### **Residual Analysis for Envelopes**

The residual values for the envelopes category provide insights into sales performance trends and the factors influencing customer demand. Here's a summary of the findings:

### **Key Observations:**

## 1. Variability in Residuals:

 Throughout 2015 and 2016, the residuals fluctuate significantly, showcasing both positive and negative sales performance. This indicates a dynamic market for envelopes, potentially influenced by various external factors.

#### 2. Positive Residuals:

 November 2015 (312.81) and December 2016 (254.13) show strong positive residuals, suggesting notable increases in sales during these months.
Analyzing the factors contributing to this increase could inform successful sales strategies in the future.

## 3. Negative Residuals:

Months with the most substantial negative residuals include June 2016 (-315.87), February 2018 (-172.55), and January 2016 (-155.85). Investigating these periods for potential causes, such as market competition or decreased demand, is crucial to address sales performance.

#### **Actionable Insights:**

#### 1. Focus on High-Performing Months:

Examine the marketing strategies or promotions used during November
2015 and December 2016 to replicate successful tactics in future campaigns.

# 2. Address Negative Trends:

 Investigate the causes of negative residuals in key months, such as June 2016, to understand what might have deterred sales. This could involve looking into competitive actions, economic factors, or internal pricing strategies.

# 3. Customer Insights:

 Understanding customer needs and preferences could be essential to improving sales. Conducting surveys or market research could uncover valuable insights that help tailor products and marketing efforts.

# 4. Seasonal Adjustments:

 Given the variability, consider implementing seasonal promotions or tailored inventory strategies that align with expected demand fluctuations for envelopes.

# **Next Steps**

- Deep dive into the months with significant negative residuals to develop corrective actions aimed at improving sales performance.
- Analyze successful months for strategies that led to increased sales, and implement findings in upcoming marketing campaigns.