

A/B Test Analysis

By: Marcia Espinosa

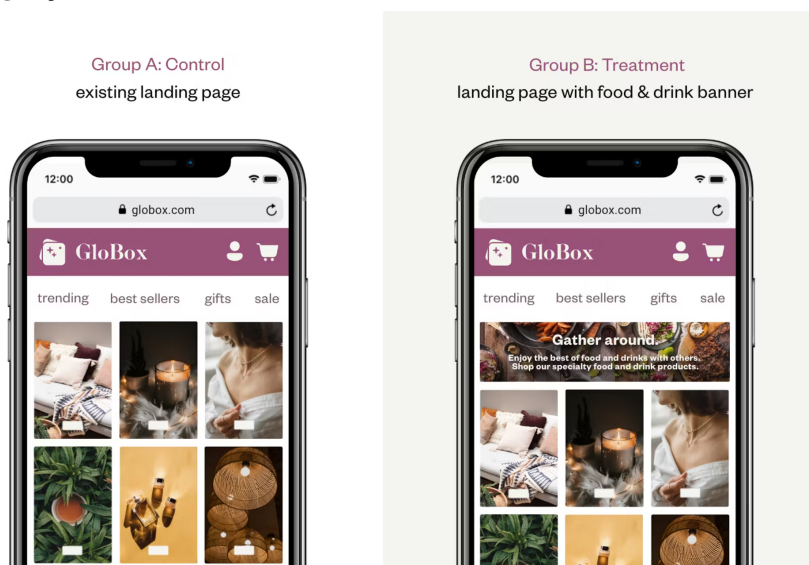
Summary

Statistics showed a significant increase in Conversion Rate between the control and treatment groups, suggesting that the change had a positive impact on overall user engagement. However, it is uncertain whether the specific new banner contributed to increase the revenue and further experiments or data analysis may be needed before launching the new design.

Context

The Globox team run an A/B test to increase revenue by bringing awareness to key products in the food and drink category through a banner at the top of the website, as shown below.

The company aims to further boost revenue by increasing awareness of this product category



The experiment was conducted on the mobile website, and the users were randomly assigned to either the control or test group. The metrics used to measure the success of the experiment were the **Conversion Rate of action purchases**. Data was collected

for 12 days, and a total of 48943 unique users visited the website, of which 24343 were in the control group (A) and 24600 were in the experimental group (B).

Results

Based on the results of the experiment, we can conclude that the new banner had a statistically significant effect on the conversion rate. The data showed that the treatment group had a higher conversion rate compared to the control group, with a difference of 0.71%. This difference was found to be statistically significant as evidenced by the p-value of 0.00011, which was less than the significance level of 0.05.

Furthermore, the 95% confidence interval for the difference in conversion rate between the control and treatment groups did not include zero, which provides additional evidence for the statistical significance of the result. The interval was [0.0035, 0.0107], which suggests that we can be 95% confident that the true difference in conversion rate between the two groups lies within this range. Therefore, we can conclude that the new banner had a statistically significant effect on the conversion rate.

Recommendation

I recommend that we do not launch it. Statistics showed a significant increase in Conversion Rate between the control and treatment groups, it is likely that the change had a positive impact on overall user engagement and behavior. However, the experiment only focused on highlighting key products in the food and drink category and it is uncertain whether this specific change contributed to the observed increase in conversion rate.

To better understand the impact of the new banner, it may be useful to conduct further experiments or gather more data on user behavior, such as surveys or analyzing user feedback. Additionally, analyzing the types of products that were purchased by users in the experimental group could also help determine whether the new banner had a specific impact on the food and drink category or on overall purchasing behavior.