AB TEST

Globox Landing site

Group A: Control

existing landing page

Group B: Treatment

landing page with food & drink banner

Metrics that define success :

- Conversion rate.
- Revenue generated.

Time frame:(25/01/2023) to (6/02/2023)
12 (days)
User ID(count): 48943

An A/B test is an experimentation technique used by businesses to compare two versions of a webpage, advertisement, or product feature to determine which one performs better.

Conversion Rate :

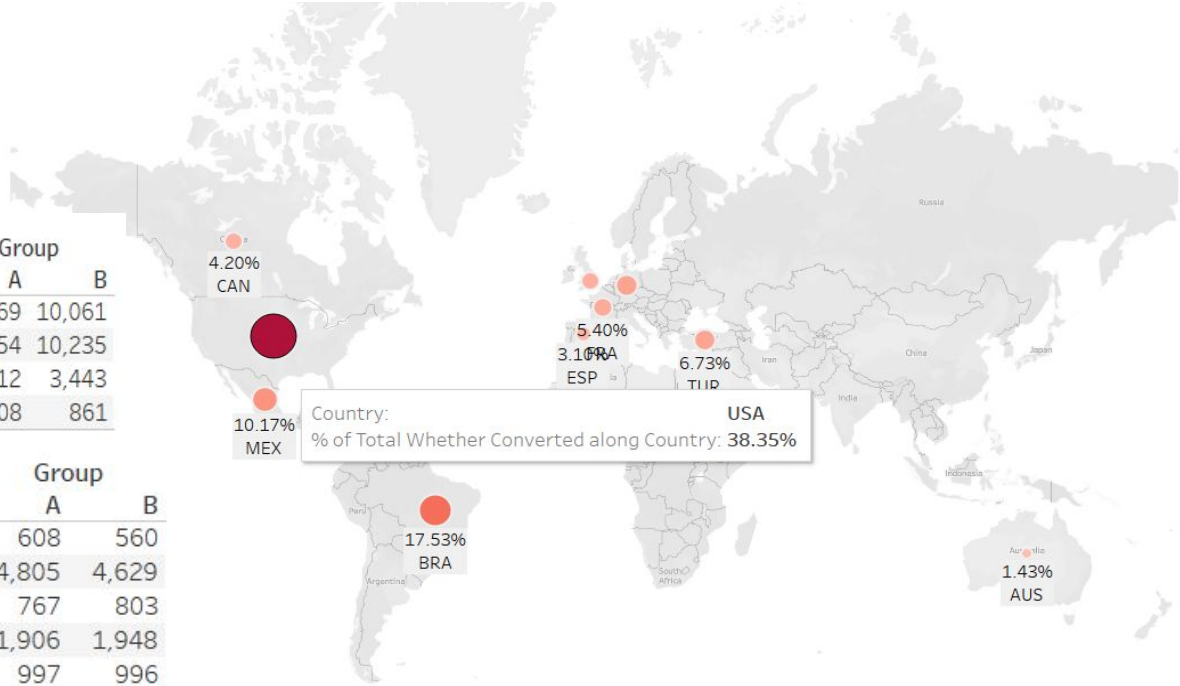
Group A	Group B
24,343	24,600
955	1,139

Gender conversion percentage

Gender	Group A	Group B
F	10,069	10,061
M	10,054	10,235
not_available	3,412	3,443
O	808	861

Country	Group A	Group B
AUS	608	560
BRA	4,805	4,629
CAN	767	803
DEU	1,906	1,948
ESP	997	996
FRA	1,536	1,554
GBR	1,455	1,494
MEX	2,815	2,923
not_available	296	347
TUR	1,849	1,883
USA	7,309	7,463

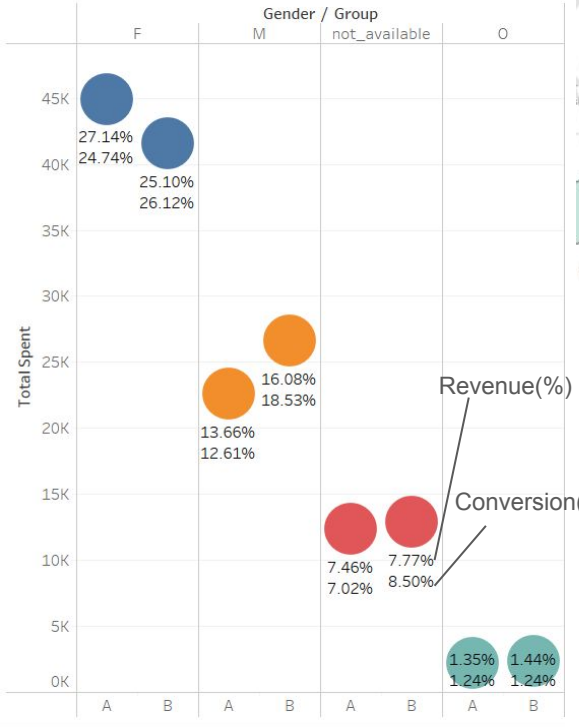
Country :

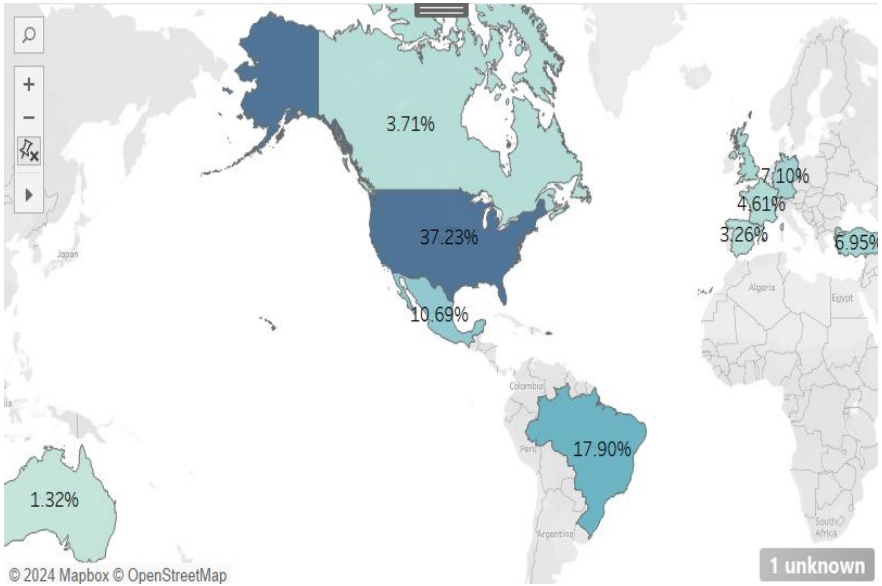


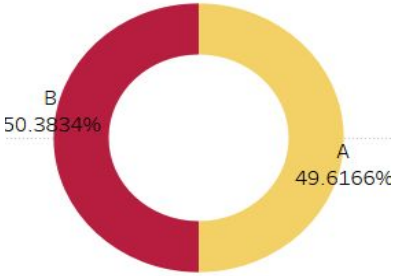
- 70% of conversion comes from one Continent only (America).

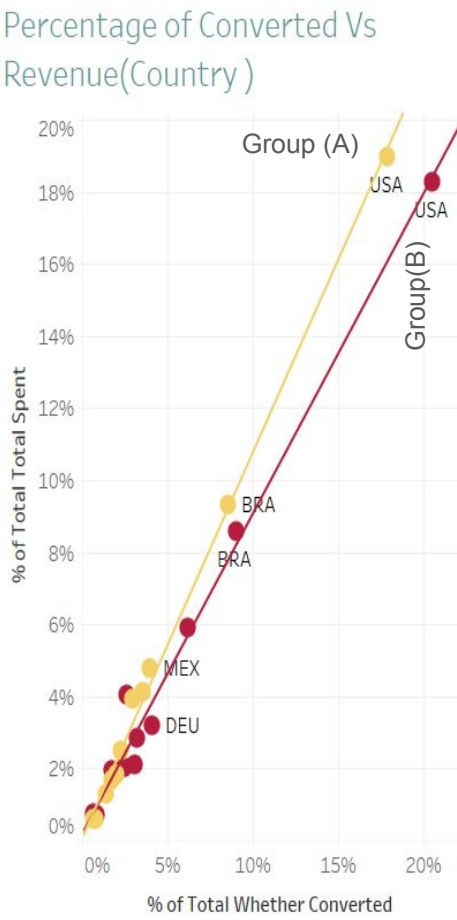
Revenue generated:

Revenue per group per Gender

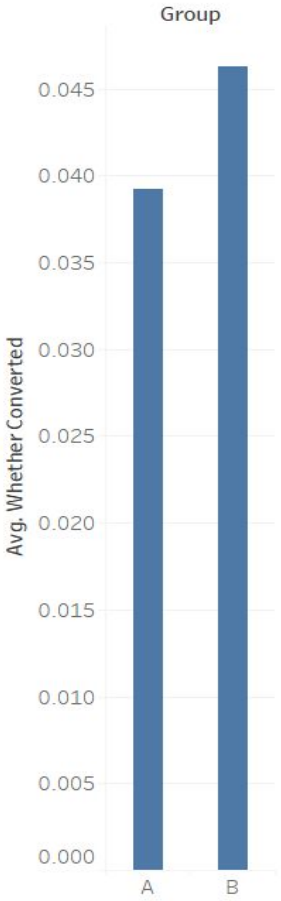


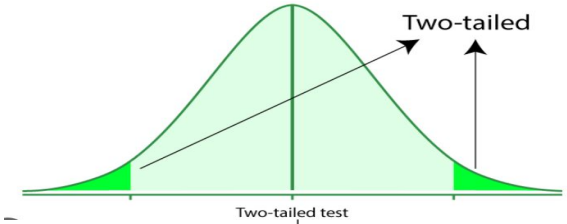






Inferential Statistics:

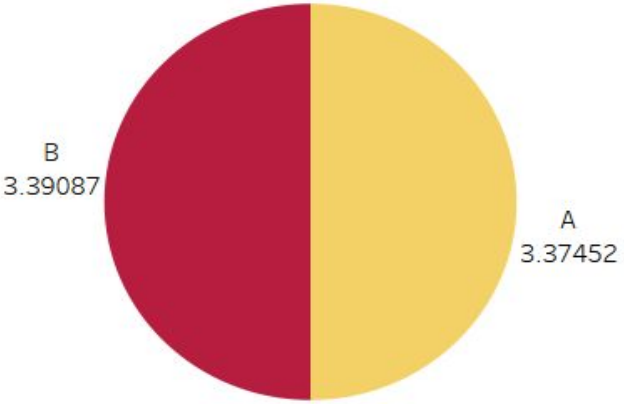




- Null_hypothesis:p1-p2=p0(pooled proportion)
- Alternative_hypothesis:p1 !=p2

P-value: 0.0001
Two-tailed p-value: 0.00011141198532937935
Reject the null hypothesis: There is a difference in proportions.

Confidence Interval : (0.0034860511629807036, 0.010653593996359593)



- Null hypothesis: u1(mean)-u2(mean)=u0(zero)
- alternative hypothesis:u1-u2<>u0

P-value: 0.9438497659410876
Fail to reject the null hypothesis: There is no significant difference in mean total spent.

Confidence Interval: (-0.43866128111980474, 0.4713582370336893)

Conclusion

DON’T LAUNCH THE CAMPAIGN

Reasons:

- Novelty effect
- Statistically no significant different (should redo the experiment with bigger dataset or sample).
- Also not practically significant.

TEST SIZE	CONTROL SIZE
37.7k	39.3k

TOTAL SAMPLE SIZE
77k

Power Analysis for difference in conversion.

Power Analysis for difference in avg total spent.

Input and calculation

Mean difference 0.02

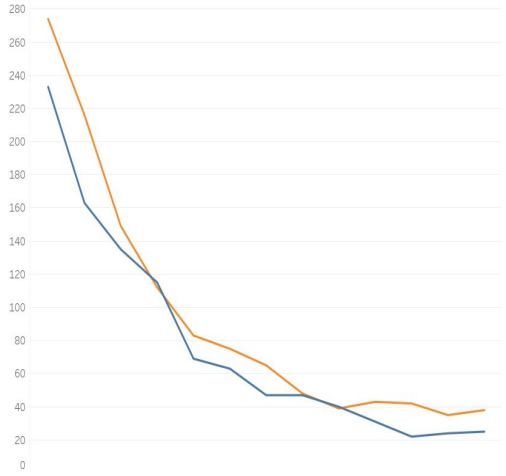
Standard deviation 25.67

Alpha two-sided 0.05

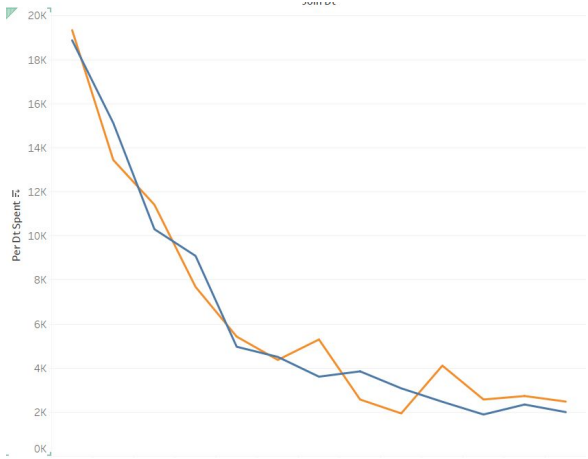
Power 0.1

Calculate

The required sample size per group is 1516386.



Conversion (novelty effect)



Revenue (novelty effect)