

Part1:

Insights:

1. From the second line chart, I count the number of users records by month and find in August, there are only 13 records in total. This may affect the third chart: average score value for subjective metrics and the way to predict the whole trend.
2. In the Second dashboard, the above two bar charts illustrate user engagement. The orange graph shows the retention count: Retention is a measure of how many users remained customers over a period of time such as five days, eight weeks, or one year. In this chart, the X axis is the bin of length of day using it, and the Y axis is the number of users. Since the data set only provides customers who are using this for more than 230 days, we can see that most of the users are sticky to this app.

Another measure of user engagement is the number of records, as we can see from the green frequency bar chart, X axis is the bin of # of records, and the Y axis is the number of users. I group uses whose # records larger than 100 to 100.

Based on the results, we could take actions to improve user loyalty. We could email users who do not engage a lot in this app and encourage them to use it.

Assumption: Whether users' subjective feelings are getting better after using NEUROFLOW app?

Since the total records in August cannot affect the overall trend, therefore, I eliminate it when creating the average score trend chart.

From the third chart, we can see that for all the four subjective metrics, the total trend of the scores are increasing. The change of anticipatory stress is more significant than other 3 metrics. Which means that users did improve their life attitude and sleep after using the NEUROFLO app.

Other important information should be collect:

1. We could collect their lifestyle data if possible. As we already collected their subjective score for mood, sleep and stress, we should also collect data which could figure out the reason for change of scores.
For example: metrics like how many calories of food you eat today, how long is the exercise today and score your relationship with your family today.
Then we could use this data to calculate the correlations to figure out the reason why their score is getting better. Therefore, you could help users maintain health.

2. You can also collect demographic data like age, gender, education and job. By classifying people into different groups, we could do more specific analysis for each group.