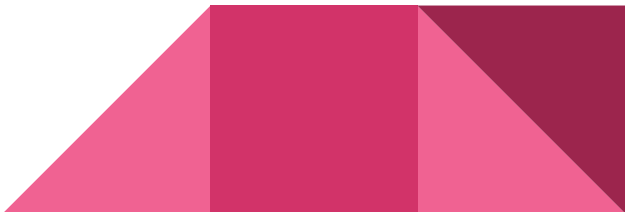# How can we increase revenue from
Catch the Pink Flamingo?

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Problem Statement

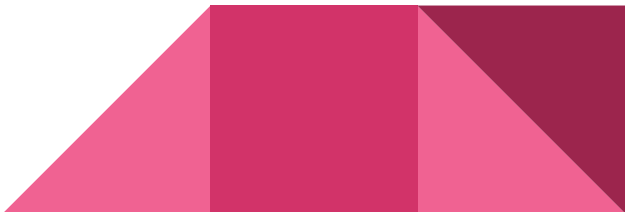How can we use the following data sets to understand options for increasing revenue from game players?

- **ad-clicks:** a line is added to this file when a player clicks on an advertisement in the Flamingo app.
- **buy-clicks:** a line is added to this file when a player makes an in-app purchase in the Flamingo app.
- **game-clicks:** line is added to this file each time a user performs a click in the game.
- Also there was a data represents the chat between users in their teams.

Data Exploration Overview

Our data set contains about 8 data sets to represents user behavior like the items that user bought and the number of game clicks and also contains about 5 data sets talking about relations between users and teams in chat data.

We used the first data set to get insights about user behavior as the total purchases was 21407 dollar and the top 3 buying users was using Iphone as a platform.

We also used the second data set to get the top 10 chattiest teams and also the top 10 chattiest users.

What have we learned from classification?

We classified the users by decision tree to users that bought items with more than 5 dollars and users that bought items less than or equal to 5 dollars.

The classification showed that users that tend to buy items with more than 5 dollars use **Iphone** as a platform.

What have we learned from clustering?

We cluster user into 4 cluster based on average income and ad-clicks and we found the following:

Cluster number	Average income	Ads clicks
Cluster 1 (recommendation)	Much	Few
Cluster 2 (reasonable)	Much	Many
Cluster 3 (recommendation)	Few	Many
Cluster 4 (reasonable)	Few	Few

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

From our current analysis we get the top 10 chattiest user and the top 10 chattiest teams also we managed to get density of users' group.

The other things we should consider is to get the groups with **no interaction** for a while then trying to find the reason may be the users found the system undesirable also we can find the **rush hour** or the time that the system can have much interaction as this may help in developing the system itself.

Recommendation

1. Some users clicks few clicks but buy more items we should display expensive items to them.

2. Some users clicks more but without buying much items so display ads with more expensive click money will increase our revenue from ads.

3. Try to get the groups with no interaction archived in deep of our systems as the more interaction in group was the more we need it and vice versa.

4. Developing our Iphone platform app as their users are tends to buy more.