

Framing a Machine Learning Problem:

① Business problem to ML Problem:

problem: How to increase the revenue of netflix?

A probable solution for this can be reducing churn rate.

Churn Rate: How many active users are leaving on monthly/yearly basis?

Suppose • churn rate of netflix is 4%.

So our Target has to be reducing churn rate.

Target: Reduce customer Churn Rate.

Find

② Type of Problem:

- 1) Find/identify the ~~prob~~ customers who ^{may} leave the platform
- 2) Means you have to find if a customer will leave platform or not.
- 3) For this, it becomes a classification problem.
- 4) Also it can be a Regression problem where you want to know about the probability of a person leaving the platform.

③ Check any current solution exists or not:

- If exist, then find what factors it has used to ~~prob~~ reduce churn rate
- What flaws it has?
- What improvement needed?
- You can also start working on that existing model to improve accuracy

4. Gathering Data:

- Take the data which will be valuable to measure churn rate
 - Watchtime
 - Search video but didn't find
 - Content left in the middle
 - Did not click on recommendations
 - Order of recommendations

A Data engineer will provide this data as a DW (Data Warehouse)

5. Metrics to Measure:

- You have to check whether your work that you are doing is close enough with the actual churn rate.

6. Online Or Batch Learning:

- For netflix, A better approach would be online learning

7. Check Assumptions:

- You have to check the features you think you need is actually available or not
- ~~As~~ The factors you have decided to include that should be generalized. Should not be a biased case (make the model bias)
- Many more