FRVR

Rewards Model AB Test

Executive Analysis

Final Business Recommendation & Executive Summary

Overview & Context

Our product team launched an AB Test on Oct 7th, testing a new ***Rewarded Ad Model.***

This test has been running for 14-days and we have 13-days of complete data to analyse

Test-Setup

Within our games we show 2 types of Ads:

1. **Rewarded**: User chooses to watch ad in exchange for in-game rewards
2. **Interstitial:** Ad appears automatically after every 2 losses

This test has 2 variations:

1. **Control Group:** Default ads model
2. **Test:** We're offering more in-game rewards, to see if we can incentivise more users to watch a reward ad

Test-Goal

1. ***Increase product engagement*** (retention rate & ad impression views)
2. Thereby ***increasing the average revenue per user*** (ARPU)

Key Takeaways

KPI	Control Group	Test Group	Δ
Total Users	42,571	42,707	-
Users: D7	24,914	25,140	-
Retention Rate [%]: D7	4.50%	4.40%	*-2.20%*
ARPU [$]: D7	$0.30	$0.29	*-3.30%*
Ad Impressions per User: D7	3.69	3.64	*-1.40%*

Key Findings

1. There is ***no evidence*** that the tested rewards has a positive impact on product engagement or revenue
2. We observe a decrease all KPIs, after 7-days
3. We retain fewer users (***-2.2%***), they few fewer ads (***-1.4%***) which translates into lower revenue per user (***-3.3%***)

Important to Note

1. The results are not yet statistically significant as of yet
2. For each user added to the experiment, we need to wait 7-days until we have complete data for user
3. Approx. 60% of the users in the experiment meet that criteria. For the remaining 40% we need to wait 7-days.

Strategic Next Steps

As of today, we ***should not roll-out the experiment*** ❌ The test group shows a decrease across all KPIs.

We have 3 Options:

1. Roll-out the test
2. Scale the test
3. Abandon Test / Pause the test

Considerations

1. What other AB Tests do we have ready to launch?
2. Is there a risk of keeping the test running?

Recommendation

1. Pause the test. Don’t add any new users to the experiment.
2. Keep the users in the ‘test_group’ variation, for now.
3. Re-analyse the test next week, once the entire cohort of users has been in the experiment for at least 7-days
4. Align with Product. What does our testing pipeline look like? Do we have better tests in backlog?
5. **Yes** > Consider Abandoning this Test. **No >** Refine this test and resume.

Executive-Level Data Visualization

AB Test Summary: KPI Tables

KPI	Control Group	Test Group	Δ
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Observations

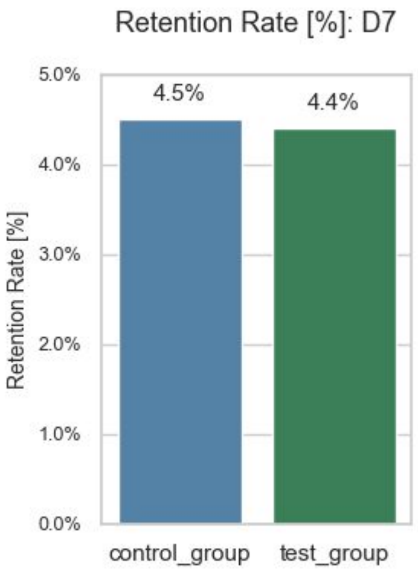
- Decrease across all engagement and monetization KPIs
- Approx. 60% of users have been in the test for at least 7-days
- We see the key business drivers of gaming at play. Revenue is a function of retaining and engaging users (ad impressions)
- When both engagement (*-1.4%*) and retention (-*2.2%*) drops, it has a multiplying effect on revenue (*-3.3%*)

💰 Revenue per User: D7

Insights

- We observe a -3.3% decrease for the test group vs the control group
- The decrease is not statistically significant

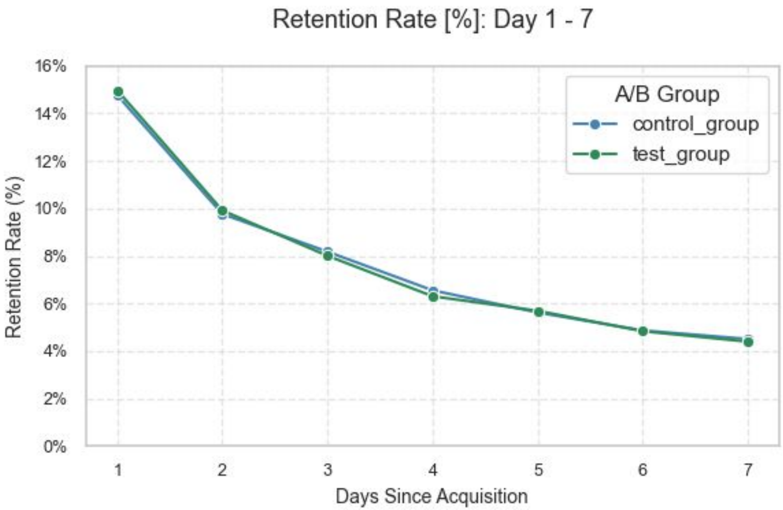
📊 Retention Rate D7



Key Takeaways:

- We observe a -2.2% decrease for the test group vs the control group
- The decrease is not statistically significant
- **Retention is the cornerstone of LTV / ARPU**; even small % drops at scale result in material revenue loss.
- Focus area: **improving early user experience** for better engagement.

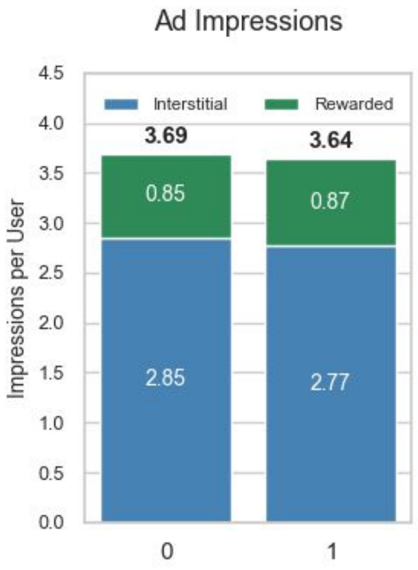
📊 Retention Rate Curves: D1 -7



Key Takeaways:

- The dynamics of the retention rates essentially identical
- Within gaming, retention rate curves mirror exponential decaying

📺 Ad Impressions per User



Observations:

- Test group shows a **slight drop in interstitial ad impressions**.
- Rewarded impressions are flat — indicating users aren't necessarily choosing to watch more rewarded ads.

⚙️ AI Optimization

- **Ad Frequency Optimization**: Predict optimal timing to balance revenue vs retention
- **Churn / Retention Prediction Models**: Flag users likely to drop out early
- **LTV Prediction Models**: Make early LTV estimations (e.g. after 3 days)
- **Personalized Experiences**: Use AI to customize onboarding / tutorial flow for retention gains