Video Streaming Churn Project | Final Insights for the Stakeholders (Milestone 6)

Executive Summary Report

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Project Overview

I developed a data analytics project aimed at increasing overall growth by preventing monthly user churn on the video streaming platform. For the purposes of this project, churn quantifies the number of users who have canceled the subscription with the video streaming service. The ultimate goal for this project is to develop a machine learning (ML) model that predicts user churn. **This report offers details and key insights from all the project milestones and the future actions.**

Final Insights

- Long-term subscribers with higher total charges, more viewing hours per week, longer average viewing duration, and with more content downloads per month should be segmented as **low-risk churn subscribers.**

- On contrary, subscribers with higher monthly charges and more support tickets per month should be segmented as **high-risk churn subscribers.**

- Additionaly, in order to better predict user churn, the following top 5 interactive features were identified with highest importance:

1. AccountAge * AverageViewingDuration
2. AccountAge * ViewingHoursPerWeek
3. AccountAge * ContentDownloadsPerMonth
4. AccountAge / MonthlyCharges
5. ViewingHoursPerWeekContentDownloadsPerMonth

Results

➔ **The best developed ML model showed excellent result in the predicted differentiation of the positive and negative cases of user churn.**
➔ **The model was able to correctly differentiate between churned and not-churned users in 74,87% cases.**
➔ **It fails to predict only 4.5% of all users who plan to churn.**
➔ **It showed a well-calibrated likelihood score that can be used to target interventions and support most accurately.**