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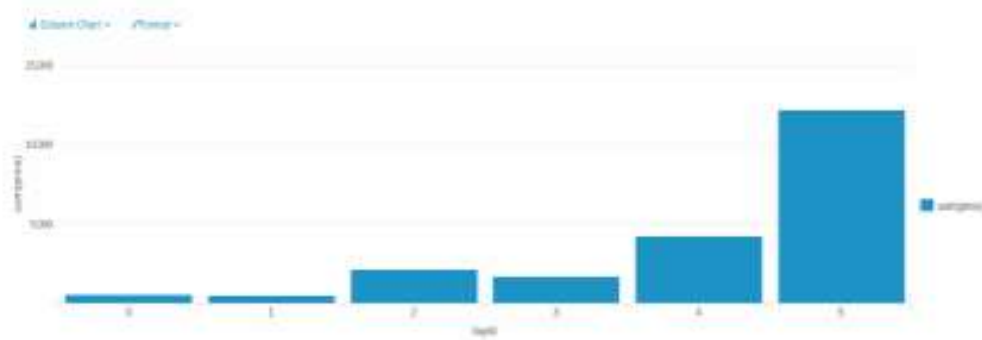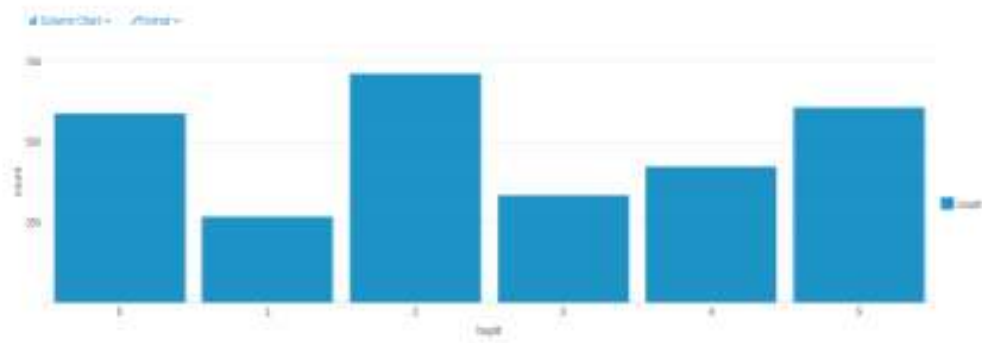# Catch the Pink Flamingo?

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Problem Statement

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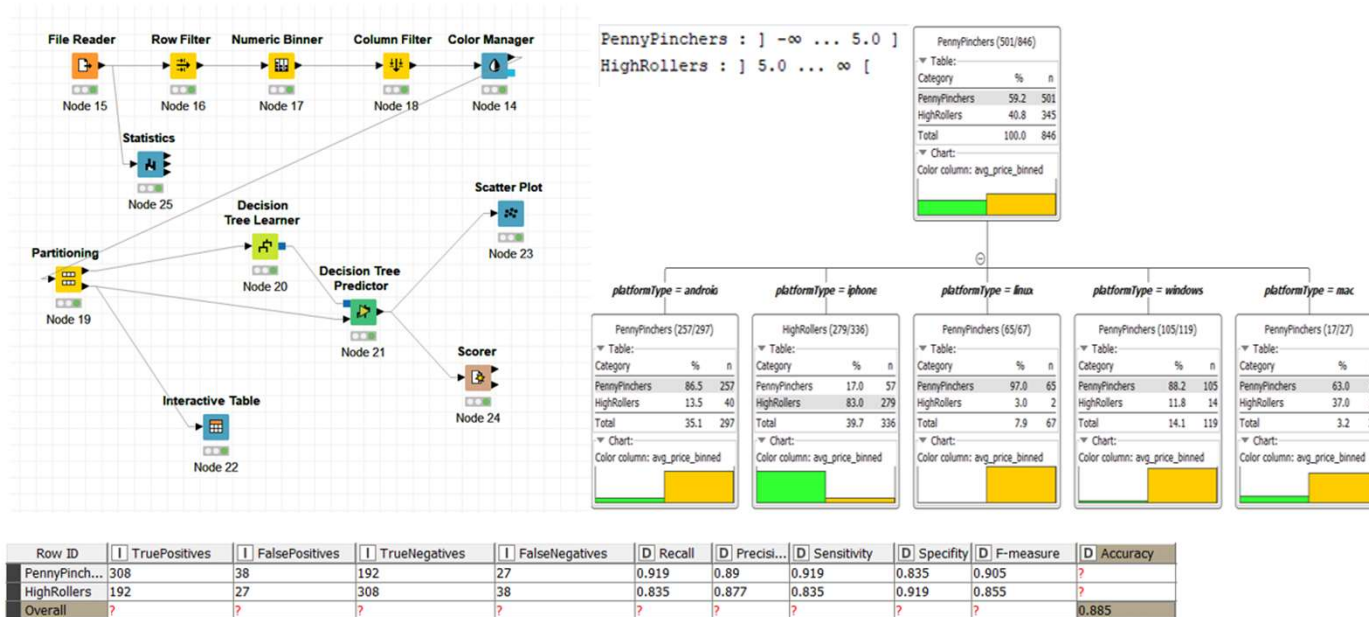
Data Exploration Overview

• item "2" is the most purchased, the item "1" is the least purchased

• tem "5" made the most money, and the item "1" made the least money

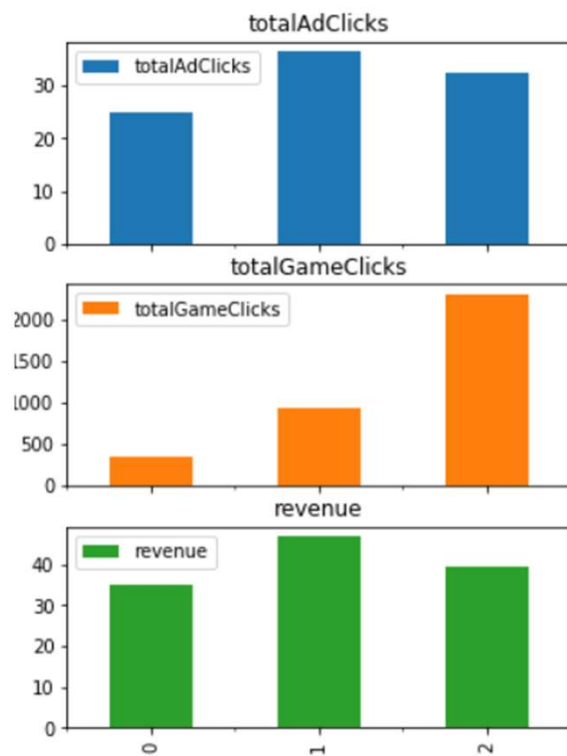# What have we learned from classification?

What makes a HighRoller vs. a PennyPincher?*
People who use iPhone are HighRollers

*HighRollers (buyers of items that cost more than $5.00) and PennyPinchers (buyers of items that cost $5.00 or less)

What have we learned from clustering?

totalAdClicks

totalGameClicks

revenue

Train KMeans model

```
km_model = KMeans.train(parsed_data, 3, maxIterations=10, initializationMode="random")

headers = cluster_df.columns.values.tolist()
centers = [a.tolist() for a in km_model.centers]
```

Display the centers of three clusters formed

```
df = pd.DataFrame(centers, columns=headers)
df.head()
```

	totalAdClicks	totalGameClicks	revenue
0	36.441341	926.117318	46.966480
1	32.355556	2310.644444	39.422222
2	24.987461	357.959248	35.065831

Recommended Actions

Action Recommended	Rationale for the action
Target specific lower cost promo/discounts for Cluster 2.	Cluster 2: Customers that are very active and generate a moderate amount of revenue. If we could make them buy a bit more with cheaper prices, we could take advantage of their habit.
Target specific higher cost premium features for Cluster 1.	Cluster 1: Customers that are very cash convertible with ads even if they play a moderate amount, generating a high amount of revenue. These guys like to spend their money, even if they aren't playing all the time. They are probably older and have a day job. We should target premium features and personalize adds so that they are aware and can spend their cash.

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

Find and target all influencers:

If we can identify these highly interactive neighborhoods, we can potentially target some members of the neighborhood for direct advertising. These will influence the rest on buying the same products.

Recommendation

• Offer more products to iPhone users

• Provide more products to "high level spending user"

• Provide some fixed pay packages or promotion to users, especially to "low level spending user"

• Target influencers that will spread the word of our products