

1. *Is the project aims and background clear and easy to understand? Provide reasons why you found the project aims clear or provide suggestions to improve the clarity.*

We found that the purpose of the project was not fully disclosed. The author states that:

“The goal of this project is to segment a population of customers into categories based on what promotion they respond best to and identify the ideal promotion for each customer.”

The explained purpose doesn't align with the purpose of the project. They could have better categorised based on spending behaviour, instead of doing it based on the offers they availed.

We felt not all offers for e.g newsletter were necessary to take into consideration while clustering.

2. *Are the derived variables clear and well described? Would you be able to create the described variables based on the information provided? Do you think the variables described would be helpful in distinguishing between customers? If you have answered no to these questions, provide reasons why.*

The list of variables is well described and makes sense and it would be absolutely possible to derive these variables from the provided data set. All of the provided variables are strongly correlated with customers spending behaviour and can therefore be helpful for the customers segmentation model. However, the “Transaction frequency” and “Total number of Transactions” are strongly correlated, hence there was no point in using both the variables for clustering.

We are using unsupervised Machine Learning methods and hence pre- categorising the customers in 11 segments in the beginning of the project analysis may result in biased clustering.

We felt the statement where the choices of clustering method in page 5 is mentioned doesn't make sense, as PCA is not a clustering method. Rather, PCA is a preparation step for any kind of clustering. Statement- **“PCA would enable the researchers to determine if a specific customer fits to an offer.”** is not very clear for us.

3. *If the submission includes plots and tables (which it should), provide feedback on the quality of tables and figures. Are they easy to read and understand? Explain why, or provide suggestions to improve the quality of plots and tables. Is there a good balance between plots and tables in relation to the written content? For example, do plots or tables appear that are not adequately discussed in the main text?*

The submission includes a well-balanced combination of graphs and written text. All graphs have a short and informative description that is easy to read. The author also highlighted the outliers that were found in the dataset, visualised distribution of the main variables.