How can we increase revenue from Catch the Pink Flamingo?

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Problem Statement

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

Analyze the data to understand player behavior and use it to improve the player experience and find new revenue opportunities

Data source

- Chat of players
- Players activities in game

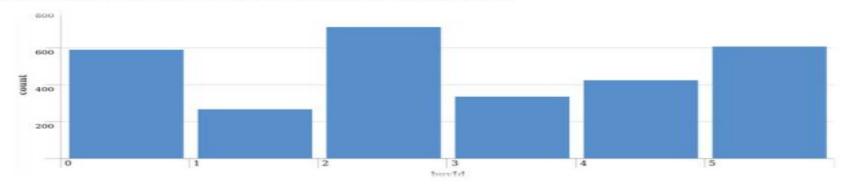
Chat of players

This help us to understand how players communicate in all situations, about what they talk, find influencers players and how this impact in revenue.

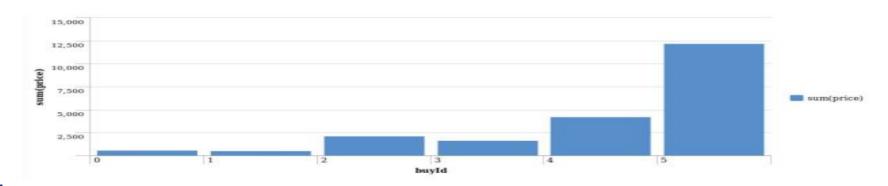
Players activities in game
 How players play the game(where they click, when they purchase item...)

Data Exploration Overview

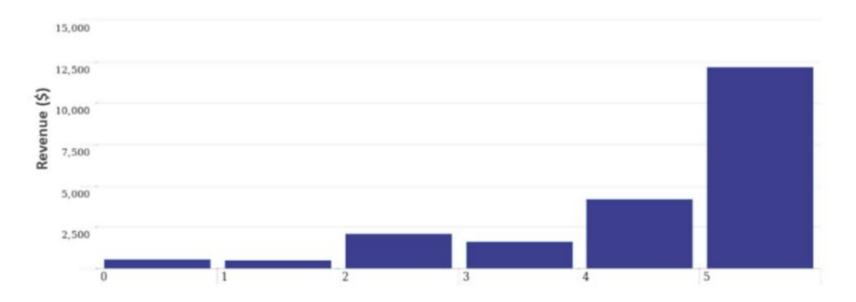
A histogram showing how many times each item is purchased:



A histogram showing how much money was made from each item:



Revenue Generate from in-app purchase item



Item id5 generate 57% of revenue, we can create more itens as item 5

What have we learned from classification?



- Most players are on mobile plataforms
- Iphones players are likely to be Highrollers
- Android players are likely to be Pennypinchers
- Focus in Iphones players to increase revenue

What have we learned from clustering?

Cluster #	Cluster Center ['totalAdClics', 'totalBuyClicks', 'totalRevenue']
1	[41.07, 10.29, 145.51]
2	[34.28, 6.45, 67.22]
3	[26.30, 4.48, 17.07]

TotalAdclicks: Total number of ad-click per player

TotalBuyclicks: Total number of in-app purchase per player

TotalRevenue: Total money spent on in-app purchase per player

Kmeans analyse gives us 3 clusters:

Cluster 1: the higest for the 3 attributes, they spend more, click more, they buy more, we could give more ads for they, and give more benefits for then continue to spend.

Cluster 2: They are in the middle of all attributes, the target is move they to the Cluster 1.

Cluster 3: Target is to bring then to cluster 2, we can create benefits if then interact a minimum for be in Cluster 2.

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

Found the top 3 active users: We can understand why they are more active and generalize this to all players:;

We looked at the relationship between the top 10 users and team chats and didn't find any relationships, players on a team have different experiences that we could explore;

Found the participants with the longest chain of conversation: We can understand what make players engage more in the game, and profit from it.

Recommendation

We should develop more items like itemID 5, promote him more and find Ways for the player earn the item, with ad-click for example.

Focus on bring and retain more iphone users our biggest revenue

Now, with our cluster analysis and graph, we can make various strategies to focus each group, make them more engaged and spend more, make a new item or promotion that makes players spend more and be more engaged

Thank you all