

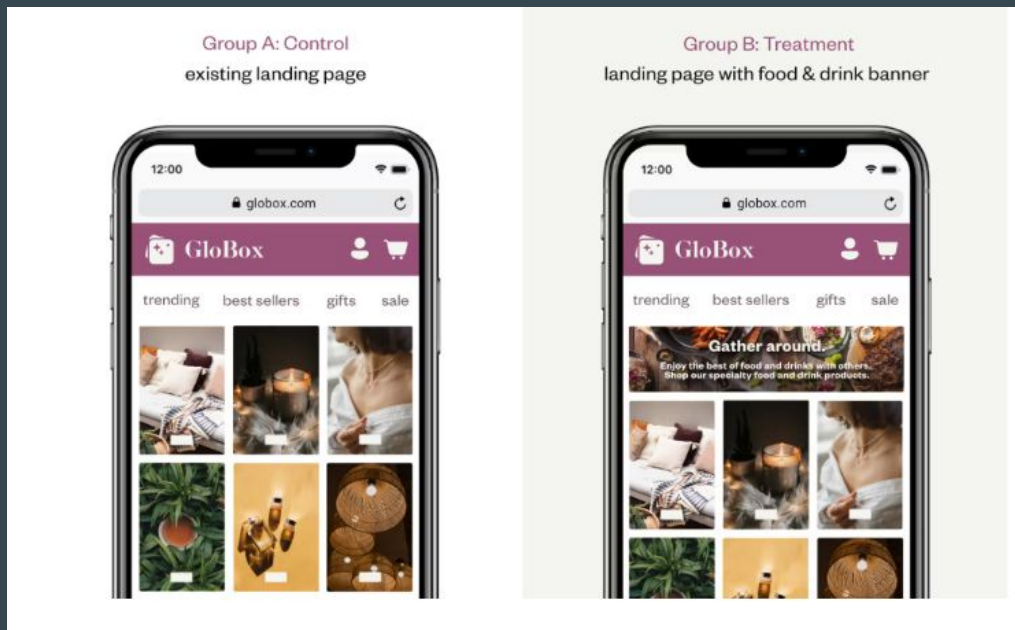
A/B Test For GoBlox

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July 31, 2023

Overview

- **GloBox** is primarily known amongst its customer base for boutique fashion items and high-end decor products. However, their food and drink offerings have grown tremendously in the last few months, and the company wants to bring awareness to this product category to increase revenue.
- Now we need to use an A/B test because it empowers businesses and individuals to make data-driven decisions, optimize user experiences, increase conversions, reduce risks and costs, foster continuous improvement, and objectively compare alternatives.



Understanding the problem

Item 1

- We have a total of 48943 separate in two groups:
Control Group (A) = 24343
and Treatment Group (B) = 24600

Item 2

- The experiment had a duration of two months

Item 3

The control group will use the regular app, while the treatment group will undergo a change to see if it affects profits and interactions positively.

Project objective:

We want to know the percent of conversion and how successful was the changes we used for the treatment group.

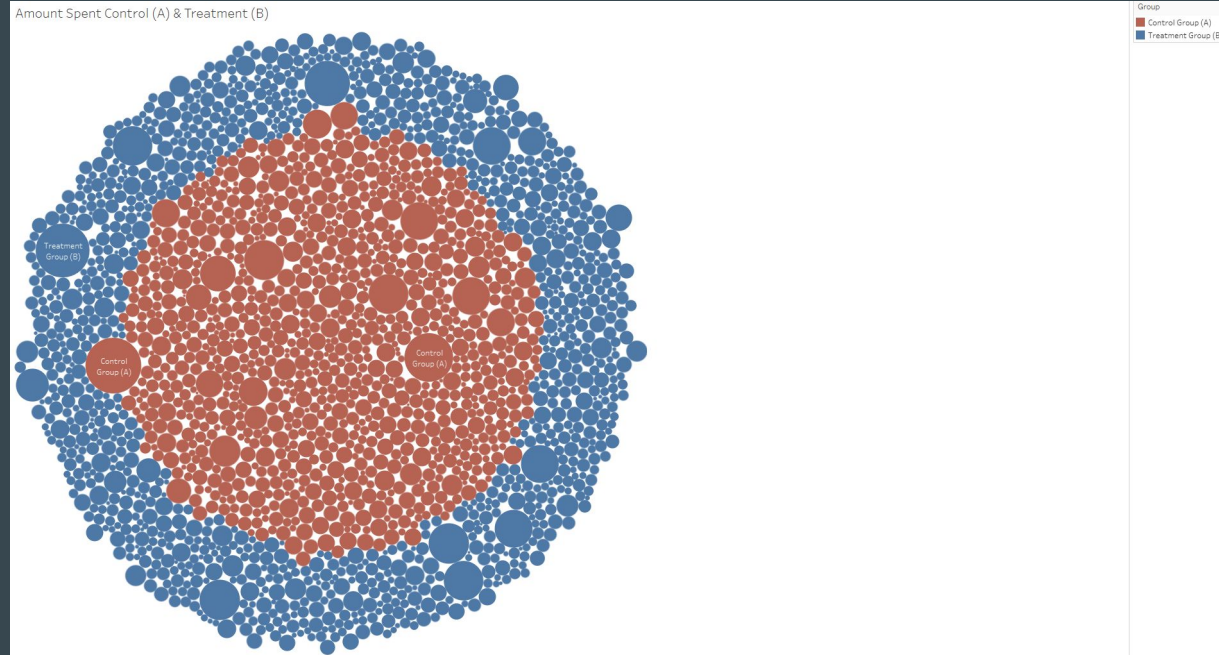
Here it can be observed that the average expenses were slightly higher in the treatment group; therefore, the conversion rate is slightly higher than the control group.

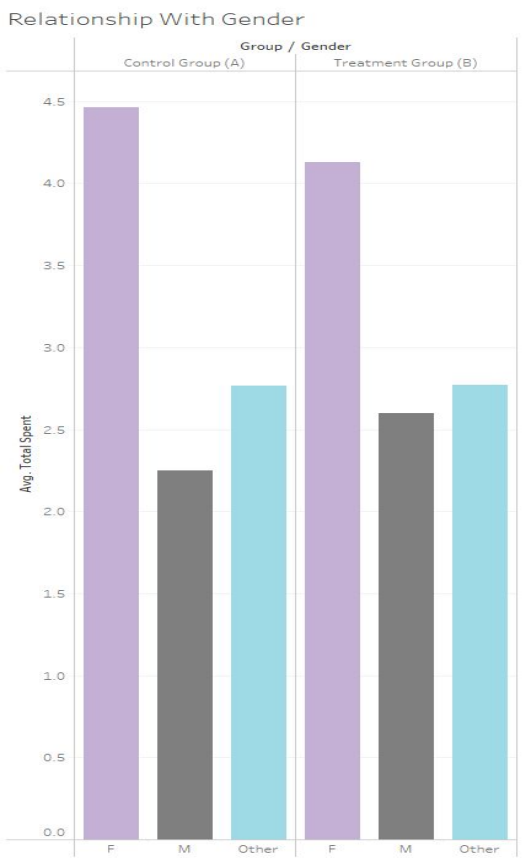
AVG Spent

Group	AVG Spent	Conversion Rate
Control Group (A)	3.375	0.039
Treatment Group (B)	3.391	0.046

Total Expenses Between Groups

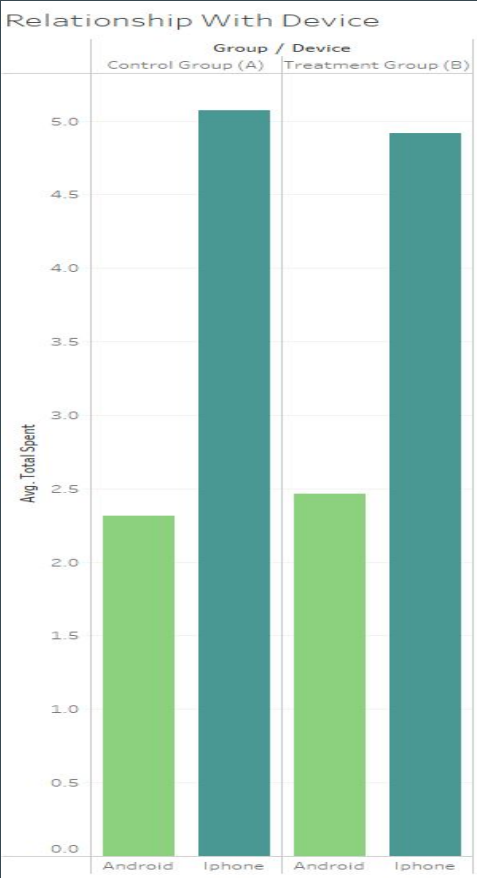
- In this graph, the total expense per individual using the app is shown, where the larger circles represent higher spending between the control group (orange color) and the treatment group (blue color).



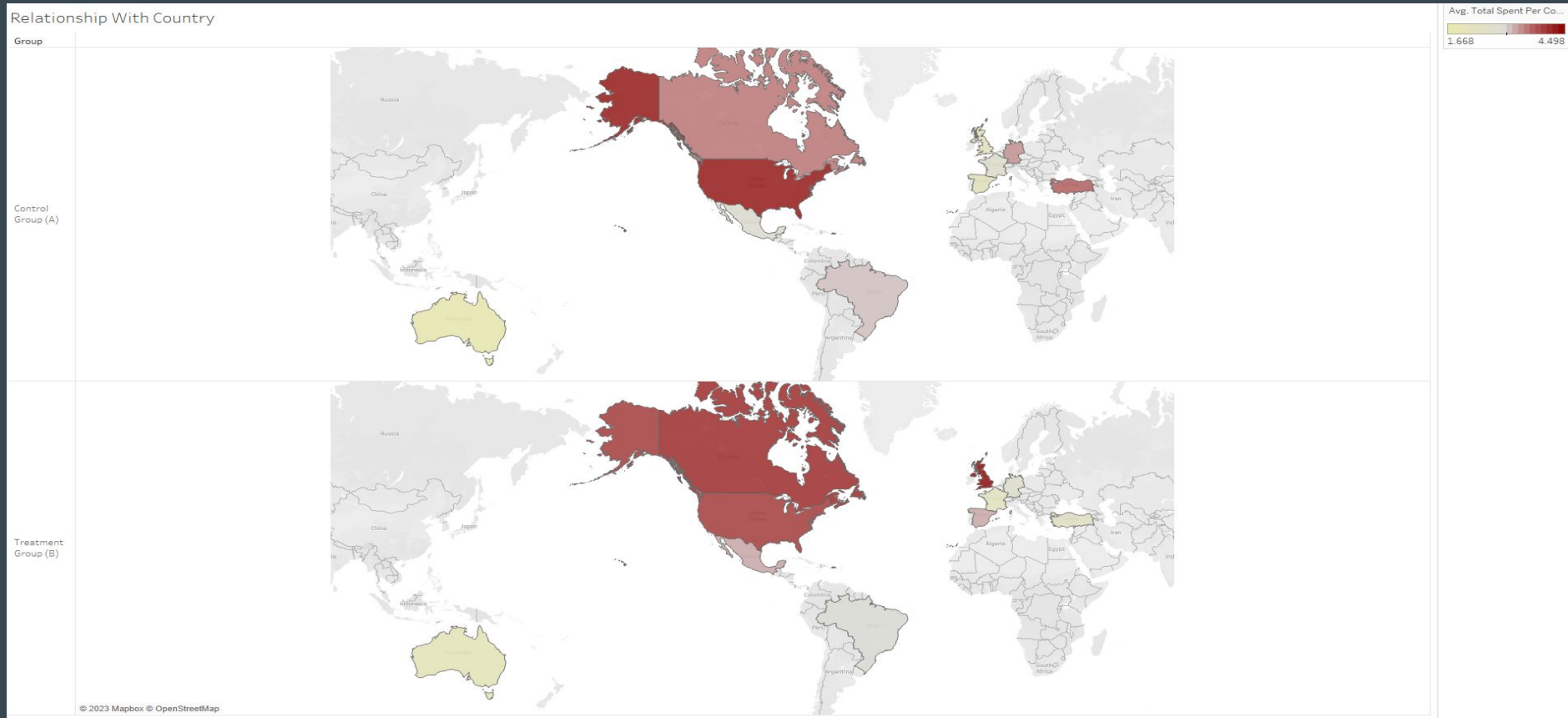


The female gender had a conversion rate of 5.14% for the control group and 5.43% for the treatment group, both of which were higher than those for males and others in both groups. Similarly, the average expenses in the app were higher for the female gender, with 4.46 in the control group and 4.13 in the treatment group.

Comparing the devices, between iPhone and Android. The average expenses for both groups occurred on iPhone devices, with the Control Group having an average of 5.07 and the treatment group 4.91. This is almost double compared to those who used Android.



In this map, we can identify the differences in total expenses and conversion rates, by country, keeping in mind that the redder the color, the higher the percentage and expenditure. It can be observed that there was a higher concentration of users in North America.

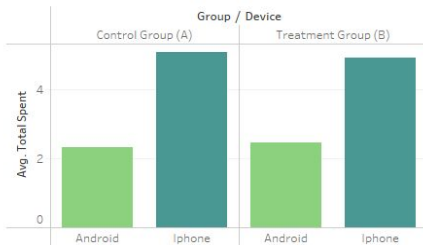


Full View Of Analysis

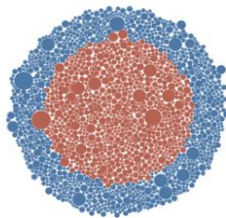
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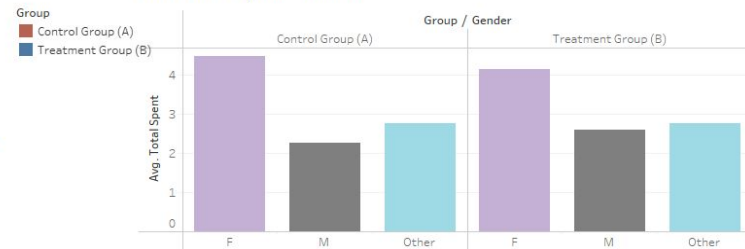
Relationship With Device



Amount Spent Control (A) & Treatment (B)



Relationship With Gender



Relationship With Country



Avg. Total Spent Per Country



Recommendations

After all this analysis, we can provide a recommendation for the company. Following the A/B test, it can be said that the change is not conclusive, and the difference is not significant enough to conclude that it is worth making the change in the application. In conclusion, the change is not very significant to deserve implementing it. The company should try other changes and conduct this test again to pursue the desired outcome. Thank you for your attention, and if you have any questions or inquiries, please don't hesitate to let me know.