Revenue Management leadership is interested in developing a new discount program to help drive profitable case volume growth within our customers and has asked for your help.

Using the dataset provided, please perform the following tasks:

1. Exploratory analysis
   1. Trend charts, distributions, plots by segments, etc.
2. Identify potential opportunities
   1. Specific groupings of items or customers where a discount may be effective at incentivizing growth
3. Proposed follow-up steps and analysis
   1. What additional analysis or datapoints would you suggest investigating to arrive at a more definitive conclusion?
4. Summarize your findings in a presentation to your managers

Please provide all materials used in your work (ex: Excel files, code, visualizations, PowerPoint, etc.)

**Data Dictionary**

* **Date**
  + The date that the transaction occurred
* **Invoice No.**
  + The unique ID assigned to the transaction
  + Note that a single invoice can contain multiple items (“lines”)
* **Invoice Line No.**
  + The ID number assigned to an item within an invoice
* **Fiscal Week No.**
  + Date key for fiscal week
* **Customer Group ID**
  + Unique ID assigned to a group of customers who require pricing consistency and for pricing purposes are treated as a single entity
  + An example of this would be a collection of customers who are under joint ownership
* **Customer ID**
  + Unique ID assigned to a specific customer
* **Business Type**
  + Classifies customers based on their cuisine type/style of business
* **Item ID**
  + Unique ID for a specific item
* **Item Description**
* **Sysco Brand Flag**
  + Indicates if the item is a propriety Sysco product
* **Item Category and Sub-Category**
  + Item taxonomy to group similar items together
* **Price**
  + Sell price per unit for the item
* **Cost**
  + Cost per unit for the item
* **Units**
  + Number of units sold in the transaction
* **Total Sales**
  + Price multiplied by units
* **Total Cost**
  + Cost multiplied by units