costs are very close or identical.
- **Insight:** These products may already have efficient shipping strategies in place, such as optimized packaging or proximity to shipping hubs.

3. Outliers and Cost Drivers

- **Observation:** Products with the highest shipping costs in both **Baseline** and **What-If** scenarios are likely larger or heavier items (e.g., "Litter Slide Multi-Cat Litter").
- **Insight:** Outliers can help identify cost drivers. For example, heavy products or bulky items might require special handling or incur additional shipping fees.

4. Cost Increase Patterns

- **Observation:** A general upward trend in **What-If Shipping Costs** for most products suggests that the proposed changes (e.g., increased fuel prices, route adjustments, or demand changes) may broadly impact shipping costs.
- **Insight:** This trend indicates the need for proactive cost-control measures, such as renegotiating shipping contracts or finding alternative carriers.

5. Top Contributing Products

- **Observation:** Products with the highest shipping costs (both baseline and what-if) contribute significantly to overall shipping expenditures.
- **Insight:** These items should be prioritized for cost-reduction strategies, such as exploring cheaper shipping methods, optimizing packaging, or shifting fulfilment centres.

6. Opportunity for Pricing Adjustments

- **Observation:** Products with high shipping costs relative to their expected profit margins might require pricing adjustments to maintain profitability.
- **Insight:** Adjusting product prices or offering incentives for bulk orders could offset high shipping costs for these items.

Recommendations

1. Optimize Shipping for Outliers:

- Focus on large or heavy products to reduce shipping costs. Consider options like alternative packaging or bulk shipping discounts.

2. Analyse Underlying Cost Factors:

- Investigate why specific products (e.g., "Taste of the Wild") show significant increases in the "What-If" scenario. Factors like changes in supplier location or shipping routes may be contributing.

3. Review Shipping Policy:

- Consider passing a portion of increased shipping costs to customers for certain products, especially for those with consistently high shipping expenses.

4. Evaluate Fulfilment Strategies:

- Use this analysis to inform decisions about warehousing and distribution. Position inventory closer to high-demand regions to reduce costs.

5. Scenario Planning:

- Use the "What-If" data as a foundation for forecasting shipping costs under different scenarios (e.g., fuel price changes or carrier rate adjustments) to prepare for future cost increases.