GloBox New landing Page A/B testing

By: Jayanthi Rao Date: 07/05/2023

Summary

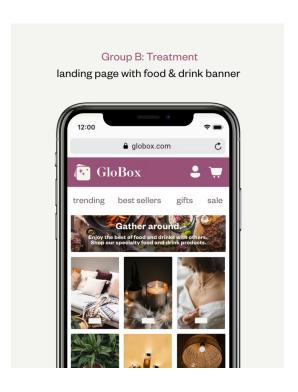
The goal of the experiment was to find whether or not to launch the new landing page for all users. Data was analyzed using Python.

I recommend that we launch the new landing for all users as there was a significant difference in the conversion rate between two groups.

Context

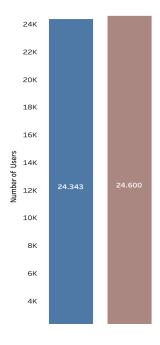
I ran an A/B test that highlighted key products in the food and drink category as a banner at the top of the website. The control group (Group A) does not see the banner, and the treatment group (Group B) sees it.





The experiment was mainly run on a mobile website. A user who visits the GloBox main page is randomly assigned to control (Group A) and treatment group (Group B). Control group has 24343 users, the treatment group has 24600 and total users are 48943. The user may or may not purchase products from the website. If the user makes one or more purchases either on the joining date or in the future, this is considered as conversion rate.

Number of Users in Group A and B



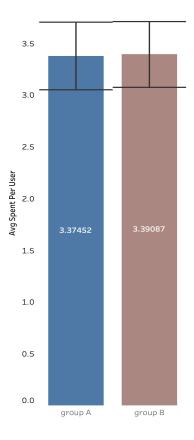
Result

In order to determine whether to launch the new experience to all users, we ran hypothesis tests.

1. On average amount spent per user in Group A vs Group B

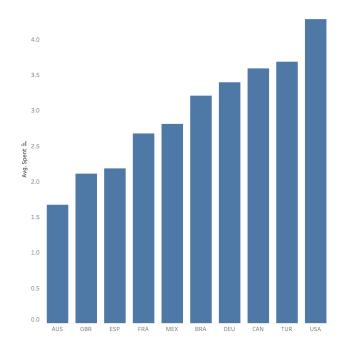
We did not see a statistically significant difference in the average amount spent per user between the two groups at the 5% significance level (p=0.943). The 95% confidence interval for the difference in average amount spent per user between the two groups is (-0.439, 0.471).

Average amount spent per user: Group A vs Group B

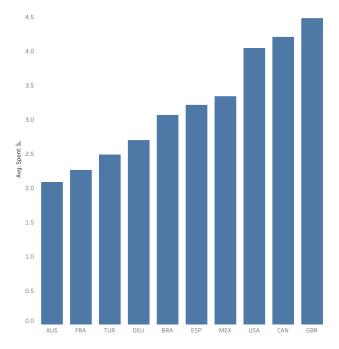


The average amount spent per user in group A is highest in the USA and in group B it is highest in GBR.

 $\label{eq:comparison} \textbf{Group A}$ Average amount spent per user in both groups based on countries



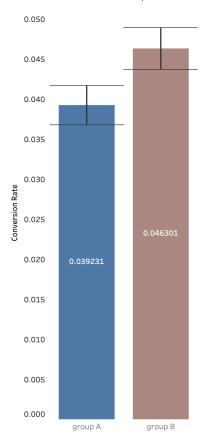
 $\label{eq:Group B} \mbox{Average amount spent per user in both groups based on countries}$



2. On the conversion Rate in Group A vs Group B

There was a statistically significant difference in the conversion rate between the two groups at 5% significance level (p=0.0001). The 95% confidence interval for the difference in the conversion rate between the two groups is (0.0035, 0.0107).

Conversion rate: Group A vs Group B



Recommendations

Based on the above result, even though there was no difference in the average amount spent per user, there was a significant increase in the conversion rate in the treatment group. So I recommend that we launch the new experience for all users.

The link to the dashboard is included below:

https://public.tableau.com/app/profile/jayanthi.rao.hosbett.ramesh/viz/abtesting_1683226825588 0/Story1?publish=yes