

DATA ANALYSIS WRITE UP – UMBA

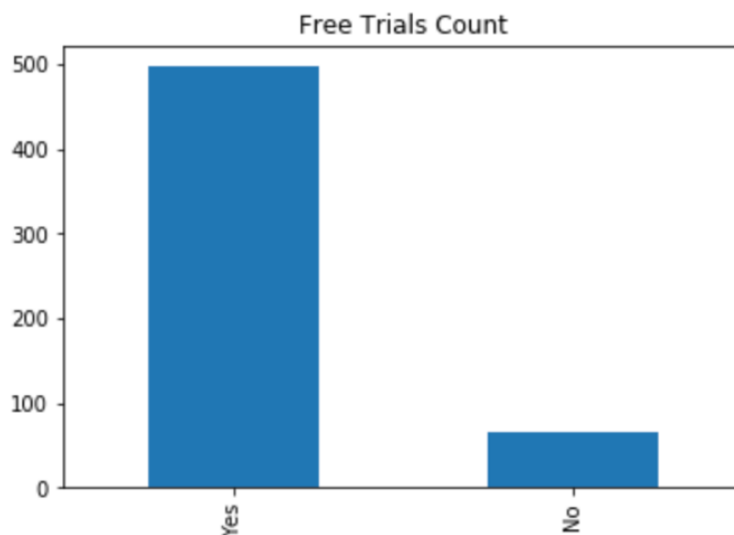
PRODUCT ANALYSIS

This write-up complements the data analysis code completed with Python in Jupyter Notebook. All the graphs included in the analysis have been generated in Python. Please refer to the attached .ipynb file to follow the analysis.

In order to identify the distinct characteristics observable for users with a higher level of engagement, I have sampled the data to include only users with an above-average weekly logins (6.06 weekly logins). After completing a brief exploratory data analysis of the variables in the observed sample, I selected the variables that appropriately represented the observed population:

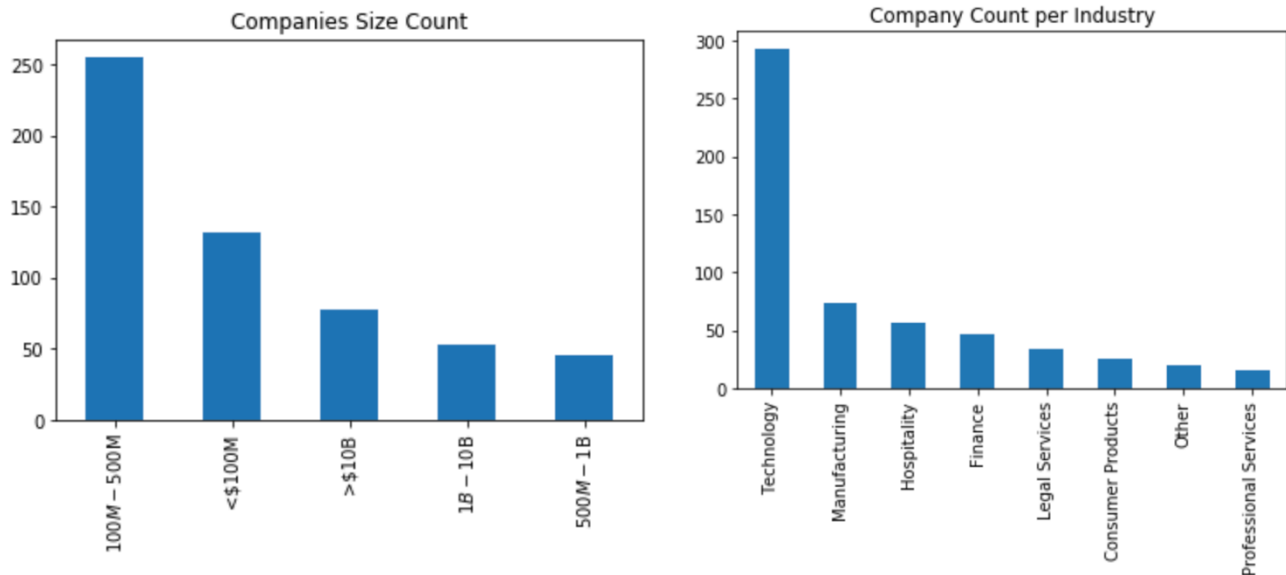
- Insight 1:

Almost all users in the sampled group have had a free trial as we can observe on the following graph. This suggests that users take advantage of the free trial to use with the platform, which allow them to get familiar with the product. After using the platform many times, users unlock the benefits or full potential that comes with using the platform which translates in a higher level of engagement. In this matter, it is suggested that the company always offers a free trial to their users to ensure a sustained level of engagement after conversion.



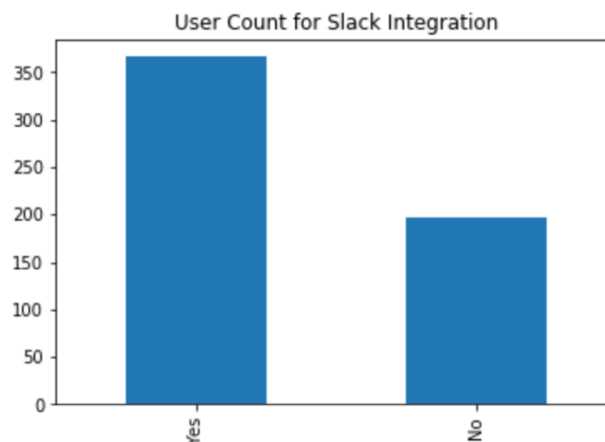
○ Insight 2:

Companies for which size is between \$100M to \$500M tend to have a higher level of engagement than smaller companies (< \$100M) or larger companies (\$1B to \$10B). In addition, most of the users' company appear to be in the technology industry. The graph on the left allows us to capture that companies inferior to 500M makes up more of the user group and that users in larger companies make up a smaller part. Similarly, the graph on the right reveals a peak in the technology industry. Therefore, we suggest the company to expand their outreach and optimize operations for users in companies with similar size in the technology industry.



○ Insight 3:

Furthermore, a higher number of users seem to use the slack integration along with the provided platform as we can see on the following bar plot. This suggests that the company might want to offer a customized package with slack integration to potential future users when recommending their platform.



○ Insight 4:

Finally, the average monthly recurring revenue per user in the sampled data is \$201.33. However, the standard deviation of \$355.64 indicates that there is a lot of variation in the data which means that users with a high-level engagement generate a variety of revenue level. In addition, the median for sale touches to close is 10, which can give an estimate to the company for how many sales touches are needed in order to create a sustained high level of engagement for their users in the future.

	User MRR	Weekly Logins	Sales Touches to Close
count	563.00	563.00	563.00
mean	201.33	10.68	9.99
std	355.64	2.88	3.83
min	39.00	7.00	4.00
25%	39.00	8.00	7.00
50%	39.00	10.00	10.00
75%	169.00	13.00	13.00
max	1299.00	17.00	16.00

In conclusion, this analysis allows us to draw a profile of a typical user that generate higher level of engagement for the company. It is suggested that company optimizes the platform for users working in the technology industry and with a size of less than \$500M. However, please note that larger sized companies also represent an important part of users with above-average level of engagement, thus they should be taken into consideration when targeting leads. In addition, the company could improve the customer journey by making sure to offer free trials to all of its users, offer customized bundles with the slack integration, and more customer support prior to closing a sale.

The next step to deepen this analysis would be to include the group with lesser level of user engagement and look for correlation in the data. The goal of this follow-up analysis would be to identify the factors driving user engagement. In this, the company could reveal if user engagement correlates with revenue per users and consequently indicate if efforts to increase user engagement are financially justified.