

## **Email Conversation**

**Subject:** Data Quality Observations and Insights from Recent Analysis

Hi [Team/Product/Business Leader],

I've completed an initial analysis of the provided datasets (Products, Transactions, and Users). Below is a summary of the findings, insights, and a few questions that need clarification to proceed effectively:

### **Key Data Quality Issues**

1. **Incomplete Date Coverage:**
  - o All transactions in the `PURCHASE_DATE` column are from 2024. There is no data from prior or subsequent years, which prevents us from calculating year-over-year (YoY) growth.
  - o Outstanding Question: Does Fetch have data for other years, or was this a limitation of the dataset provided?
2. **Missing or Null Data:**
  - o Some columns, like `FINAL_SALE` in transactions, contain null or invalid entries that could impact the accuracy of revenue calculations.
  - o Outstanding Question: Can we confirm if these null values are expected or if data needs to be cleaned further?

### **Interesting Trend in the Data**

- **Leading Brand in Dips & Salsa:**
  - o The analysis reveals that *Marketside* is the top-selling brand in the "Dips & Salsa" category, with over \$165,000 in sales. This indicates strong customer preference for this brand in this category, which could guide future partnership or promotion strategies.

### **Request for Action**

To continue with deeper analysis and provide more actionable insights:

1. **Additional Data Needed:**
  - o Could we get datasets spanning multiple years for transactions to better analyze Fetch's growth over time?
  - o Clarification on null values in the `FINAL_SALE` column. Should there be excluded or imputed with average values?
2. **Clarification on Business Goals:**
  - o Are there specific categories, brands, or customer segments you'd like us to focus on for future insights?

Please let me know how you'd like to proceed or if a follow-up meeting would be helpful to discuss these findings in detail.

**Best regards,  
Ranganayaki Chennuri**