



# FANDUELGROUP

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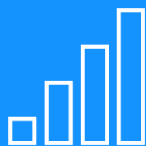
# Executive Summary

## Data Preparation



To effectively analyze the dataset, standard data practices were applied using Python and Excel. These tools facilitated a systematic approach to data exploration, allowing for a detailed examination of the dataset's features.

## Actionable Insights



By leveraging the prepared dataset, deeper insights were gained, fostering a more comprehensive understanding of the data and its underlying patterns. Understanding these patterns allow for better decisions to be made.

## Bonus Bet Promotion



Building on the insights discovered, the foundation for a Bonus Bet Promotion was established. This approach integrates key findings with strategic planning to create a promotion that aligns with the data-driven insights.

## Sportsbook Generosity



The experiment evaluates the impact and effectiveness of Flat Bonuses versus Tiered Bonuses on GGR, user engagement, and retention, aiming to develop a more effective strategy.

# Overview of Data Preparation



## 1. Data Summary

- a. Dataset containing ~4 Million rows of betting transactions
- b. Features: State, Player ID, Wager ID, Sport, Bet Type, Net Staked, GGR



## 2. Assumptions

- a. Wager ID's are not unique and represent each leg of a bet
- b. To create a unique identifier, you must combine Player ID and Wager ID
- c. Players are new to Platform



## 3. Cleaning and Removed Data

- a. Removed rows with irrelevant and incomplete data
- b. Original Dataset: 4,174,500 rows, Cleaned Dataset: 4,090,752 rows (2% dropped)



## 4. Transformation

- a. Calculation of unique sports per bet
- b. Separation of Parlays into Multi and Single Bets
- c. Parlays across different sports need to share Net Stake and GGR proportionally

# Actionable Insights



## → Sportsbook Performance

- ◆ UEFA Champions League Football (UCL) has about 60% more of the margin of the next sport, however, UCL has the lowest staking and revenue engagement.



## → Parlay Insights

- ◆ Larger Parlays and Multi-Sport Parlays return the highest GGR, but have low customer engagement.

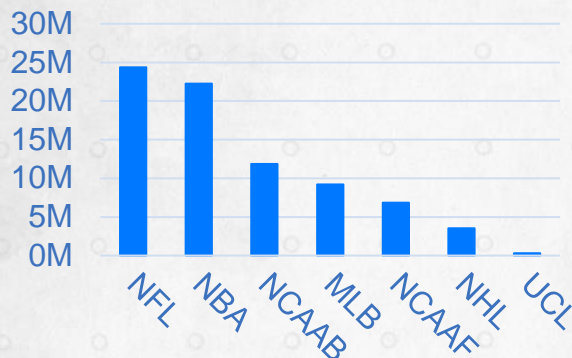


## → Customer Behavior

- ◆ 21% of profitable FanDuel customers generate 80% of Gross Gaming Revenue (GGR), thus high value customers are critical to the business; retention of existing high value customers and conversion of others to high value.

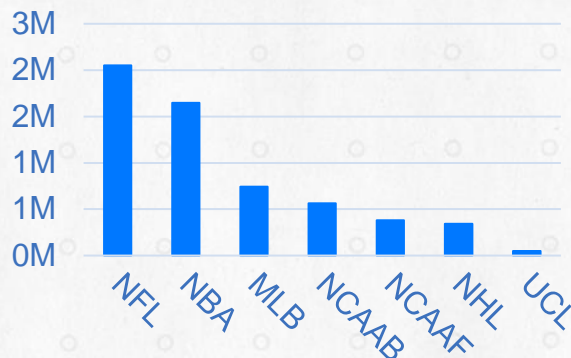
# Insight #1 - Sportsbook Performance

## Net Stake by Sport



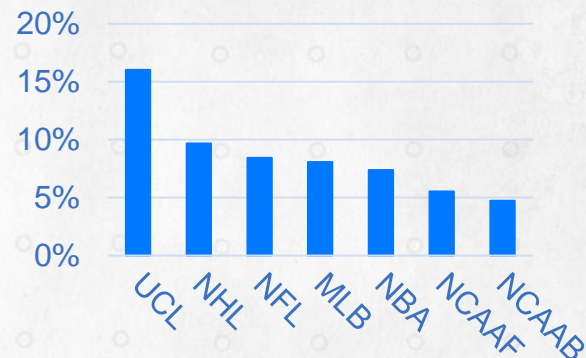
- Total Handle: \$78.4M
- 83% of Staking was on either Basketball and American Football
- Total Net Staking Peaked in Autumn

## GGR by Sport



- In Total GGR: \$5.7M
- 80% of GGR is Basketball and American Football

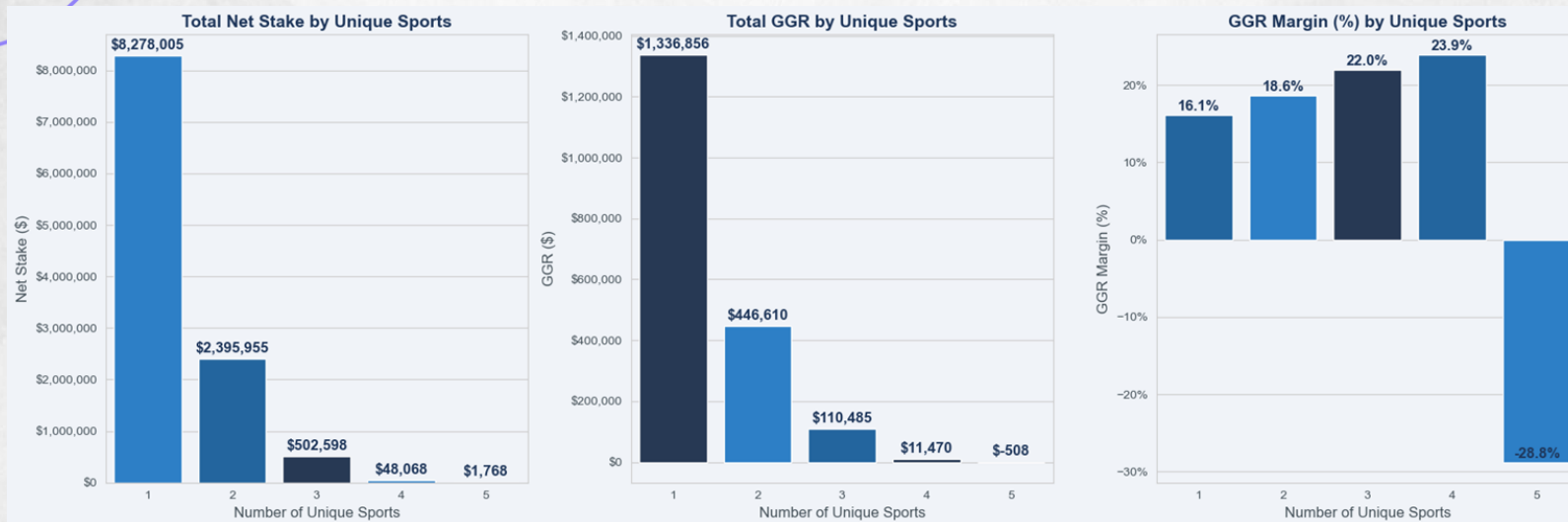
## Margin by Sport



- AVG Margin: 7.36%
- Opportunity with Champions League, NHL
- Parlays Significantly Outweigh Straight Bets (16.97% vs 5.76%)



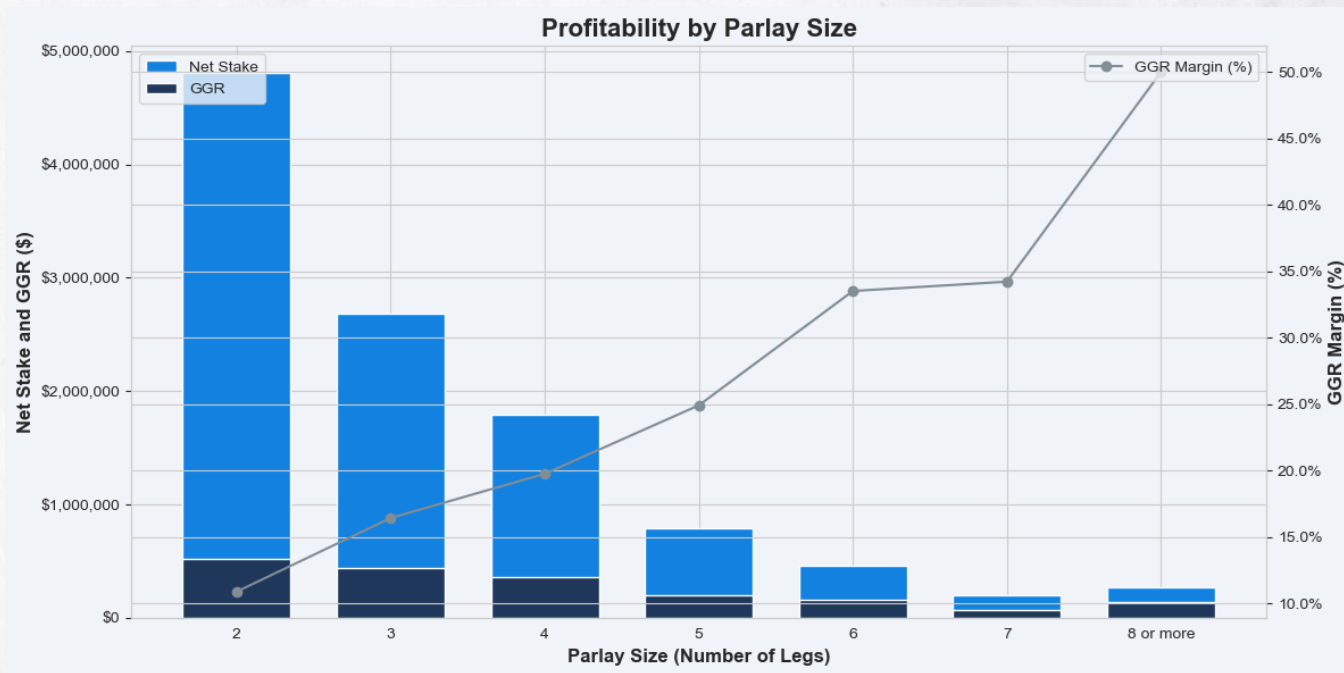
# Insight #2 - Parlays: Sports Combinations



- Single Sport Parlays have the most engagement in terms of Net Stake and GGR
- With each additional unique sport added to a parlay the engagement decreases and the Margin Increases
  - *Note: The negative Margin for Parlays of 5 sports is likely due to an “unlucky” skewed result*
- Increasing engagement for these types of Parlays would see a significant increase in GGR

## Insight #2 - Parlays: By Size

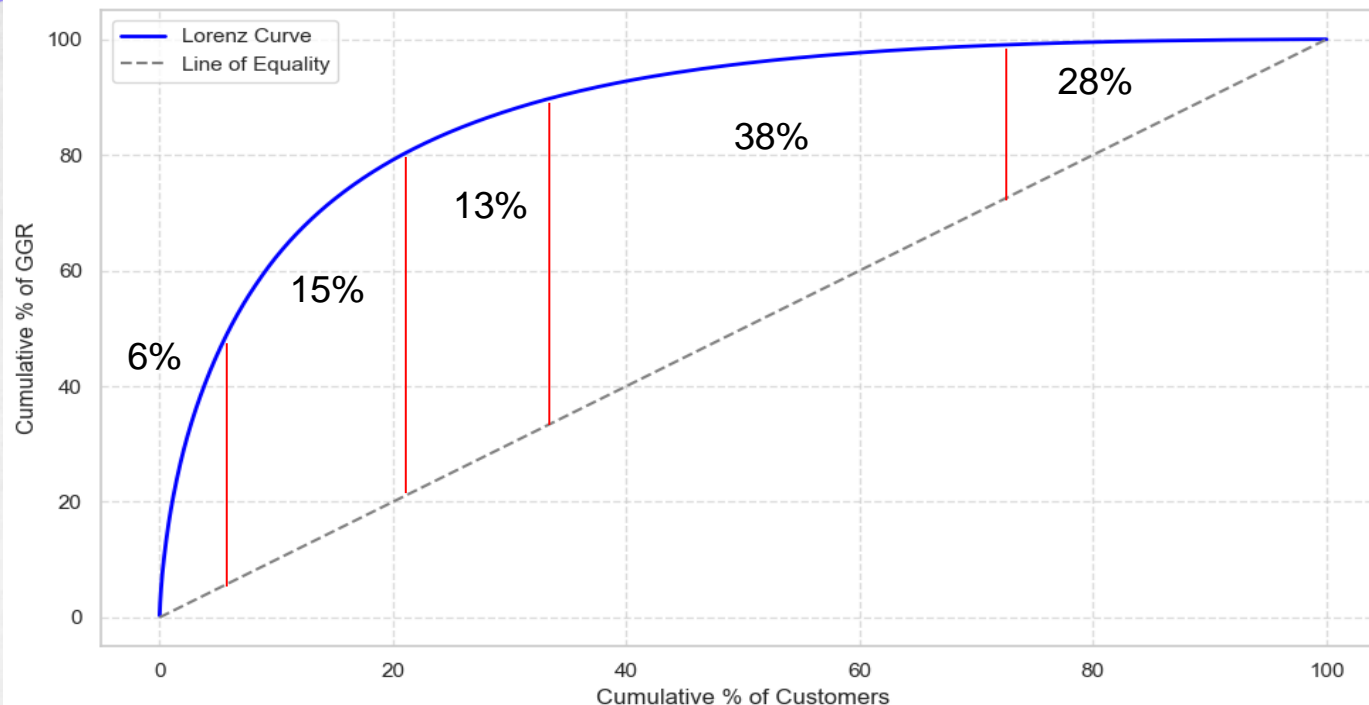
- Smaller bet sizes attract the most engagement, with each additional leg decreasing the engagement
- While also providing higher GGR
- This paired with our previous insight informs us there is major opportunity





# Insight #3 - Customer Behavior

Lorenz Curve: Customer Contribution to GGR



- 6% of profitable customers generate 15% of the GGR.
- 21% of profitable customers generate 38% of the GGR.
- 34% of profitable customers generate 72% of the GGR.
- 72% of profitable customers generate 99% of the GGR.

# Bonus Bet Promotion

## Goal

- Increase GGR and Engagement Levels of Customers

## Method

- Assign Bonus Bet Dollars that can only be used on Multi-Sport Parlays and allocate proportionally to customers according to their existing contribution to GGR
  - Ex: High Value Customers would receive more in Bonus Bets to help retain them while less profitable customers would receive less
- One way of marketing would be with Pre-Assembled Parlays
  - Ex: Preselected Parlay combining the Yankees, Mets, Giants, Jets, Knicks, Nets, Rangers and/or Islanders

## Metrics to Track

- Retention, Staked Amounts, Total Bets Made

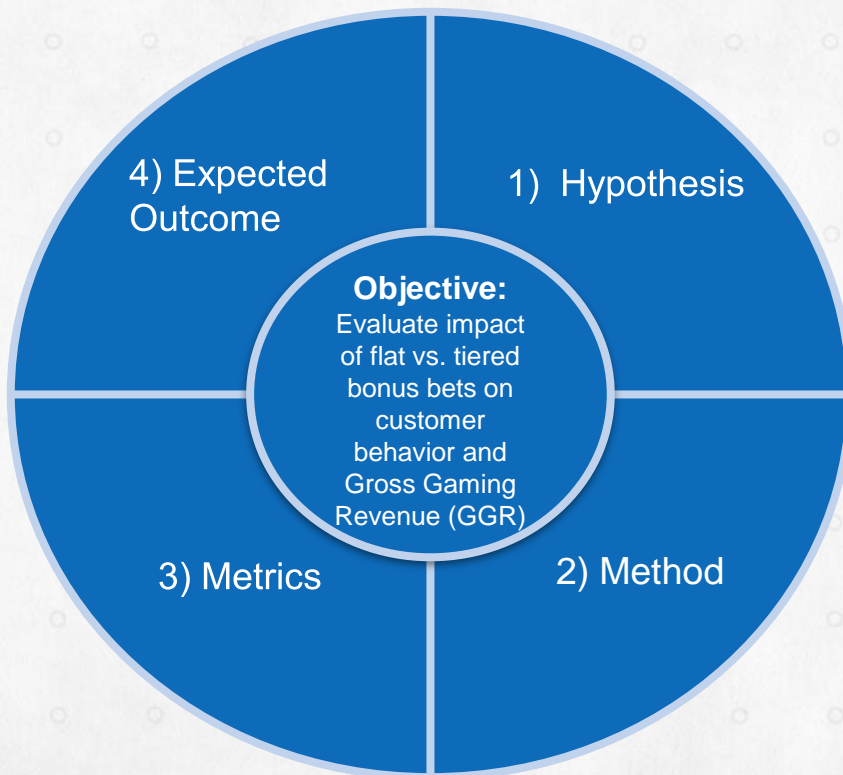
## Expansion and Improvement

- Including more data points on customer behavior and profile will aid in the success of a Bonus Bet Promotion, like: Pre-Net Stake Amount, Promotions Applied, Bet Types (Moneyline, Spread, Over/Under, Prop Bets), Customer Background

# Generosity Experiment: Optimizing Promotions

- Insights for tailored promotions boosting engagement & revenue
- Data-driven strategy for continuous improvement

- GGR, Net Stake, Retention and Redemption Rates, Behavioral Shifts



- Tiered Bonus Bets yield Higher GGR and Engagement, especially for high-value bettors. While Flat Bonus Bets increase GGR and Engagement of casual and lapsed bettors.

- RCT Design: 30-day test and 30-day cool-down phase.
- Groups
  - Flat Bonus
  - Tiered Bonus
  - No Promotion



# Questions?