# Background

Adventus would like to have all Recruiters use our Course Search functionality to browse when counselling a student, however we know that some recruiters already have the course in mind for their student and they are using our platform more like an application processing tool. This information comes from interviews with individual recruiters as well as experience of the team and their prior knowledge.

Currently, we do not have any way to identify each of these two personas in the platform.

# Aim

The aim of this work is to create a definition for personas as a beginning for use in future analytical work, research and Product Design decisions. The definition should be based on quantitative data to allow programmatic segmentation of the users.

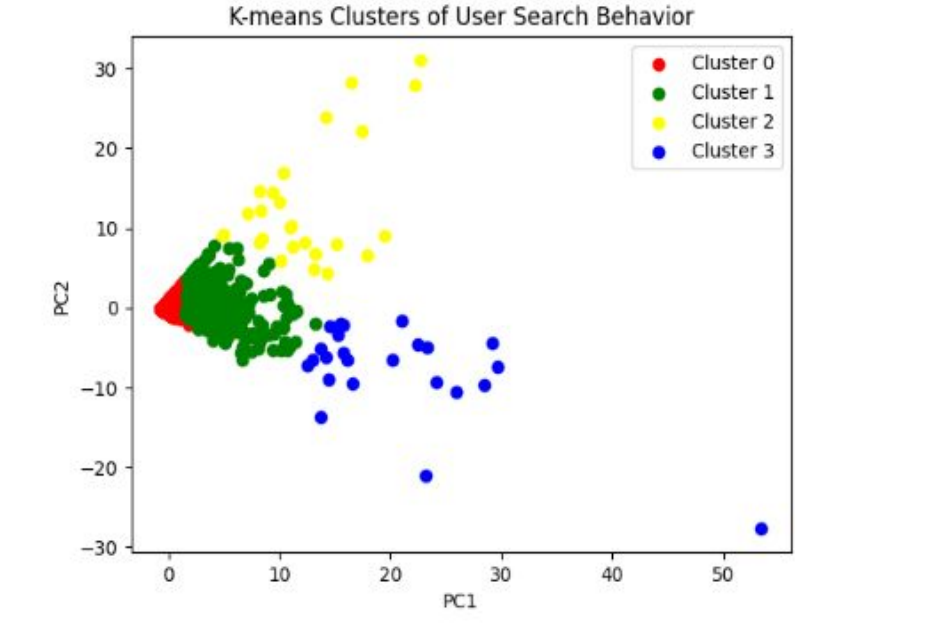
# Approach

- The approach to understand Recruiter persona uses combination of data points gathered from multiple data sources.
- Primarily it includes behavioral data from the Recruiter portal captured through segment events.
- Data starting from Jan 2023 was considered for the analysis till Feb 2024.
- Following were the features identified:
    - **Student Count:** Count of students handled by the recruiter
    - **Course Search:** Count of unique course searches performed by the recruiter
    - **Studentless Searches:** Count of unique course searches performed without student.
    - **Course Saved:** Count of courses saved by recruiter
    - **Course Shortlisted:** Count of courses shortlisted by recruiter
    - **Student Placed:** Count of orders successfully completed by the recruiter i.e. orders reached census stage.

# Observations

- Using the above mentioned features recruiter clusters were created using K-means clustering algorithm.
- Following are the 4 clusters identified:
  - Underperforming (Cluster 0)
  - Explorers (Cluster 1)
  - Rising Stars (Cluster 2)
  - Pro (Cluster 3)
- Following are cluster definitions:

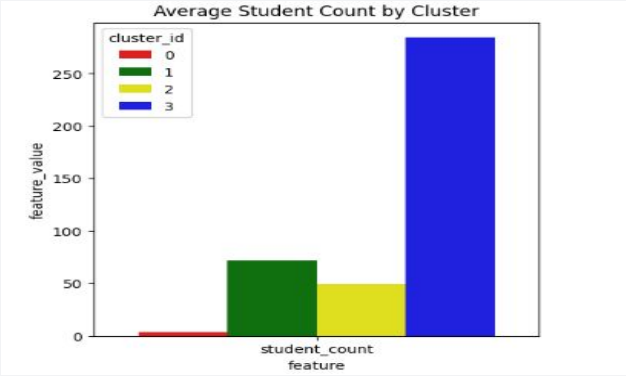
| Cluster | Student Count | Student Search | Student Placed |
|---|---|---|---|
| 0 | low | low | low |
| 1 | low | high | average |
| 2 | low | low | average |
| 3 | high | low | high |

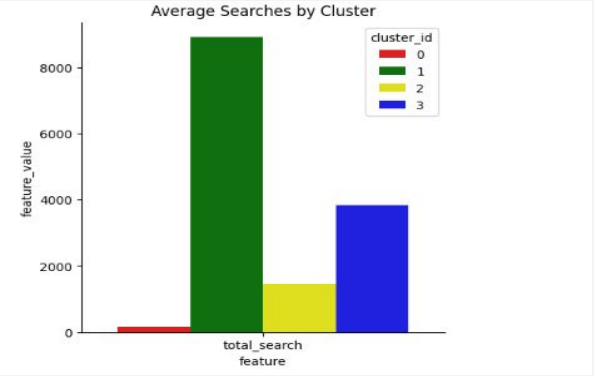


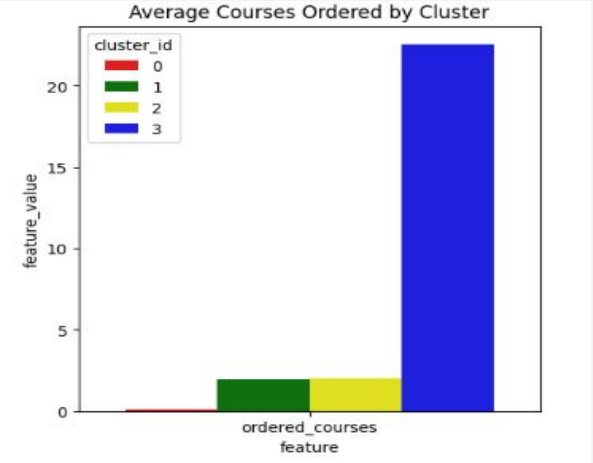
# Observations

We can clearly observe following key insights while comparing different clusters:

- Underperforming (Cluster 0) has low student count, low course searches and eventually low conversion rates.
- Explorers (Cluster 1) has slightly higher student count as compared to Rising star (Cluster 2) but has the highest course searches.
- Rising Stars (Cluster 2) has low student count, low course searches but equivalent conversion rate as of Explorers (Cluster 1).
- Cluster Pro (3) has the highest student count, low course search count and highest conversion rate.

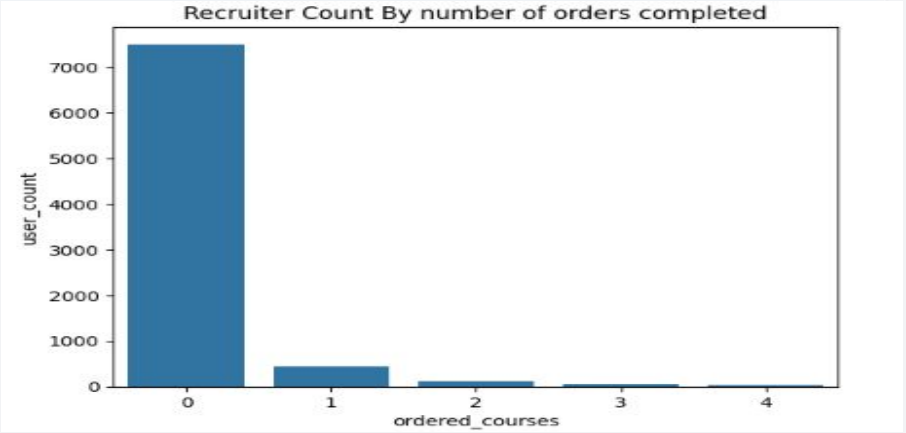


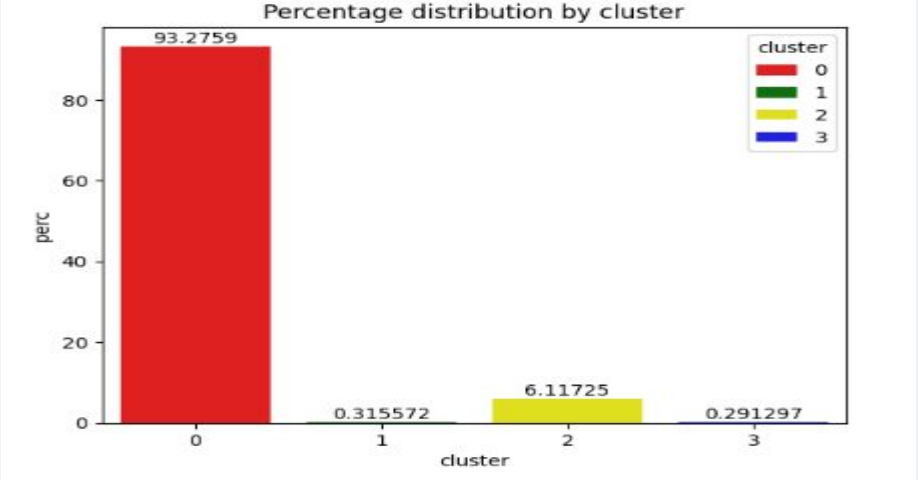



# Conclusion

- As observed majority of the recruiters aren't able to successfully convert orders i.e. order placed never reach census stage.
- Thus majority of recruiters (93%) fall under 'Underperforming' cluster as most recruiters have low student volume and low conversion rates.
- Less than 0.3% of recruiters are high performing and fall under 'Pro' cluster. The overall conversion rate for this cluster is about 24%.



# Next Steps

- We have a good chunk of recruiters (6%) under the ‘Rising Star’ cluster. If these recruiters are supported with student volume there are high chances that these will transition into ‘Pro’ cluster.

- Cluster Pro and Rising Star can be further analyzed to understand their
  - Demographics
  - Type of  courses applied
  - Destination country

- Using the clustering we can priorities application processing for higher conversion rate recruiters and de-priorities low performing clusters this can help us save cost and time.

# Appendix

- Python Script: https://colab.research.google.com/drive/1TJcvY8wCdu_3kZbruacJfk8fvcr0JCx_?usp=sharing