How can we increase revenue from Catch the Pink Flamingo?

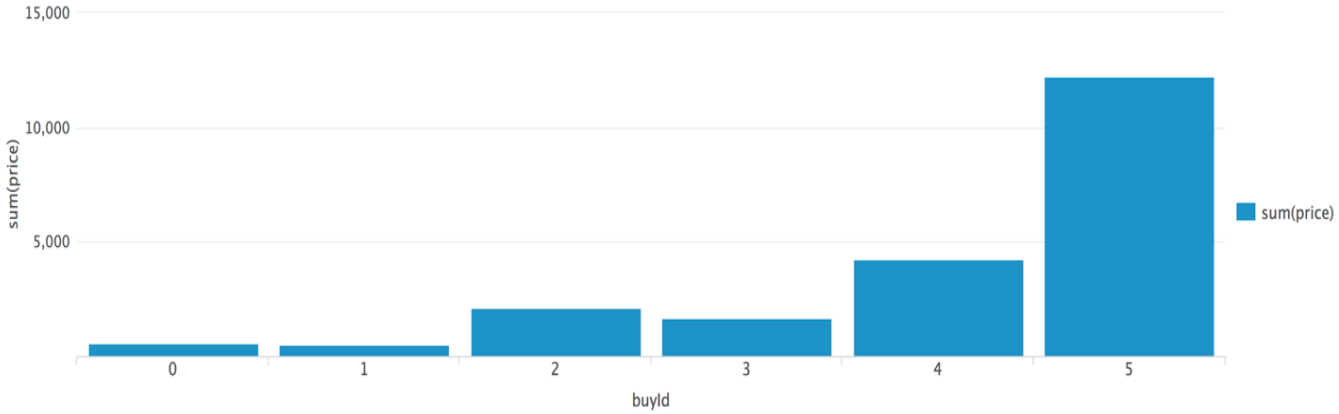
Problem Statement

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

- Flamingo dataset: Analyze the behavior of the users.
- Combined dataset: Categorize the users into different groups based on their behavior.
- Chat dataset: Social network analysis, targeting advertisement

Data Exploration Overview

- Total revenue: $21407
- Most profitable item



What have we learned from classification?

By classifying the users, we learned the following things:

- What is the feature that differentiate the users? platform
- Users from which platform are more likely to buy items? iPhone

What have we learned from clustering?

Clustering helps us understand how many types of users there are.

Cluster #	Cluster Center
1	[-0.0967, 0.02876, 0.8414]]
2	[2.322, 0.0707, 0.8612]
3	[-0.0656, 2.5974, 0.1903]
4	[-0.4427, -0.5243, -0.9249]

These clusters can be differentiated from each other as follows:

Cluster 1 is different from the others in that the users click on the ads very often but seldom pay for the items.

Cluster 2 is different from the others in that the users click on the ads a lot and also like to buy the items.

Cluster 3 is different from the others in that the users play the game very often.

Cluster 4 is different from the others in that the users is not active in playing the games, buying items and clicking the ads.

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

- Analyze the relationship between users or teams.
- Advertisement targeting.
- Find the most active users in each team.
- Build a chat bot that talk like a human.

Recommendation

- Collect more useful data, like the text of the chat.
- Focus on the users in cluster 2 and 3. They have the potential to bring more revenue to the company.
- Analyze why non-iPhone users are less likely to purchase items.