SAS VIYA Exercise 12

Clustering

(7/22/2020)

**Sources**

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SAS® Visual Analytics. Release 8.5

SAS® Viya® release V.03.05

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# Use Case - Clustering

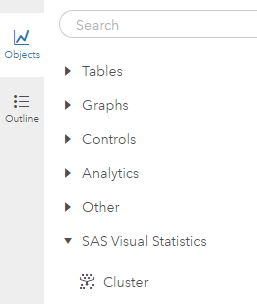
Razorback Stores is a local department store serving a metropolitan area. As a department store, they offer a wide variety of items and services and track sales through a point of sale system. Over the past several months, Razorback Stores performed a marketing campaign designed to promote and incentivize a loyalty program.

Razorback Stores would like to know if there are specific groups of customers that they should incentivize to shop at their stores.

## Step 0: Import Data

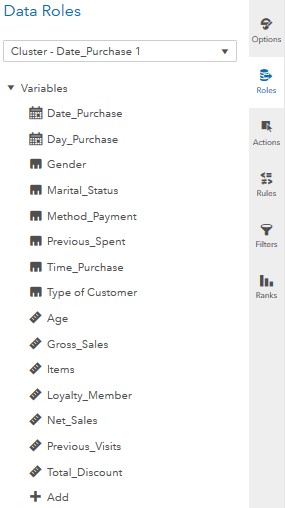
Following the guide of importing data and import your chosen dataset. See **Viya 02a – Importing data** for specific steps. In this tutorial we will be using Razorbacks Stores dataset.

## Step 1: Cluster Object



1. On the left-pane, click **Objects**
2. Scroll down to find **Cluster**
3. Drag and drop the cluster visual into the center of the screen

## Step 2: Roles



1. On the right-pane, click on **Roles** (make sure you have clicked on the working space before doing this)

A new window named **Data Roles** will appear for you to add variables.

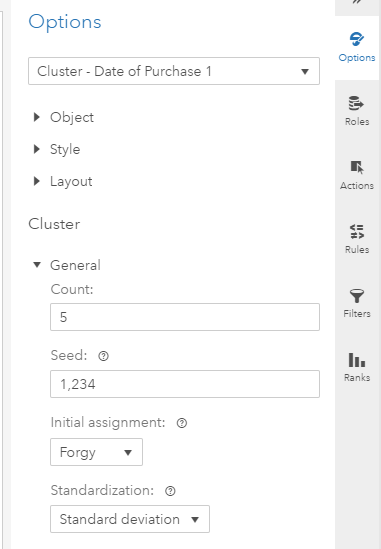
1. Click on **+ Add** under **Variables**

This is going to be all the variables that you wish to include in your cluster analysis.

1. Add **Date\_Purchase, Day\_Purchase, Gender, Marital\_Status, Method\_Payment, Previous\_Spent, Time\_Purchase, Type of customer, Age, Gross\_Sales, Items, Loyalty\_Member, Net\_Sales, Previous\_Visits,** and **Total\_Discount**.

## Step 3: Options

Now that you have variables, the cluster analysis will begin to build.



1. On the right-pane, click on **Options**

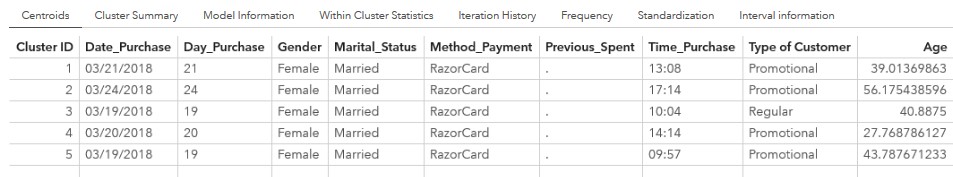
From here, there are various options that you can manipulate in order to achieve the desired results.

## Step 4: Variables



1. Click on the maximize button

From here, under the centroids tab, you can view variables that make up each cluster.



Congratulations, you have created a clustering analysis in VIYA!