

A/B Test on launch of a new banner

About the company

- E-commerce company
- 2 segments: boutique fashion items and high-end decor products and food & drinks
- Key stakeholders:
 - Mei Kim, Head of Marketing
 - Leila Al-Farsi, Product Manager, Growth
 - Growth Product & Engineering Team
 - Alejandro Gonzalez, User Experience Designer, Growth



Question asked by the company

• Will introducing a new banner at top of the website with highlighted food & drinks, increase conversion rate and as a result revenue?



Experiment to answer the question asked....

- A/B Testing
- Hypothesis Test includes:
 - Null Hypothesis: conversion rate is not dependent on showing the banner at the top of the website
 - Alternate Hypothesis: The conversion rate is directly dependent on showing the banner on the website
 - Significance Level (α)
- 2 sample groups:
 - Control Group or Group A: existing landing page without banner
 - Treatment Group or Group B: landing page after the launch of the banner
 - $\alpha = 0.05$



Experiment Continued....

- No. of users in A: 24343
- No. of users in B: 24600
- Conversion Rate of Groups A & B
- Probability of rejecting or accepting the Null Hypothesis

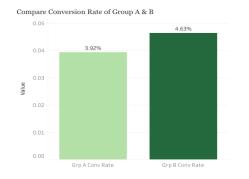
RESULT:

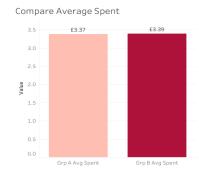
p-value $< \alpha$, Null Hypothesis REJECTED.



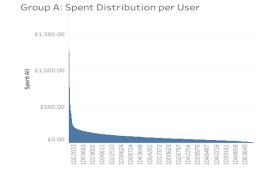
Analysis....

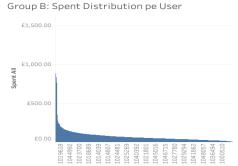
Conversion Rate & Average Spent of Test Groups A & B





Spent Distribution for Test Groups A & B







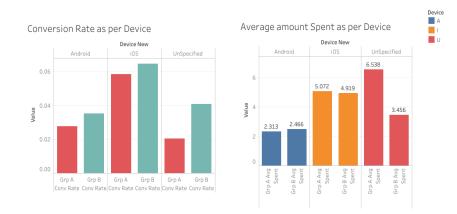
Analysis Continued....

- conversion rate of Treatment Group > Control Group
- average spent of both groups are almost same



Analysis Continued....

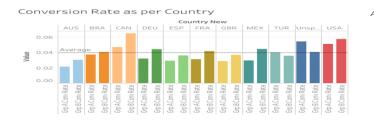
Comparison of Test Groups A & B as per Device



Comparison of Test Groups A & B as per Gender



Comparison of Test Groups A & B as per Country







Analysis Continued...

- Unspecified device segment has less conversion rate < iOS, but spent amount is highest
- Female segment conversion rate & spent amount both high
- North American countries have higher conversion rate as compared to others.



Recommendations

- Launch of banner for next 3 months and reconsideration to continue at the end of quarter
- Scope high with Unspecified device segment. More research to be done on them.
- Marketing strategy to attract male, unspecifies & others in the gender segment.



Thank You

