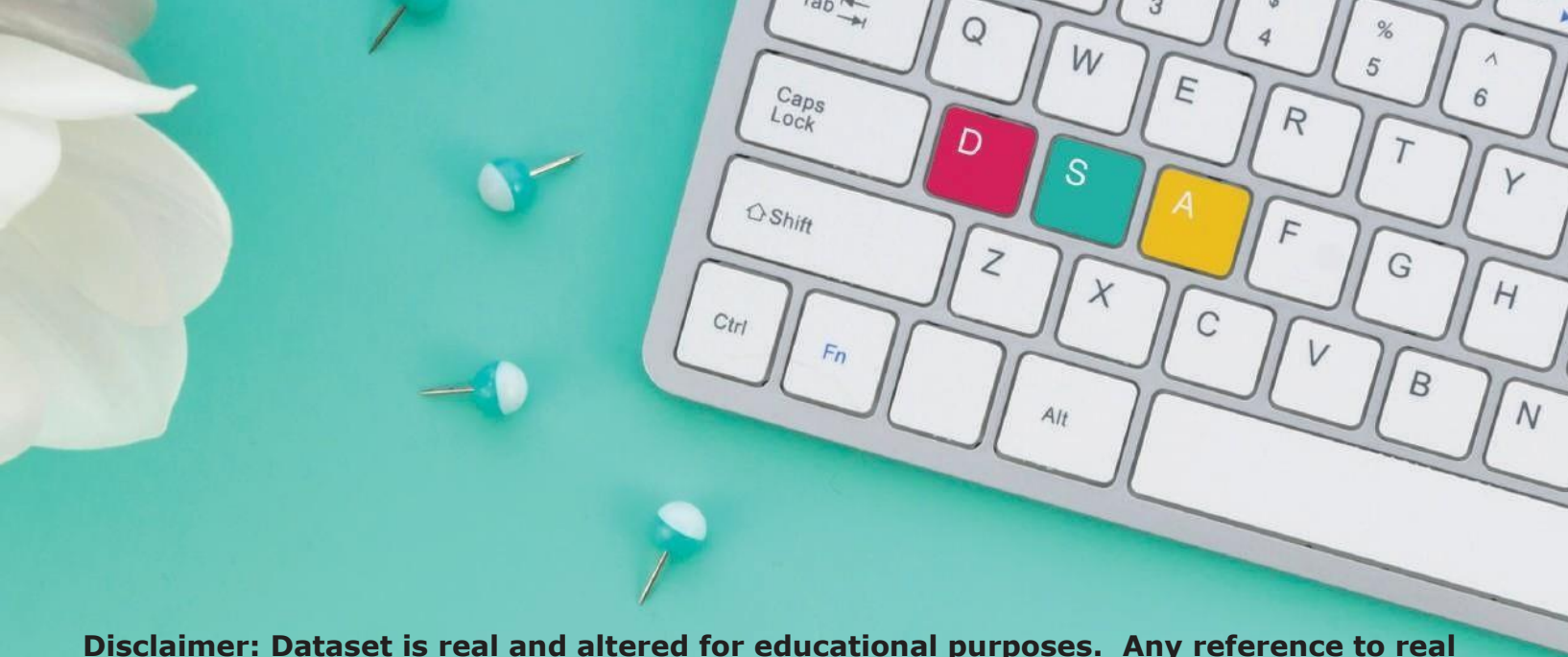


# **SPSS Modeler Case Study Logistics WEEK 7**



**Data Science  
Academy**

**CASE STUDY**



**Disclaimer: Dataset is real and altered for educational purposes. Any reference to real facts or real events is purely coincidental.**

**Answer following questions:**

1. In "**Customer segmentation (Logistics).xlsx**" Calculate percentage of customer spending for each trucking services. Derive new variable for each ratio.
2. Build Segmentation model based on derived ratios and compare service baskets of each customer segment.
3. Find optimal cluster size using Twostep algorithm and Auto Cluster.
4. Open customer transactions dataset, enable cache and export dataset to csv file (In order to use Azerbaijan alphabet, choose UTF-8 as encoding in edit settings of Flat File node. Enable "Generate import node for this data").
5. Check storage types of variables on *Data* tab of *Generated import node*. Override **Order Date** as Timestamp variable.
6. Create new date column includes only Month, Day and Year from **Order Date** variable. \*
7. Build Sequence model that shows pattern of customer's behavior. Which services have associations?
8. Export rules from modeling nugget to html format.
9. Score data on new transactions dataset and make recommendations to customers based on their past purchases.
10. Export your recommendation output into csv file format.
11. Add comment to each node and make stream understandable for other users.
12. Create CRISP-DM report to demonstrate data preparation, modeling and deployment steps. Preview each step and add preview outputs into project sections.

\* **Hint:** use `datetime_date` function, don't forget to change date format to MM-DD-YYYY. 'File>Stream Properties>Options>Date/Time/Date format: MM-DD-YYYY'.