

Problem Set:

You have been approached by a leading ed-tech platform to seek actionable business insights. Before they hire you as a consultant, they have shared a sample data set with you and has given you a problem statement to test your approach and skills. This sample data set is of their free learners who became leads for a paid course through the platform. (Cost of Paid course = INR 100,000). Some of these learners also paid for the said course.

What this data set contains:

1. User name
2. Their Age
3. City they are in
4. Their Education background
5. Domain of their work
6. Channel from which they were acquired on to the platform
7. Info about whether they have paid for a paid course

More about the channel: There are many ways through which users are acquired on the platform, for eg, organic, from social media influencers, from paid ads, etc. These channels are named as Channel 1, Channel 2 and so on for simplicity. There is a cost attached to each and every channel of acquisition.

Channel 1 - INR 90 per user

Channel 2 - INR 0 per user

Channel 3 - INR 250 per user

Channel 4 - INR 350 per user

Channel 5 - INR 180 per user

The said Ed tech platform is looking to increase profitability and reduce their cost of acquisition. This can be achieved when

1. They know more about the profile of users that are most likely to pay
2. They are able to understand and discontinue the channels that have not been profitable

You are required to

- 1. Analyze the user profiles and come up with the most likely profile that is most likely to pay for a paid course**
- 2. Analyze the channels from which the users were acquired and give recommendations about what channels should be continued and what channels should be discontinued.**

Guidelines:

1. Perform Exploratory Data Analysis or any other relevant technique on the data set to find the solution. Smart approach will be appreciated. Avoid unnecessary steps.
2. Give visualizations in the form of (eg., tables, graphs, charts, heat maps, if relevant)

3. Explain each and every step
4. Make suitable assumptions wherever necessary. Please give the rationale behind such assumptions
5. Most important: Give your answer in two stages:
 - a. The most probable user profile that is likely to pay
 - b. Recommendations about what channels of acquisition should be retained and what should be discontinued.