GloBox A/B Test Results - Recommendation

By: Data Analyst Team Date: July 02, 2023

1. Summary

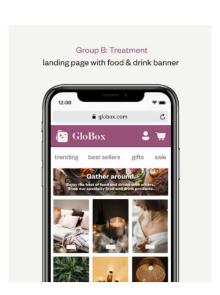
Recommendation: Continue iterating

We recommend that the team continue iterating the new homepage because we did not observe strong evidence that there was an increase in revenue per user.

1.1. Context

GloBox is an e-commerce company operating an online marketplace that specializes in sourcing unique and high-quality products from around the world. The Growth team recently conducted an A/B test to evaluate the effectiveness of a banner feature on the website page highlighting key products in the food and drink category on the website's main page (mobile only).

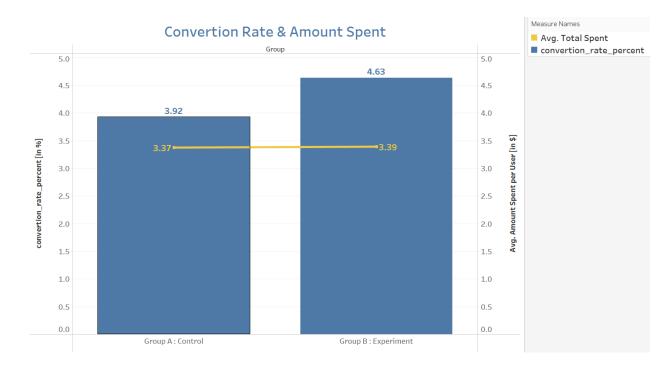




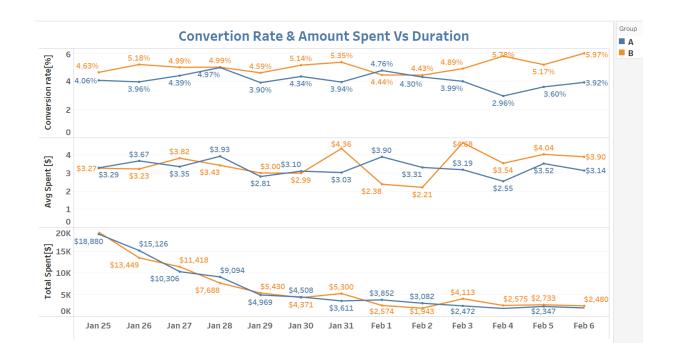
The experiment ran for 2 weeks in Q1 2023. There were 24343 users in the control group (Group A), 24600 users in the treatment group (Group B), and 48943 total.

2. Test Results

In order to determine whether there was a difference in average revenue per user and conversion rate between the two groups, we ran a hypothesis test. The analysis of the A/B test results did not yield a substantial improvement in our success metrics, thereby raising concerns about releasing the banner feature in its current state. However, we did observe a statistically significant increase in one of the success metrics, specifically the User Conversion Rate. Conversion rate for the control group was 3.92% and 4.63% for the treatment group. Avg amount spent for the control group was \$3.37 and \$3.39 for the treatment group.



Additionally, a possible novelty/seasonality effect was identified which indicated a decline in the Total amount spent over the duration of the A/B testing.



2.1. Revenue Impact

Given the valuable real estate occupied by the banner, particularly on smartphone screens, it is crucial to ensure that its implementation leads to a practically significant increase in revenue per user, surpassing the threshold of 5%. Presently, we have not achieved this target, prompting the need for further improvements.

3. Recommendations for Improvement

Despite the limited success, there are some promising insights that suggest potential enhancements to the banner experience, increasing the likelihood of achieving better results in subsequent tests. The following recommendations are proposed:

- 1) Enhance Clickability: Update the banner design to make it visually clickable and inviting. Consider adding a button to prompt user engagement.
- 2) Conduct Another A/B Test:
 - a) Design a new A/B test with a sample size increased by 3 times. This larger sample size will enhance the statistical power and provide more robust results.
 - b) Extend Test Duration: Increase the duration of the test by one additional week to identify and analyze the long-term trends related to the novelty/seasonality effect.
- 3) Perform Comprehensive Data Analysis: Conduct thorough data analysis upon completion of the extended test to gain deeper insights into user behavior and make an informed decision.

3.1. Practical Significance

For an online e-commerce company, even a modest increase of 3% to 5% in average revenue per user holds practical significance. Therefore, investing in another iteration of the A/B test is highly recommended. The data-driven approach will enable us to make an informed decision based on conclusive results, outweighing the associated costs and efforts.

4. Conclusion

In conclusion, the current A/B test results did not provide enough confidence to proceed with the release of the banner feature. However, by implementing the recommended improvements and conducting another iteration of the test, we have a significant opportunity to achieve the desired impact on key success metrics. The potential revenue increase and the practical significance of such improvements make it worthwhile to invest in further testing and analysis.