Analysis of User Engagement and Churn Metrics

Milestone 3

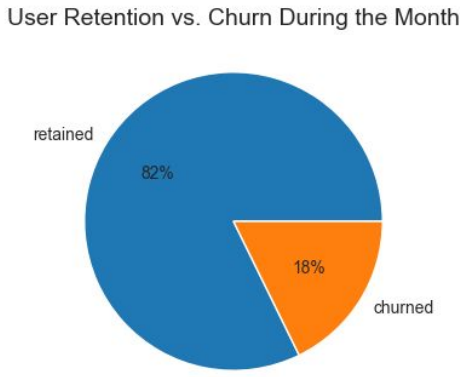
Overview

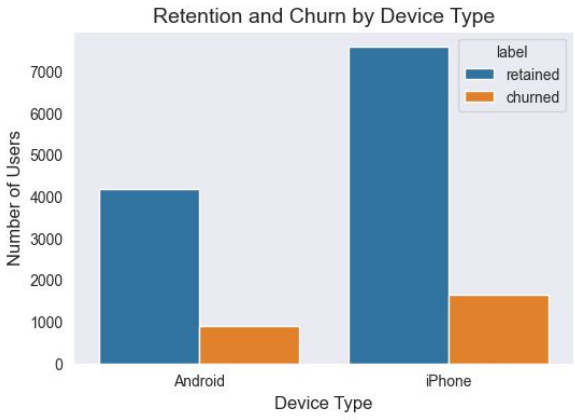
This report examines user engagement and churn metrics to identify patterns influencing retention. By analyzing usage behavior, driving patterns, and feature interaction, we aim to uncover key drivers behind user retention and churn.

Key insights

The problem is understanding the factors contributing to user churn and retention to improve user engagement and reduce attrition.
The analysis explored various factors affecting user churn, including session frequency, driving behavior, and app engagement. It identified that long-distance drivers and low-frequency users were more likely to churn, suggesting potential gaps in the service for these user segments.

- Increased app usage decreased churn. Users who engaged with the app for 30 days had no churn, whereas 40% of users who didn't use the app at all in the past month churned.
- There was a positive correlation between distance driven per driving day and churn. The more distance covered per driving day, the higher the likelihood of churn.
- Users with more driving days in the last month were less likely to churn, indicating a negative correlation between the number of driving days and churn.
- Users from various tenures, ranging from brand new to approximately 10 years, were consistently represented in the dataset.
- Most variables displayed right-skewed or uniform distributions. For right-skewed variables, this suggests that most users had lower values, while uniform distributions indicated equal likelihood across the entire range of values.
- Several variables showed improbable or outlier values, such as "driven_km_drives," "activity_days," and "driving_days," which may suggest data quality issues or unrealistic values.





Next Steps

- Investigate discrepancies in sessions, driving days, and activity days.
- Explore reasons for churn among long-distance drivers.
- Analyze variables statistically to identify churn drivers.