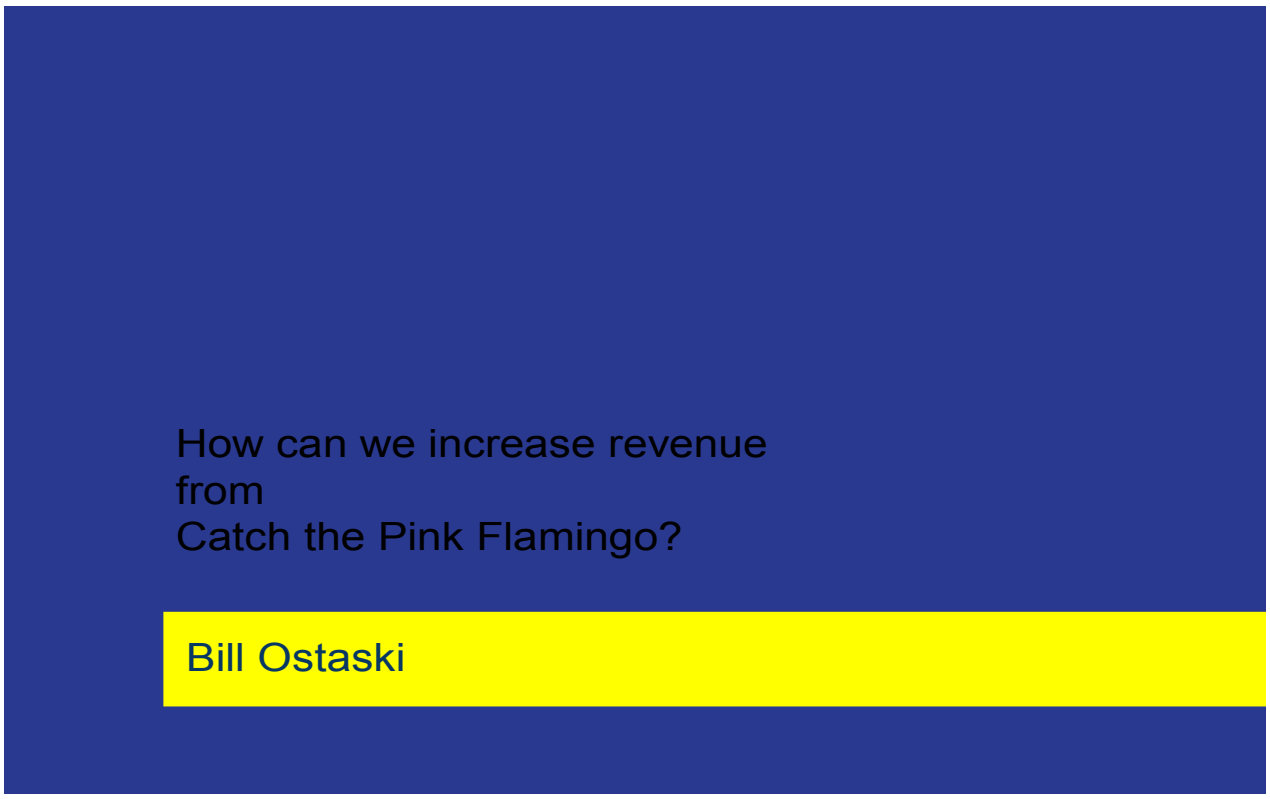

In this 10 minute presentation, we will cover the results of our data analyses and our recommendations on how Eglence Inc. can increase their revenue from Catch the Pink Flamingo.

Problem Statement

How can we use the following data sets to understand options for increasing revenue from game players?

chat-data: chat_create_team_chat, chat_item_team_chat, chat_join_team_chat, chat_leave_team_chat, chat_mention_team_chat and chat_respond_team_chat

combined-data: user-session, buy-clicks, and game-clicks

flamingo-data: ad-clicks, buy-clicks, game-clicks, level-events, team, team-assignments, users and user-session

We used 3 data sets in these analyses: chat-data, combined-data and flamingo-data.

The chat-data set contains 6 csv files: chat_create_team_chat, chat_item_team_chat, chat_join_team_chat, chat_leave_team_chat, chat_mention_team_chat and chat_respond_team_chat. The chat-data set was used in our Graph Analytics Analysis, which identified the 10 chattiest users, 10 chattiest teams and most active chat users.

The combined-data set contains a single csv file, combining data from 3 of the log files in the flamingo-data set: user-session.csv, buy-clicks.csv, and game-clicks.csv. The combined-data set was used in our Data Classification and Clustering Analyses. The Data Classification Analysis identified “High Rollers” and “Penny Pinchers” and the platform used bu the majority of the “high Rollers.” The Clustering Analysis identified 3 clusters based on the number of ad-clicks and revenue per user.

The flamingo-data set contains 8 csv files: ad-clicks, buy-clicks, game-clicks, level-events, team, team-assignments, users and user-session. The flamingo-data set was used in our initial Data Exploration to identify how many times each item was purchased, how much money was made from each item, how many times each category of advertisement was clicked-on and the total amount of ad-click revenue for a set of specific values based on the advertisement category.

Clearly, this is a data science story! We used a variety of data sets to glean information about your game players in order to develop recommendations on how to increase your revenue.

Data Exploration Overview

The most important information we discovered from our initial data exploration was:

- Item number 5 (price value 20) is the most lucrative item, but is not the most purchased
- Item number 2 is the most purchased item (price value 3)
- The average buy is 7.26; much less than the maximum item number value (20)

As we can see, our initial data exploration identified Item 5 as the most lucrative item, but it is not the most purchased item. Item number 2 was the most purchased item, but its price value is only 3. The average buy was 7.26, which is less than half the maximum item value. This suggests that we can make changes to the marketing of these items to increase the average buy value and generate more revenue.

Our initial data exploration also identified the possibility that iPhone users were generally the most active users and the biggest spenders.

What have we learned from classification?

"High Rollers" vs "Penny Pinchers"

- "High Rollers" buy items that cost more than $5
- "Penny Pinchers buy items that cost $5 or less
- "High Rollers" typically use the iPhone platform

We defined a "High Roller" as a player who buys items that cost more than $5.00 and a "Penny Pincher" as a player who buys items that cost $5.00 or less.

Building on our observation from the initial data exploration, where we found the top 3 spenders use the iPhone platform, we can now confirm that the majority of "High Rollers" use the iPhone platform according to the Classified Data found in the Decision Tree Predictor.

Given that "High Rollers" typically use iPhones, it would be beneficial to offer more ads for iPhone-related products in general.

What have we learned from clustering?

- Cluster 1 had the largest number of ad clicks and revenue per user
- Cluster 2 had the lowest number of ad clicks and revenue per user
- Cluster 3 had roughly the median number of ad clicks and revenue per user

Our Clustering Analysis identified 3 discrete clusters. The first cluster is characterized by the largest number of ad clicks and revenue per user. The second cluster is characterized by the lowest number of ad clicks and revenue per user. The third cluster falls roughly in between the first and second cluster.

From our chat graph analysis, what further exploration should we undertake?

We identified the top 10 chattiest players and teams

Further exploration should identify the number of ad clicks and revenue generated by these players and teams

Our chat graph analysis identified the top 10 chattiest players and teams. This is important to Eglence, Inc., as these players and teams hold the most influence in chats regarding the Catch the Pink Flamingo game and products. Eglence, Inc. should next identify the number of ad clicks and revenue generated by these influential players and teams.

Recommendation

Increase the prices for ads shown to frequent ad clickers

We developed many suggestions for Eglence, Inc. for increasing revenue that can be seen in the Technical Appendix.

Our most important recommendation is that Eglence, Inc. increase the prices for ads shown to frequent ad clickers.

Generally speaking, frequent ad clickers make more in-app purchases and therefore generate more revenue. Frequent ad clickers are more valuable to in-app retailers, so the price of the ads should reflect that value.