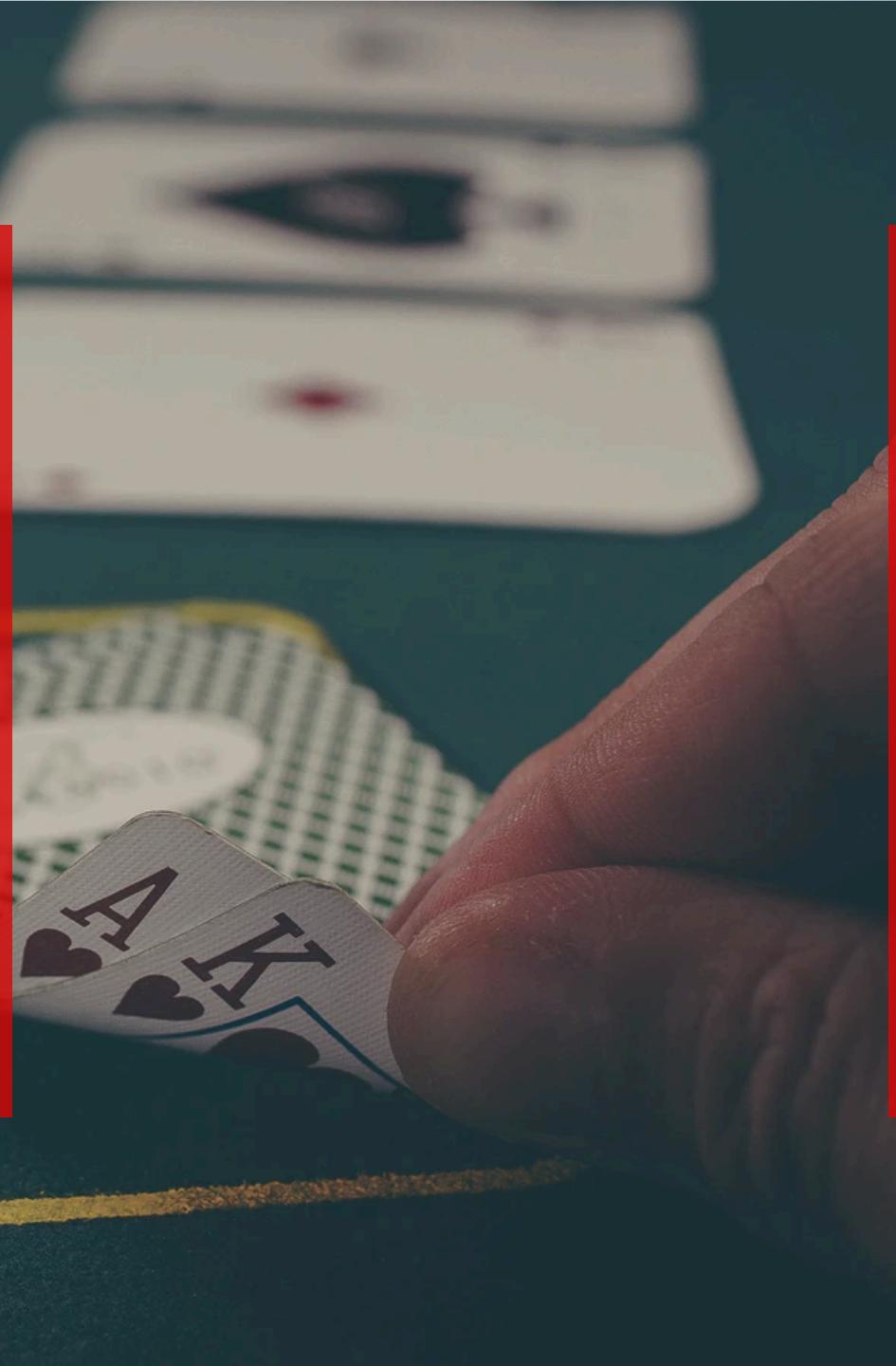


# Zynga Poker Review Analysis



# PROJECT OBJECTIVES

This project will be successful if...

- ① Consumers are able to quickly extract key topics covered by the reviews without having to go through them individually
- ② Zynga can understand the consumer feedback in the form of topics

# CONTENTS

OVERVIEW

DATA MODELLING

KEY FINDINGS

NEXT STEPS

01

02

03

04

The background of the slide features a dense pile of various colored poker chips (red, green, blue, white) scattered across a solid red surface. The chips are circular with decorative patterns around their edges.

# OVERVIEW

LO

# Zynga Poker

- Texas hold 'em poker game where players participate in tournaments or cash table games
- Has a strong community supported by Leagues and VIP program
- Forever franchises make up **66%** of Q1 2020 total revenue and bookings
  - Includes Zynga Poker



Source: Q1 2020 Earnings Slides

# App Reviews

- Hundreds of thousands of users have rated Zynga Poker with a star rating and a free-form text review on what they like/dislike
- Due to the volume of reviews, this can be very time consuming to read each one
- We can employ Natural Language Processing (NLP) techniques to help understand patterns in large text datasets

02

# DATA MODELLING

# Topic Modelling Walkthrough

- Obtained roughly **200,000** app reviews from the Google Play Store
  - Interested in the **rating, review text, review date, and # of likes**
- Preprocessed the highly unstructured and noisy data
  - Removed unwanted punctuations, emojis, stop words (e.g., the, to, and) and converted text to lower case
  - Tokenization: splits longer text into smaller pieces
  - Lemmatized the tokens: reduce inflectional forms to a common base form (e.g., studying -> study)
- Extracted **14** abstract topics from the reviews by using Latent Dirichlet Allocation (LDA) – maps all reviews to the topics in a way, such that the words in each review are mostly captured by the topics

# KEY FINDINGS

GO

# 74% of reviews rated 5 stars

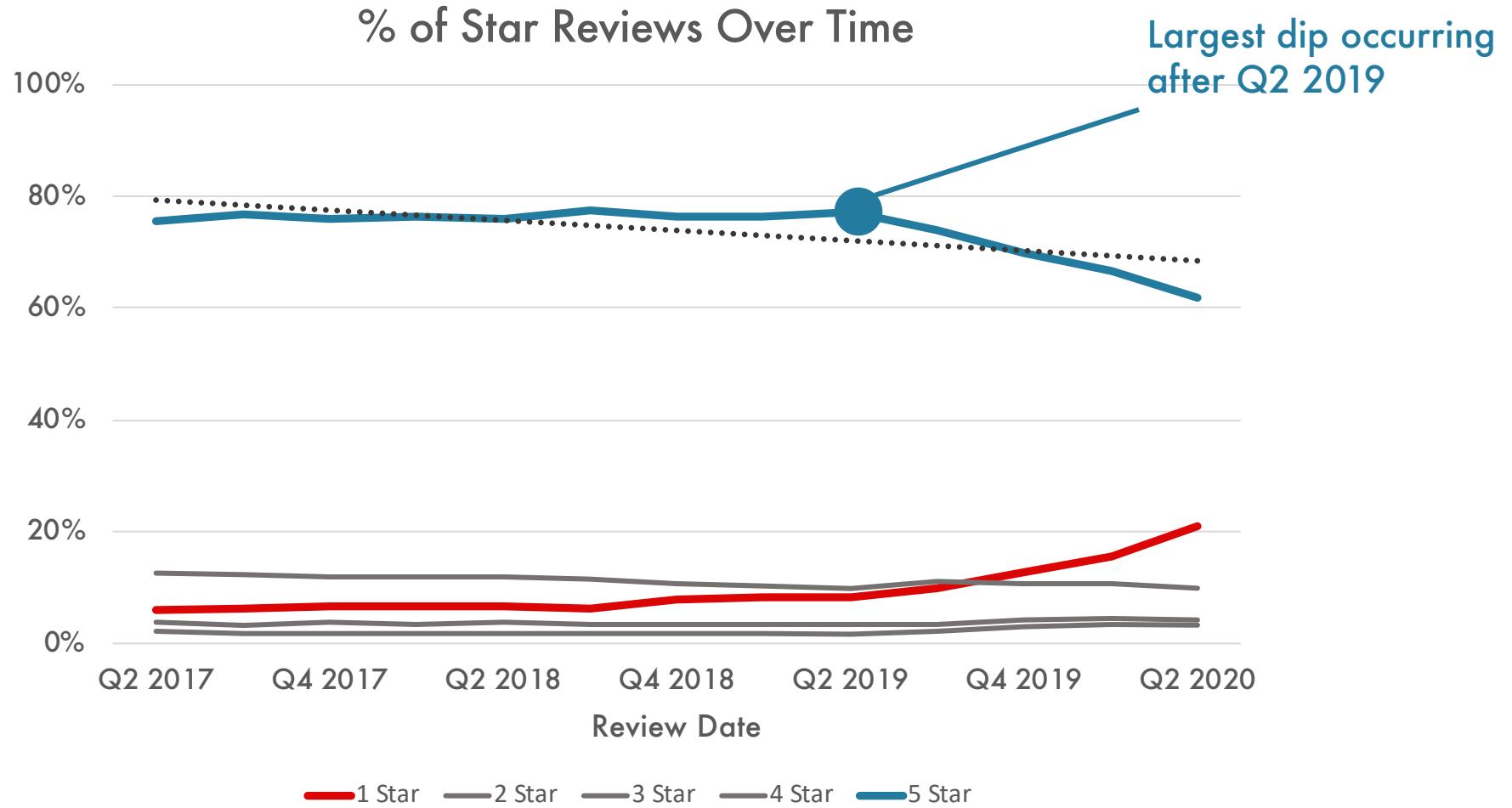
- Majority of reviews have positive sentiments about Zynga Poker
- Sample keywords from topics relating to positive reviews:
  - fun, addictive, favorite, beautiful, graphic
- Sample reviews:
  - *This game continues to be my favorite app*
  - *I've been hooked since the first time I played, love winning*
  - *Very well done! The best online poker app IMO. Improvements are noted & appreciated.*



● 1 Star ● 2 Star ● 3 Star ● 4 Star ● 5 Star

Reviews are from May 1, 2017 – June 22, 2020

# 5 Star Reviews have Dropped by 14%



Reviews are from May 1, 2017 – June 22, 2020

# Increase in 1 Star Reviews are Caused by Bad Beats and Game Bugs/Problems

**“Don’t hate the player, hate the game”**

- Sample keywords from topics relating to negative reviews:
  - player, bad, hand, fair, lose
- Most of these players who are giving poor reviews are losing and complaining how the game is “rigged” – blaming on game’s algorithm
- Losing to users called “Bingo Players”
  - I.e., Always going all-in pre-flop regardless of what is in their hand

**Bugs/Fixes & Enhancements**

- Sample keywords from topics relating to positive reviews:
  - annoying, uninstall, update, fix, error
- There seem to issues with features in the game: league progress, free chip ads, free spins, event updates
- It’s great to see Zynga already utilizing consumer feedback
  - E.g., Older reviews have said to implement a bluff button and complained about the “check or bet” text being too irritating
  - I’ve already seen this addressed and how the UI is much cleaner than past versions

# Summary of Key Findings

- 74% of reviews are rated 5 stars
- 5 Star reviews have dropped by 14%
- The increase in 1 star reviews are made up of players losing and having bugs/issues with the game itself

## Recommendations

- Keep listening to consumer feedback to inform product decisions
- E.g., I agree with a review: "Maybe 3 or so buttons like 3x 5x 10x the ante price or something? Fast play can be difficult to bet what you want sometimes the ones relative to pot size I feel are underused" or have an option in settings to switch between pot size and ante size

04



NEXT STEPS

# Next Steps

- ① Add a sentiment analysis layer because there are high rated reviews with negative feeling, and vice versa
- ② Deeper topic modelling on reviews separated by sentiment & rating
- ③ Compare reviews of other poker games (Apeak Poker, SnapShove, World Poker Club, etc)

# THANK YOU.

Analysis & Presentation by  
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