SAS VIYA Exercise 08

Correlation Matrix

(7/22/2020)

**Sources**

Steve Nolan, Ron Freeze, Elizabeth Keiffer, Michael Gibbs, Matias Delay, Jorge Moreda

Enterprise Systems, Sam M. Walton College of Business, University of Arkansas, Fayetteville

SAS® Visual Analytics. Release 8.5

SAS® Viya® release V.03.05

Copyright © 2018 *For educational uses only - adapted from sources with permission. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written permission from the author/presenter.*

# Use Case – Correlation Matrix

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.

For this case, management is interested in looking at the **relationship between** several key variables.

## Step 0: Import Data

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

## Step 1: Select Correlation Matrix

1. To begin, click on the **Objects** icon located on the left-hand pane
2. Scroll down and look for **Correlation Matrix** under **Graphs**

Once found,

1. Drag and drop it into our workspace in the middle pane

## Step 2: Add Measures

Once we have our matrix in our workspace, we can select our data roles on the right-hand pane. You can select 2 or you can select many measures to determine the correlation:

1. Select **Roles** in the right-pane
2. Under **Measures** click on **+ Add**
3. Select **Customer Record** and keeping “shift” pressed, click on **Total Discount** (this will select all variables without you having to click on every single one of them)
4. Click **Ok**


## Step 3: Visualize

Once you have selected your measures, a matrix will display showing the correlations and a color scheme showing weak correlations to strong correlations.

Congratulations, you have created a correlation matrix in VIYA!