User Churn Project | Device Dependency: Hypothesis Testing

OVERVIEW

A first modle for prediction of churning was made base on the logistic regression algorithm

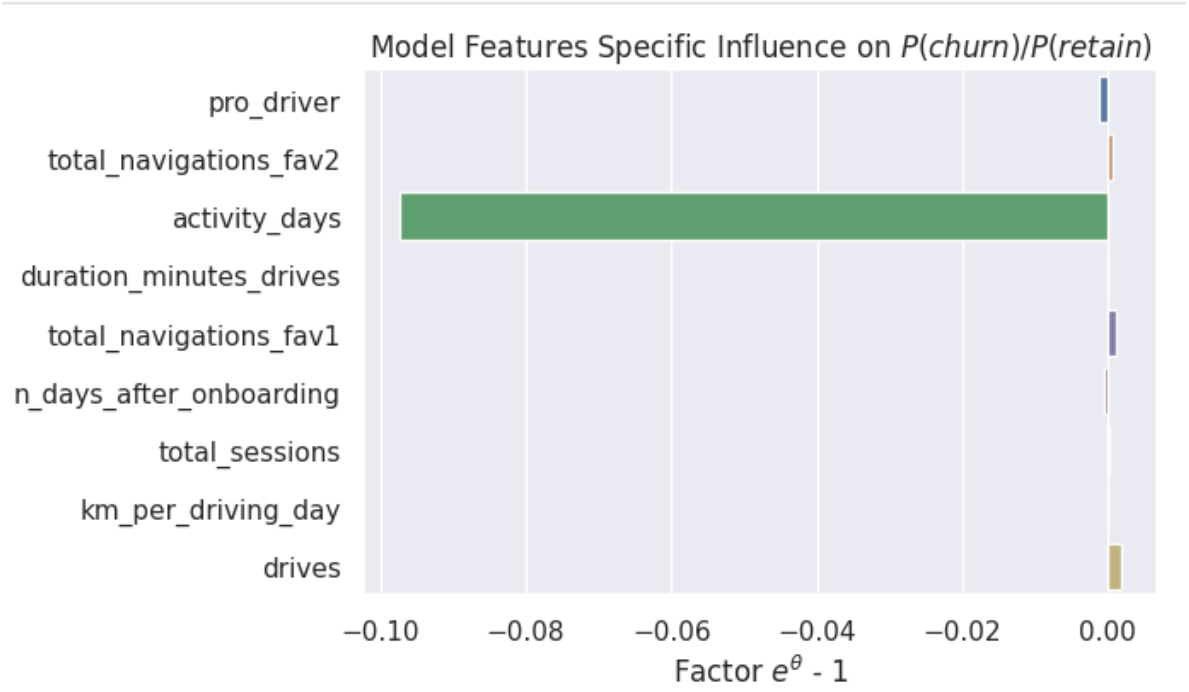
Methodology

The model was constructed with selected variables according to colinearity criteria. The model was trained witn 70/30 train/test-sets. The test group included 3988 users out of which 3306 were retained and 682 lost as customers.

	score_counts
TP	55
TN	3266
FP	40
FN	627
Total	3988

Model observations

- **It brings poor churn-prediction power: Only 55 matches out of 682**
- It is good at predicting retention: 3266 out of 3306
- Reducing the number of features just increases the bias (poorer results)
- Most influential feature is *activity_days*. About -10% change rate in odds per activity day. Followed by *drives* and *pro_driver*
- User device was already discarded as relevant feature.



Next Steps

- Try other models than logistic regression
- Get more data:
  - Long term data
  - Measure other factors