

New Homepage Analysis Report

PRESENTATION

Silas

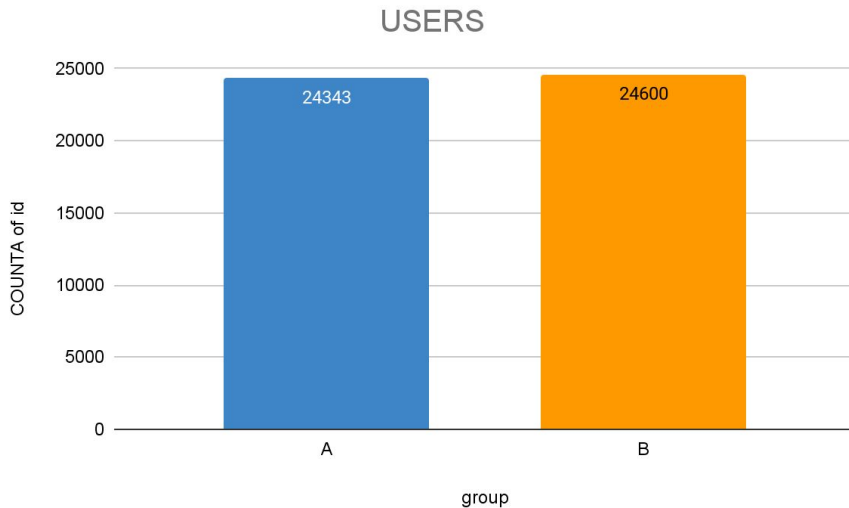
22/12/2023

Experiment

- The test of the new Homepage design spanned a two-week period from January 25, 2023, to February 6, 2023.
- It involved a total of 48,094 users, with 24,343 users in the control group and 24,600 users in the treatment group.
- The primary goal of this test was to increase revenue generated from the new products.

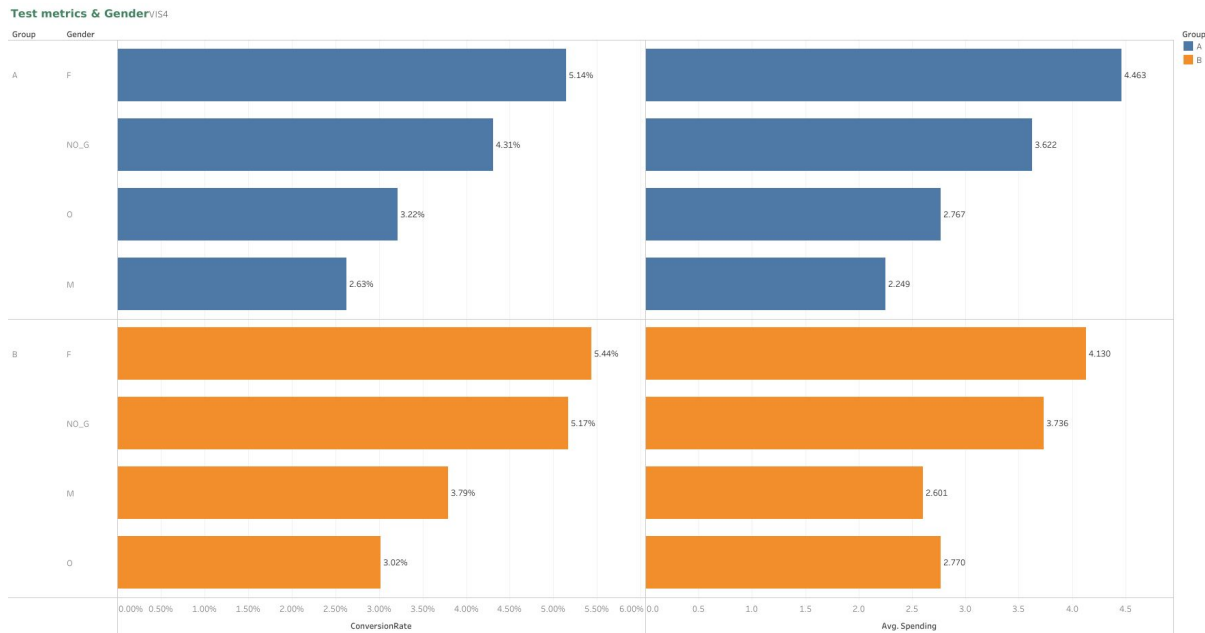
Things to note;

- Some Users_id had NULL records under some fields like gender and device.



RESULTS

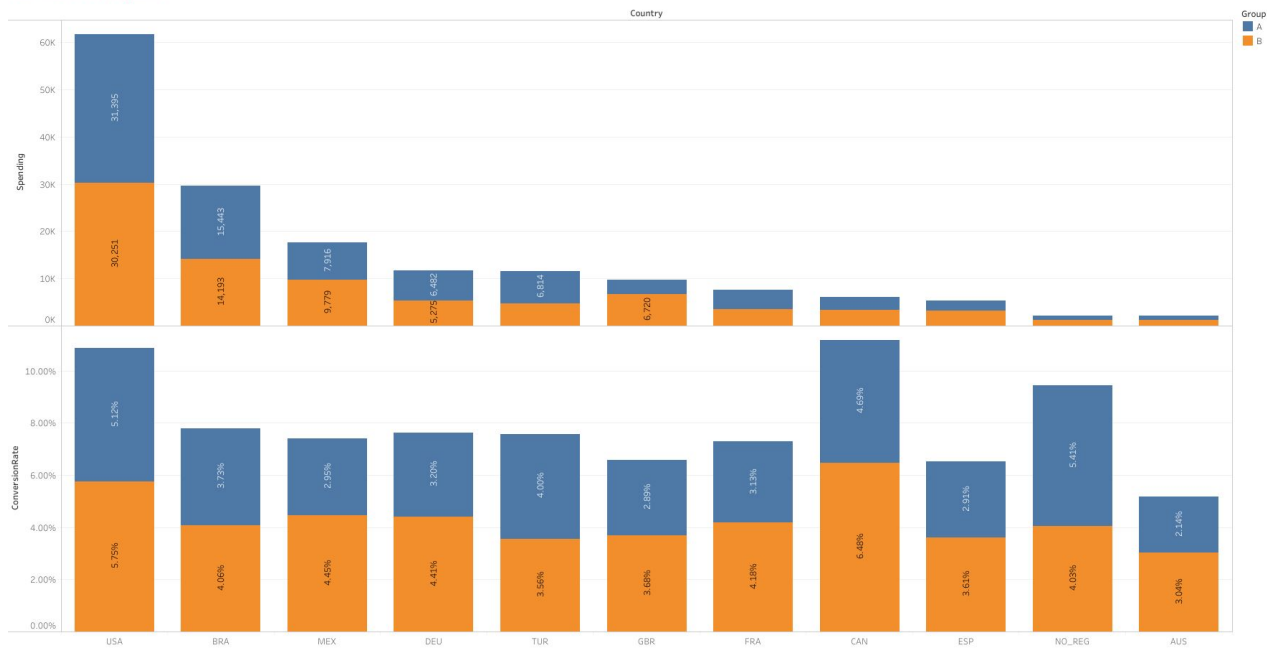
- The female gender exhibits a leading position in both conversion rate and spending, showcasing a 0.30% increase in treatment.
- The variable 'No_G' demonstrates significant impact, notably displaying the largest difference in conversion rate between treatment groups.



RESULTS

- The USA has the highest spending but ranks second in conversion rate after Canada.
- When considering Treatment (B), there was a higher conversion rate compared to the control (A).

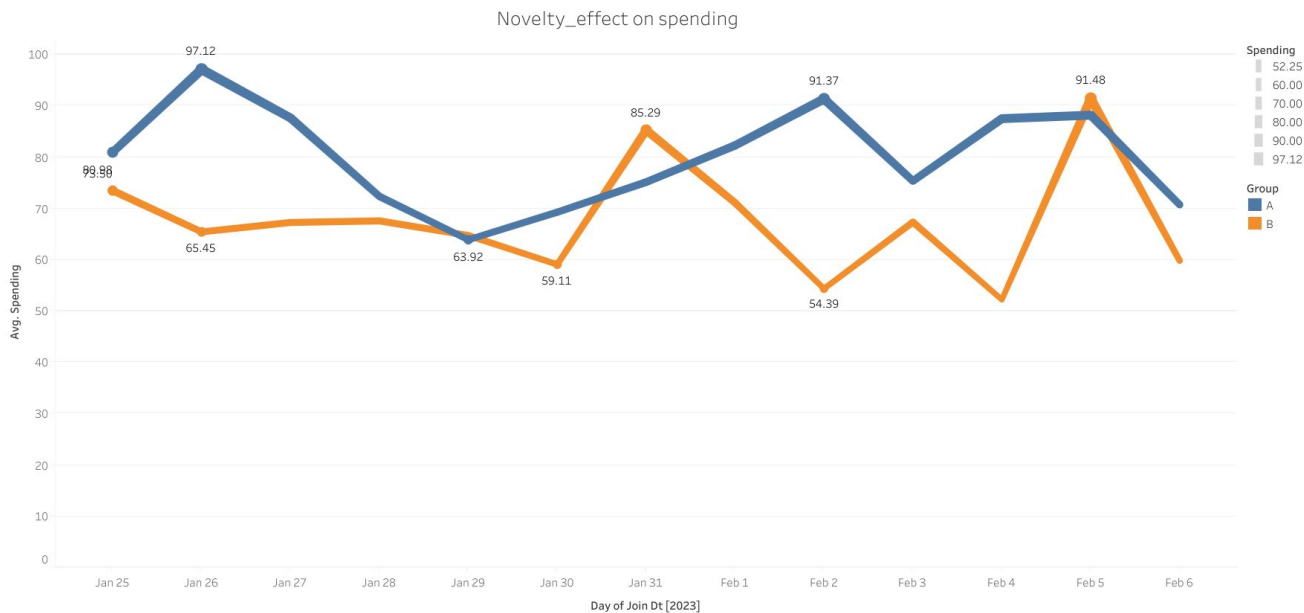
Test metrics & Regions



RESULTS

Novelty Test

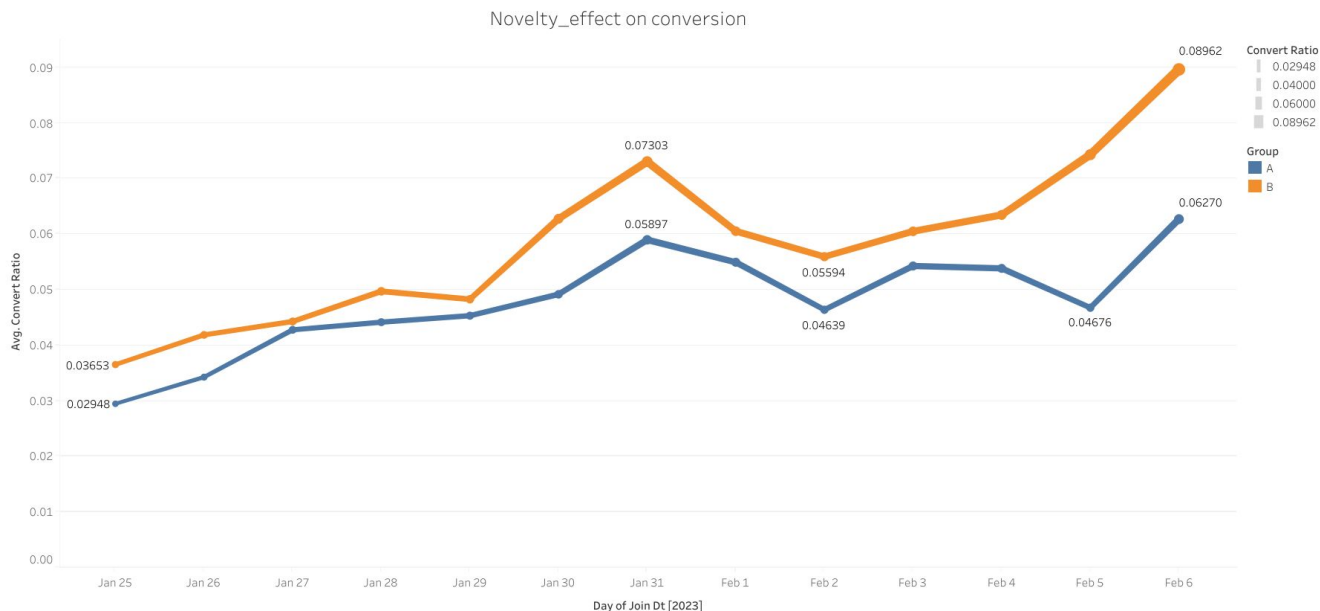
- Group A starts with higher spending but experiences a significant drop around Jan 28 before recovering and peaking on Feb 3. I
- In contrast, Group B begins with lower expenditure, sees an increase around Jan 28, and peaks earlier than Group A on Feb 1.
- **The behavior in both groups may be due to other factors, not due to the new project.**



RESULTS

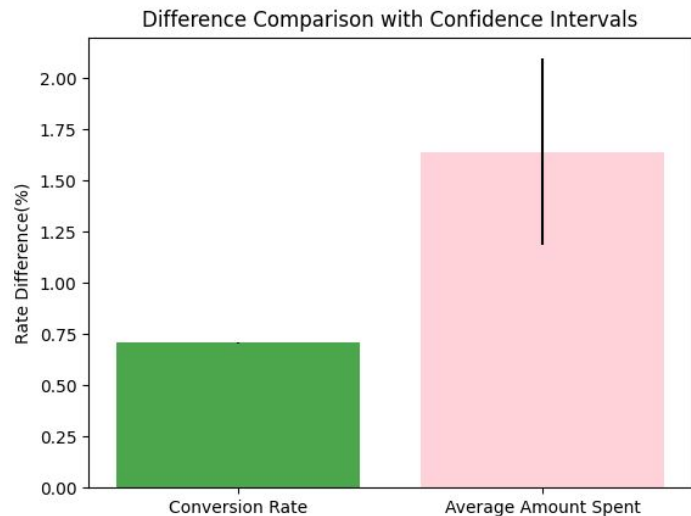
Novelty Test

- Test group (B) experiences a significant increase in the conversion ratio, peaking around January 31 before a decline in February 2.
- The control group (A) depicts the same projection but with a lower conversion rate.
- **B has a higher conversion rate than A. No indication of a novelty effect.**



RESULTS

Roll out the experiment



There is a positive differences in conversion and spending rate between the groups . In general, test group has a higher rate.

- The hypothesis testing indicates that there is a significant difference in the mean of the conversion rate between the two treatments.
- In terms of conversion rates, the treatment group demonstrates a favorable outcome concerning gender and regional factors.
- There is no clear evidence of novelty effect in both the estimators, although there is higher conversion rate in treatment group. Additionally, the spending rate curves for both treatments exhibit a relatively fluctuations.
- Considering the positive mean difference of 0.71% revealed by the hypothesis testing and the shorter duration of the change aversion effect, I recommend proceeding with the rollout of the experiment.