

# AI consulting Pro

**Attendee:** John Doe

**Company:** Easy Apartments Inc.

**Consultant:** Kelwin Fernandes

**Date:** Sep 5, 2022



## Summary:

- John is working in the Real Estate industry, managing +100k long-term rentals.
- Understanding customer satisfaction is key to maximizing contract renewals and occupancy rates.
- **Goal:** Know each tenant's likelihood of canceling the contract next month.

## Main insights:

- Some valuable data they have:
  - All tenant repair requests (2-3 per tenant) with the corrective measures. Including the time between the request and the solution.
  - Payment method and delays for all tenants (5 years of data).
  - Contractual information (price, duration, etc.).
  - Information about the apartments and buildings (typology, size, materials).
- They are looking for a customer churn probability. The plan is to take action by re-prioritizing repairs according to that score.

## References:

- When looking at churn, you may want to consider recoverability instead of just churn score. So, we suggest taking an uplift modeling approach.
  - <https://nilg.ai/blog/202101/an-overview-of-churn-prediction/>
- Actions you take on one tenant may affect others. So, consider tenants' geographic location when testing the initiative impact.
  - <https://dl.acm.org/doi/pdf/10.1145/3292500.3330778>

## Action points:

- Build a PoC predictive model of churn given the repair requests, payment data and contractual information of each tenant individually.
- Assuming the performance is satisfactory, consider:
  - Adding information from the neighborhood (repairs to other neighbors of the same building can have predictive value for other tenants less prone to exhibit dissatisfaction).

## Fallback plan:

- Consider an alternative set of actions besides repairs. For example, pricing strategies or adjusting contract duration.
- Consider optimizing the overall operational cost of the handyman. Instead of assigning the highest priority to the churners, consider a trade-off between the expected lifetime value given churn levels and the operational costs of the handyman assignments.

[Book a follow-up meeting](#)

