



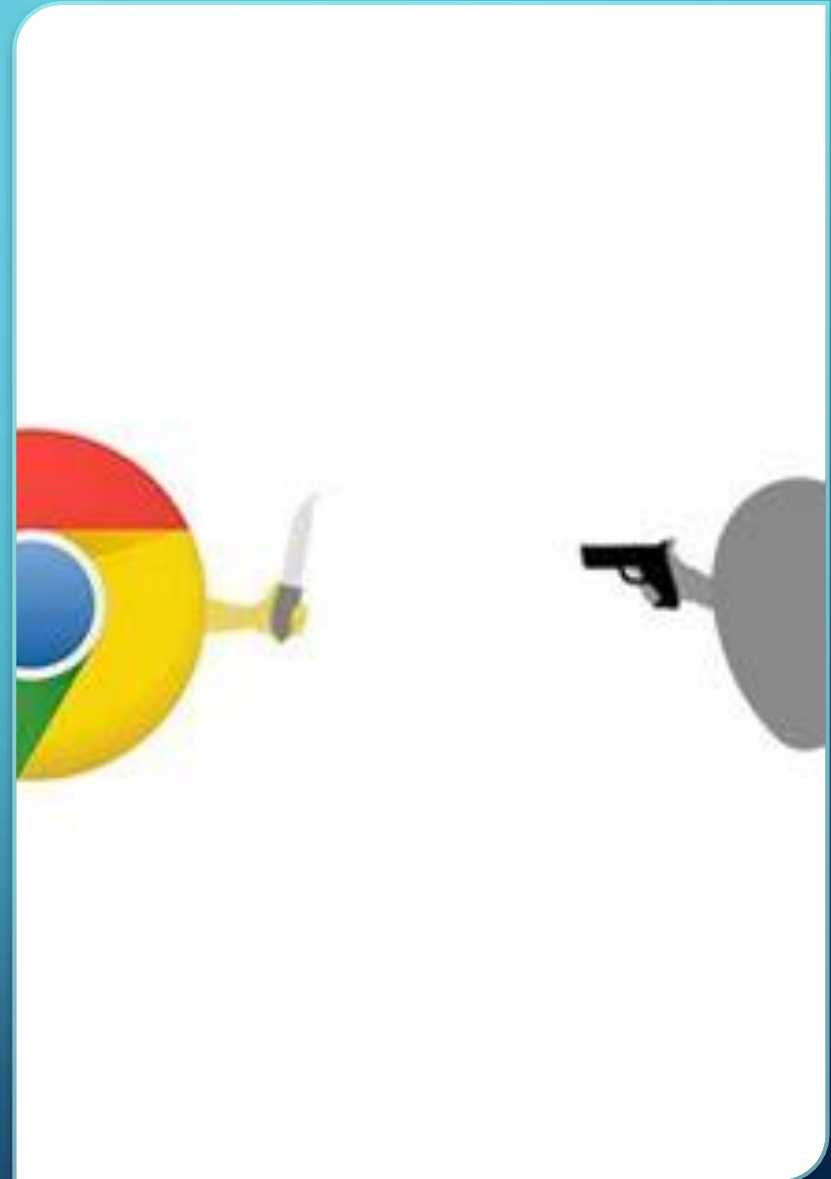
APPS PROJECT

SPRINGBOARD PROJECT – JONNY PEARCE
– JULY 2023

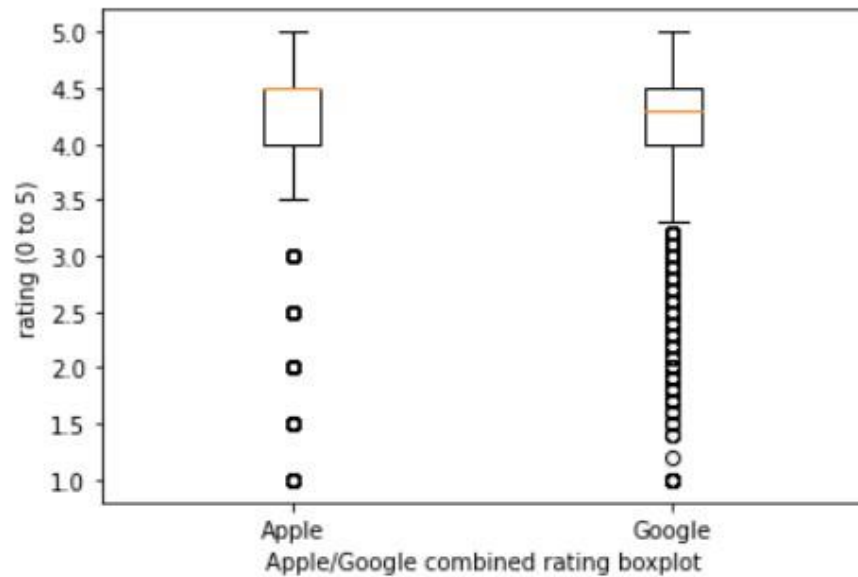
THE PROBLEM

- Splendid Marketing Consultancy Ltd wants to build a major apps store into its user interface.
- Faced with a choice between using Google Play to source apps or Apple Store.
- Could use both, but business aim is to strike deal with one or the other.
- Key test: Do Apple Store apps receive better reviews than Google Play apps?

Let's find out ...

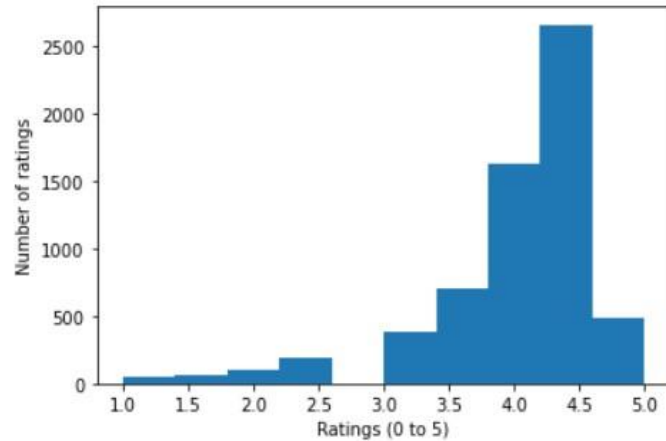


KEY STEP 1 – SOURCING, CLEANING, TRANSFORMING AND VISUALISING THE DATA

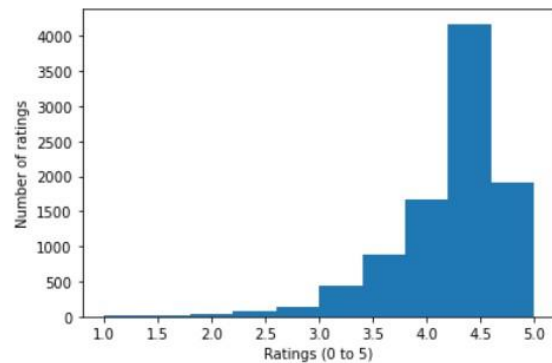


- Sourced app review data for both Apple and Google stores
- Reduced datasets to key columns/values, focusing on category/genre of app, ratings, reviews and price – as initial starting point
- Cleaned data to remove extraneous detail/characters, ensured working with correct datatypes, added platform labels, etc.
- Merged the two datasets, removed null values, removed apps that have received no reviews.
- Compared ratings columns – see boxplot

Apple



Google



KEY STEP 2 MODELLING

- Hypothesis formulation
 - Null – observed difference in mean rating of Apple Store and Google Play apps is due to chance (not due to platform)
 - Alternate – observed difference is due to platform
 - Significance level of 0.05
- Non-parametric test used due to data not being normally distributed.
- Carried out permutation test – re-ran 10,000x
- Confirmed observable difference in preference towards Google Store apps

RECOMMENDATION



- Data analysis/permutation testing shows statistically significant result to reject null hypothesis that difference in average ratings is due to chance alone.
- Therefore, Splendid Marketing Consultancy should integrate **only Google Play** into their operating system interface.