

# How can we increase revenue from Catch the Pink Flamingo?

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# Problem Statement

Use available data and applied analytics in order to identify new revenue opportunities and gain insight into the behavior of players among each other.

## Data source:

- Players activities.
- Chats between players.



## Players activities during the game:

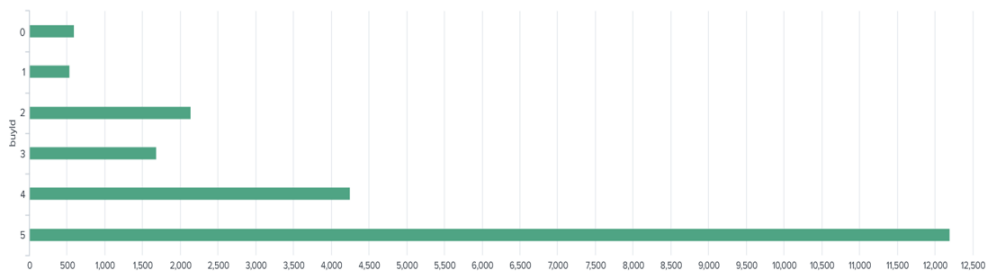
This data helps us assess when and where users tap on the screen, and when a user purchases an in-app item or clicks on an item to preview. Understanding this data helps us to evaluate and design the best UX game, specifically targeting promotion to specific users and pricing strategy and offering items to specific users without the product reaching the wrong people or those who are not interested in those items.

## Players activities during the game:

This data enables us to find the most influential players and what are the most important topics. We can select more efficient marketing or advertising campaign strategies based on the insights we discover from this data.

# Data Exploration Overview

Revenue generated from in-app purchase item.

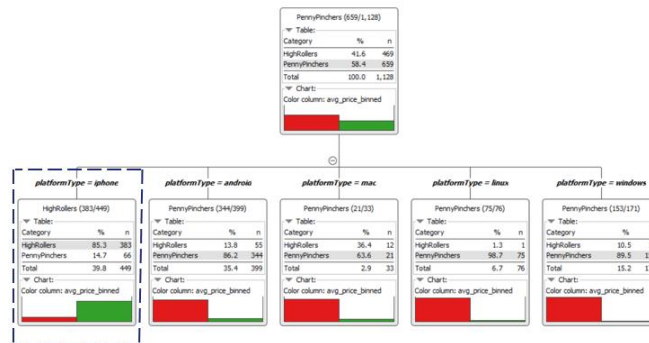


buyid 5 generate between 55% and 60% of total revenue

More than all items companied.

ItemID 5 generates between 55% and 60% of total revenue. It delivers more revenue than all other items combined. With this insight, we can develop a marketing strategy that boosts sales of ItemID 5 or perhaps derive a new similar item with a new package from the second-highest selling item.

## What have we learned from classification?



Eyes on the iphone.

Most of the players are using mobile platforms, the Iphone player is more likely to be High Roller while the android, Win and Linux players tend to be Penny Pinchers. Promotion of the game among iOS and Mac users will increase the total revenue.

## What have we learned from clustering?

Cluster #	[totalAdClicks, 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 add-clicks per user.

[totalBuyClicks](#): total number of in-app purchase per user.

[totalRevenue](#): total monny spent on in-app purchase item per user.

### K-means Cluster analysis based on these 3 attributes resulted in 3 cluster

Cluster 1 is different from the others in that the players in the cluster have the highest. 'totalAdClicks', 'totalBuyClicks' and 'totalRevenue'. They are frequent ad-clickers. We could increase the price for ads targeting for these players.

Cluster 2 is different from the others in that the players in the cluster have the second highest 'totalAdClicks', 'totalBuyClicks' and 'totalRevenue'.

Cluster 3 is different from the others in that the players in the cluster have the lowest 'totalAdClicks', 'totalBuyClicks' and 'totalRevenue'. They spend items with lower price. We could encourage them to spend more with promotional codes.

# Graph analytics on chat data

- Found the longest conversation chain and it's participants.
- Analyzed relationship between top 10 chattiest user and top 10 chattiest teams.
- Found the top 3 most active users based on clustering coefficient.



## Found the longest conversation chain and its participants

We could use this information to find hottest topic and business strategies on those.

## Analyzed relationship between Top10 chattiest users and Top10 chattiest teams

It seems that there isn't relationship between chattiest users and chattiest teams. This suggests that we may need different business strategies between the two categories.

## Found the Top3 most active users based on clustering coefficient

Promoting targeting these players should be more effective than "normal" players.

## Recommendation

- Focus in selling and developing in-app purchase item like the buyId 5.
- Promoting the game attract more iOS and Mac users.
- Target specific group of player obtained from the results of the clustering and graph analytics that we have.



Focus on selling and developing in-app purchase items like Item ID 5, it is the most profitable item.

Using the conversation data to find out the most important topics in circulation, for example (the packages to be included in the purchase element and others), including knowing who is the biggest influencer within the conversation data in order to use this user as a marketer of the game and in order to maintain the enthusiasm of the players. Create a promotional advertising plan to attract more iOS and Mac users.

Players on these two platforms are more likely to be high-end players who are willing to spend more promotions for most influential players, and can easily attract the community.

Allocate special features and prizes to each of the top ten players in 10 the individual ranking and the top 3 teams in the team ranking.

## End of presentation

Thanks all for your good attention and caring.  
My fully regards and respects.

