Customer Churn Analysis & Action Plan

Case Study: KKBox Subscription-Based Business

Business Context

Customer churn poses a significant risk to subscription-based businesses due to its direct impact on recurring revenue and customer lifetime value. This analysis evaluates churn behavior using transactional, behavioral, and engagement data to identify key churn drivers and define actionable retention strategies.

Key Findings

1. Churn Peaks at Lifecycle Transition Points
   - Highest churn occurs during 1–6 months tenure and again at 1–3 years tenure.
   - Long tenure does not guarantee loyalty; churn risk re-emerges as users reassess value.
2. Engagement Momentum Is a Strong Predictor
   - Users with increasing activity trends have the lowest churn.
   - Stable or flat activity masks latent disengagement and higher churn risk.
3. Discount Usage Correlates with Higher Churn
   - Users receiving no discounts show the lowest churn.
   - Medium discount users exhibit extremely high churn, indicating price sensitivity rather than loyalty.
4. Payment Method Matters
   - Certain payment methods show disproportionately high churn, suggesting payment friction or renewal failures.
   - Stable, consistent payment preferences strongly correlate with retention.
5. Geographic Differences Exist
   - Churn varies significantly across cities, indicating regional effects such as competition, infrastructure, or payment availability.

Core Insight:

Churn is driven primarily by behavioral and transactional patterns, not demographics.

Key Churn Drivers

Increase Churn Risk

- Longer average plan duration
- High discount dependency
- Long inactivity gaps
- Multiple payment methods

Support Retention

- High number of renewals (strongest signal)
- Stable favorite payment method
- High listening frequency and recency
- Positive engagement trends

Action Plan: Data-Driven Retention Strategy

1. Lifecycle-Based Retention

Target Segments

- 1–6 month users (post-onboarding)
- 1–3 year users (subscription fatigue)

Actions

- Strengthen onboarding and habit formation
- Introduce loyalty refresh campaigns for long-tenure users
- Avoid generic retention offers; tailor by tenure stage

2. Engagement Early-Warning System

Target Segments

- Users with flat or declining activity trends
- Users with increasing days since last listen

Actions

- Trigger automated nudges before inactivity thresholds
- Personalize content recommendations
- Promote feature discovery to deepen usage

3. Discount Strategy Optimization

Target Segments

- Medium and frequent discount users

Actions

- Reduce blanket discounting
- Replace price incentives with behavior-based rewards
- Use discounts selectively for high-engagement, temporary-risk users only

4. Payment Experience Optimization

Target Segments

- Users on high-churn payment methods
- Users with multiple payment methods

Actions

- Audit high-risk payment methods for failures or friction
- Promote stable payment methods as default

- Implement renewal reminders and backup payment options

5. Geographic Retention Targeting

   Target Segments

   - High-churn cities

   Actions

   - Deploy region-specific campaigns

   - Adjust pricing, payment options, or content localization

   - Replicate best practices from low-churn cities