

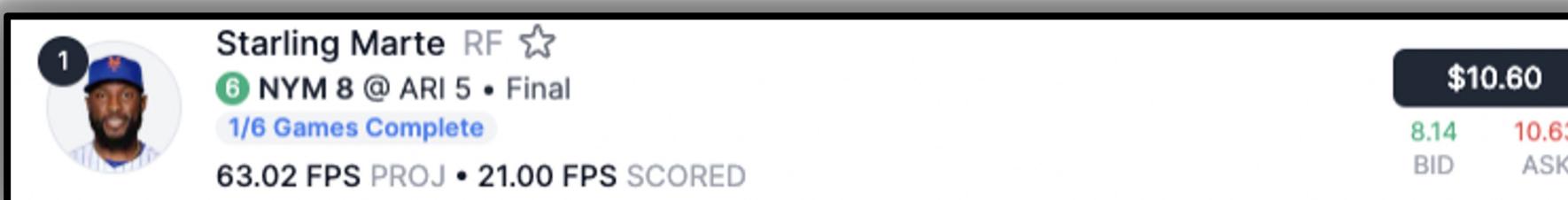
## Abstract

This capstone project aims to enhance user engagement and retention rates on the dynamic Jock MKT platform, which turns the sports market into a stock market for trading athlete shares. By analyzing previous test data and leveraging two amplitude datasets, the project aims to optimize user experiences and drive business growth through targeted strategies.

## Background

**Jock MKT:** A platform merging sports and finance, allowing users to invest in athletes like stocks for a unique and captivating experience.

Figure 1: Player Stock Price: MLB July Market Draft



**Business Problem:** Enhance user engagement and retention for sustained growth.

**Datasets:** Leverage insights from previous run tests. Analyze the sign-up, redeposit, and churn risk bonus tests to refine engagement and retention strategies.

1. Sign-up Test: Offer a "\$10 risk-free entry fee" to designated users, encouraging immediate engagement and exploration.
2. Redeposit Test: Provide 100% deposit match up to \$20 or 50% deposit match up to \$100 to increase reinvestment and user engagement.
3. Churn Risk Bonus: Target inactive users with a "\$20 risk-free slip" to re-engage and regain attention.



Figure 2: Jock MKT's Sign-Up Test offers a \$10 bonus slip to drive user engagement and retention.



Figure 3: Jock MKT's Redeposit Test implementation banner offers deposit match options to encourage user redeposits.

**Objective:** Analyze previous tests and datasets to propose an innovative bonus test that enhances user engagement, promotes active participation, and drives the growth of Jock MKT.

## Acknowledgements

• Jonathan Bell (Jock MKT), Professor Oliver Bandte, Boston University's MSBA Faculty and Administration

## Analysis

**Analysis from the 3 Tests:** The sign-up and redeposit tests did not yield statistically significant differences in deposited amount or number of deposits. The churn risk bonus did not show a significant impact on the mean deposited amount, although notable interactions were observed between the bonus amount and total props wagered in predicting customer LTV.

**Paid Active User Analysis and Test Design:** We analyzed paid inactive users on Jock MKT using Amplitude data. We observed a drop-off in user activity after major events like the NBA Finals and playoffs. To address this, we developed a new test design focused on enhancing user engagement and trust. Our goal is to propose strategies to improve user retention and satisfaction. In addition, we plan to build a predictive model using the data to better predict a user's churn probability.

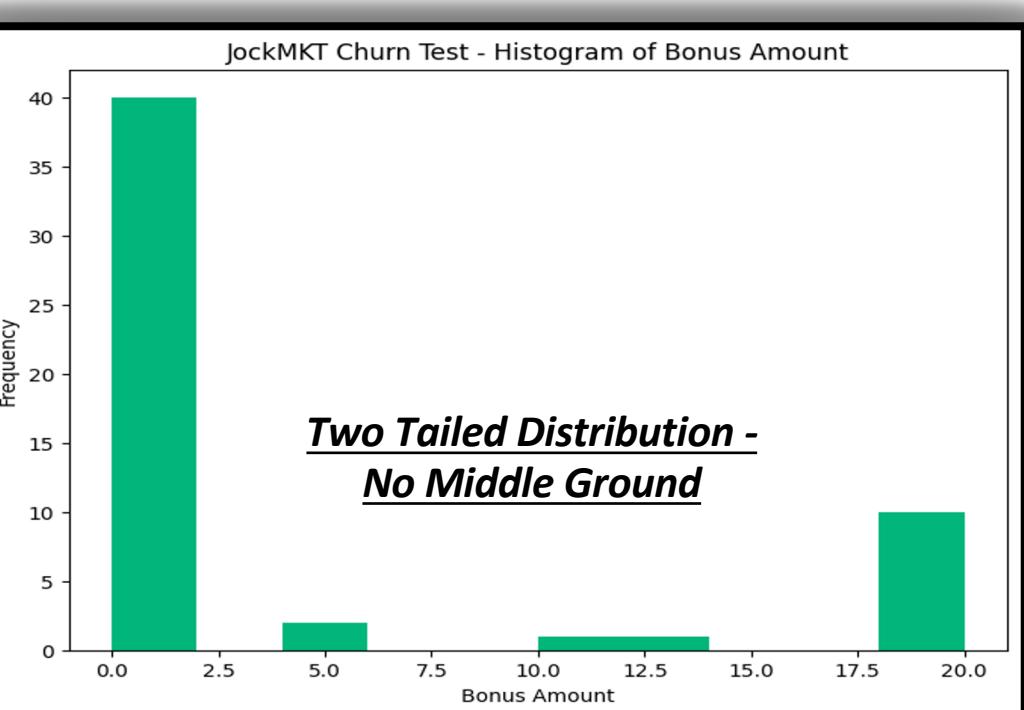


Figure 4: Frequency distribution of bonus amount, a significant factor in our churn risk bonus test. It drives our analysis and predictive modeling for assessing churn risk.

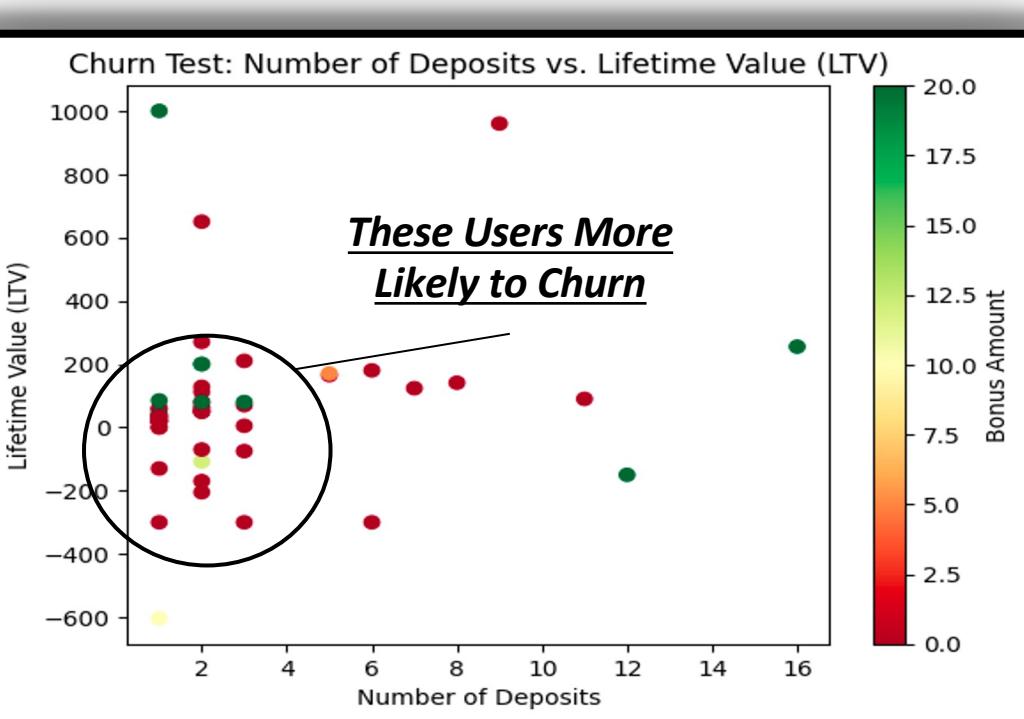


Figure 5: Distribution of deposits based on lifetime value and bonus amount. These variables play a crucial role in our churn risk bonus test and inform our proposed test and predictive model for assessing churn risk.

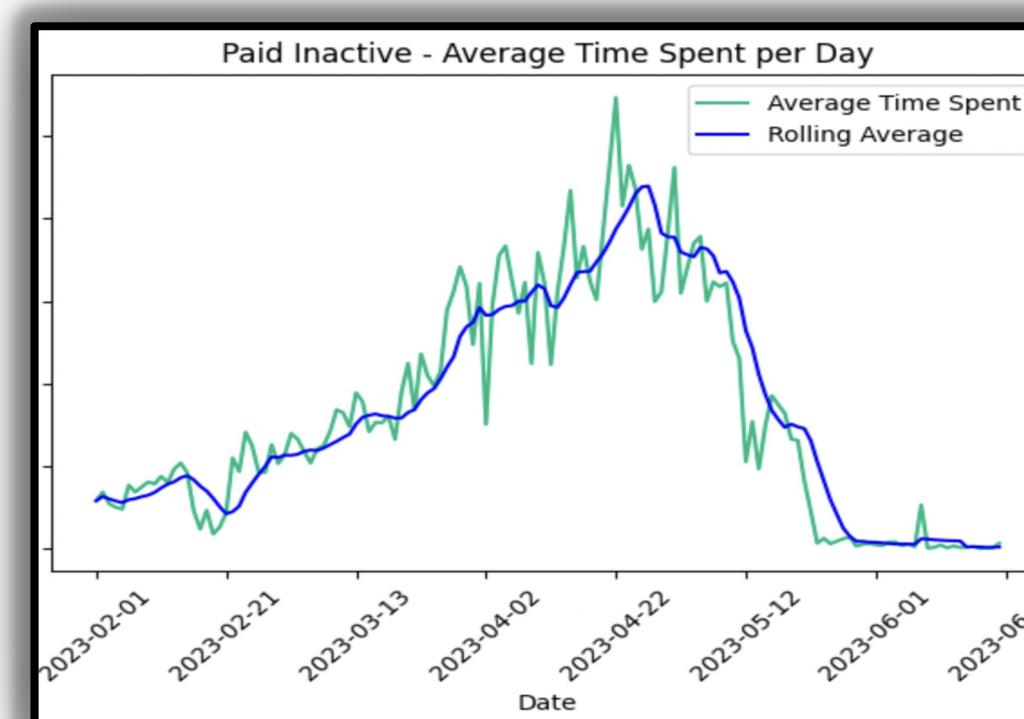


Figure 6: Daily average time spent by paid inactive users reveals reduced engagement post-NBA playoffs, highlighting opportunities for user retention and experience enhancement.

## Recommendation

**Proposed Test:** Focus on Retention & Re-engagement for Paid Inactive Users

**Hypothesis:** Cash-back incentives can re-engage paid inactive users, boosting retention.

**Targeted Segment:** ~800 paid inactive users inactive for 30 days.

**Offer:** Cash-back of 50% of the user's slip, up to \$10, after betting.

**Implementation:** Email, push notifications, web banners.

**Duration:** 30-day test to observe impact.

**Data Analysis:** Track user journey, slip value, cash back redemption, retention rate. Use t-tests for significance.

**Expected Results:**

- Increased re-engagement and participation
- Higher retention in the targeted segment
- Improved satisfaction and loyalty.

Our recommendation aims to re-engage paid inactive users, increase participation, and enhance retention on Jock MKT.



Figure 7: Banner design offering a 50% cash-back incentive to paid inactive users, aiming to re-engage them with the Jock MKT platform.

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## SCAN

About Jock  
MKT:



GitHub  
Repository:

