PROJECT BACKGROUND:

PropertyScout.io is an emerging startup in the rapidly growing real estate data domain. Since its establishment in 2019, the company has been operating under a business-to-business (B2B) model, catering to diverse industries by facilitating access to mortgage documents, liens, deeds, and comprehensive property details. However, the firm faces challenges in customer retention, resulting in a high churn rate. To address this concern, a project was undertaken across four quarters. Through this initiative, PropertyScout.io aims to enhance customer retention, solidify its market position, and establish itself as a trusted provider of real estate data solutions.

OBJECTIVES

- Create a descriptive model using available data to gain insight into potential drivers of customer churn rate
- Incorporate the findings into an interactive dashboard
- Provide recommendations

KEY CHARACTERISTICS

- Data shared by included details of customer journey on the platform, including searches (when, what, and how), customer subscriptions (including post purchase and cancellation feedback), and downloads.
- Datasets records vary based on when the data started being gathered on the platform—from three years to a little under 1 year worth of records.
- Financial information is stored on a separate portal called Stripe.

KEY TAKEAWYS

- Due to a high number of one-month subscriptions, the average subscription length is only 11 days (as of December 2022)
- Pro250 plan is the most popular amongst all subscription options.
- Number of searches tends to go down over weekend. Similarly, the searchers have a lower subscription length on average.
- Top 3 most searched states are California, Florida, Georgia and Texas.

MULTIPLE REGRESSION RESULTS

- R-squared: 0.5439
- Mean Squared Error (MSE): 0.3064
- Mean Absolute Error (MAE): 0.3791

CONCLUSIONS

- Counterintuitively, TotalSearchCount is negatively correlated with the subscription length, suggesting that many users start their subscription with a specific goal in mind that they are able to achieve quickly.
- Similarly, customers that started with a 3 day pass (one time offer for new customers) also tend to stay on the platform shorter than ones that did not initially buy it.

LIMITATIONS

- Short timeframe of data gathering might influence general understanding of the data and its outcomes, as it might be affected by trends or seasonality.
- Data gathering approach changed a couple of times in the past few years leading to inconsistencies and data having to be excluded.

RECOMMENDATIONS

- Consider added value of a 3-day pass
- Introduce additional questions triggered by upgrades/downgrades/reactivation
- Continue add more data to the model to draw more accurate insights