GloBox

New Home page Design Project

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24th August 2023

Project Motivation

- **Goal - Increase Revenue**

- **A/B tested with 48k Users**

- **Test Duration: 25th January to 06 February 2023**

- **Metrics**

  — **Conversion Rate** —

  — **Average amount spend** —

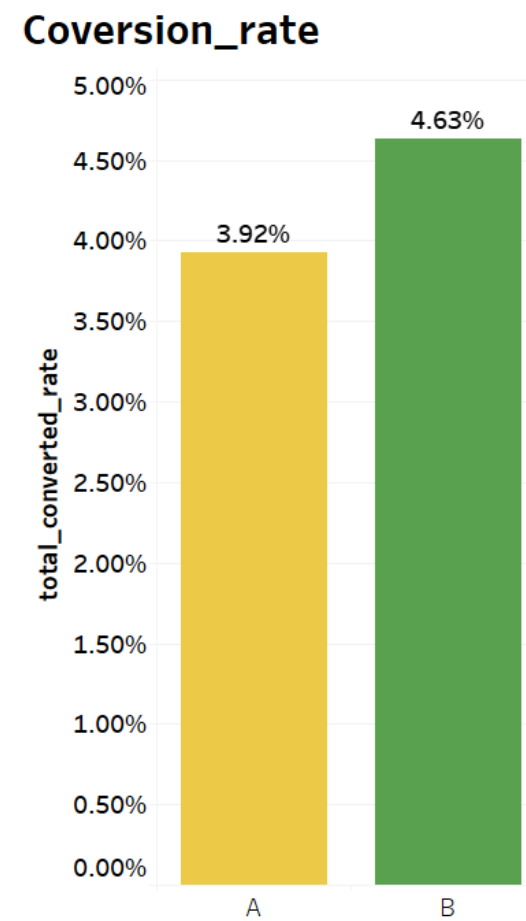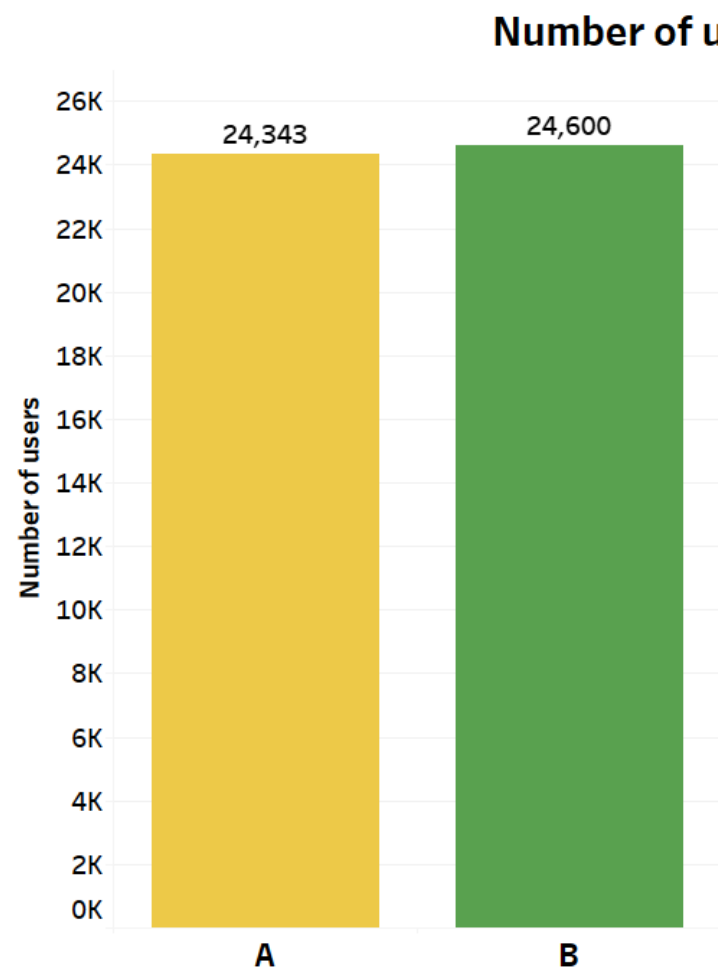Group A: Control
existing landing page

Group B: Treatment
landing page with food & drink banner

Test Findings

- The users distributed nearly equal numbers

- We can see strong statistical evidence that the conversion rate is increased after the banner

Number of users in each group
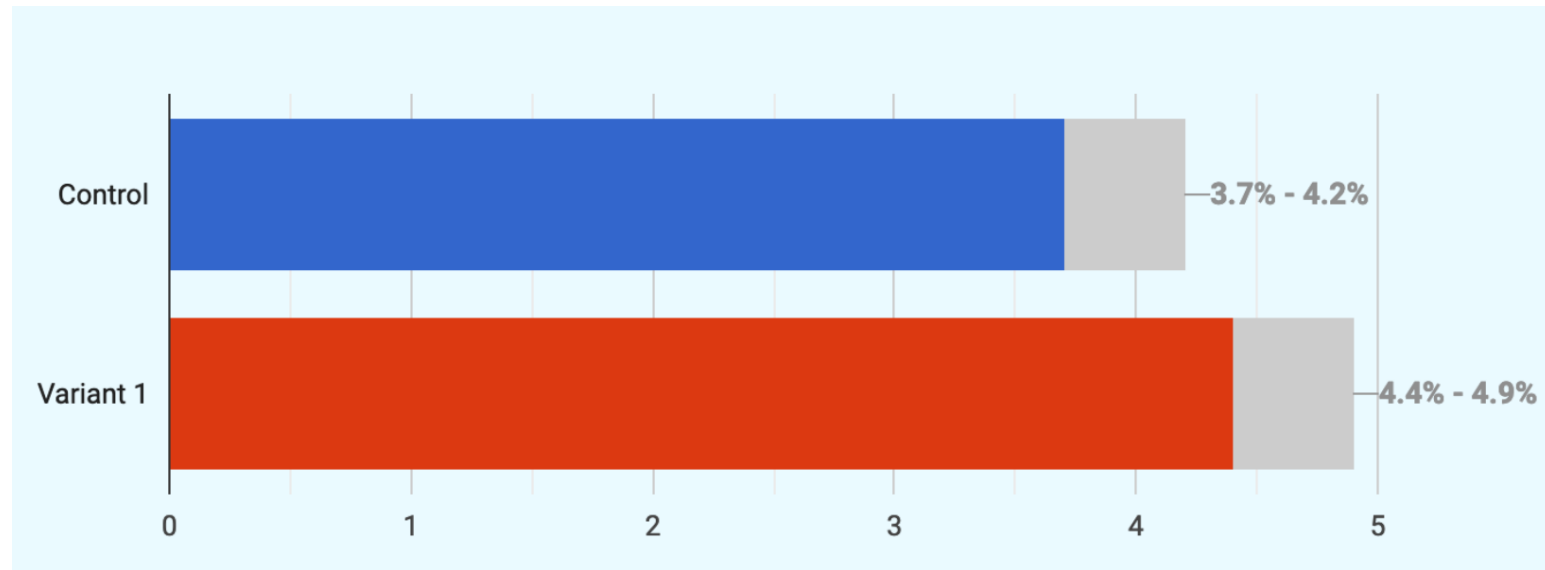

Coversion_rate

Test Findings

- Comparison of the conversion rate and average amount spend between the test groups.

- Despite there is a change on the conversion rate, there is no significant improvement on the average user's spending.
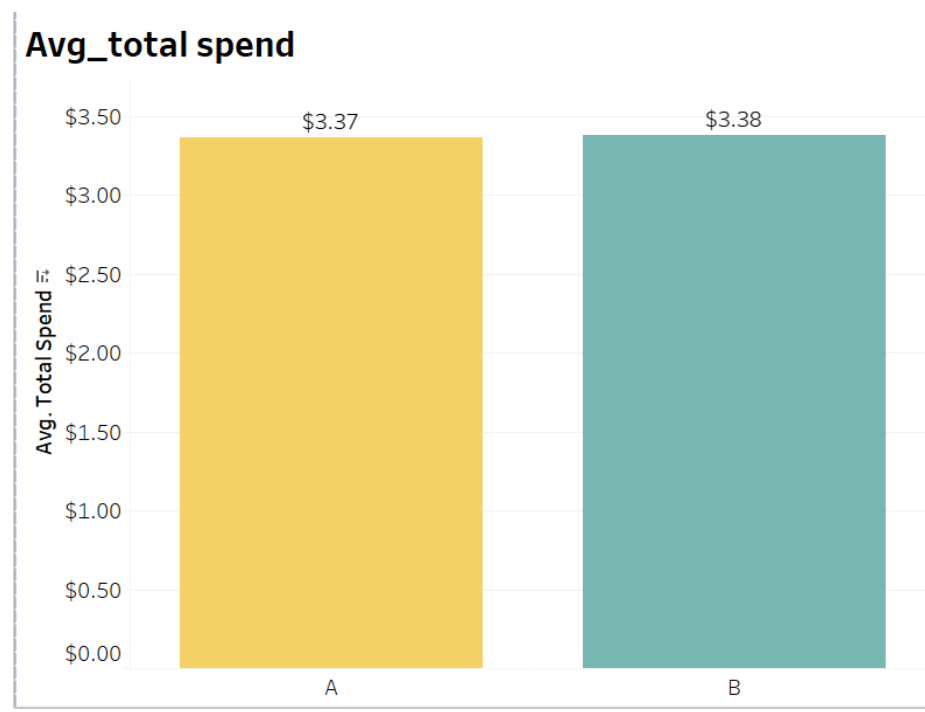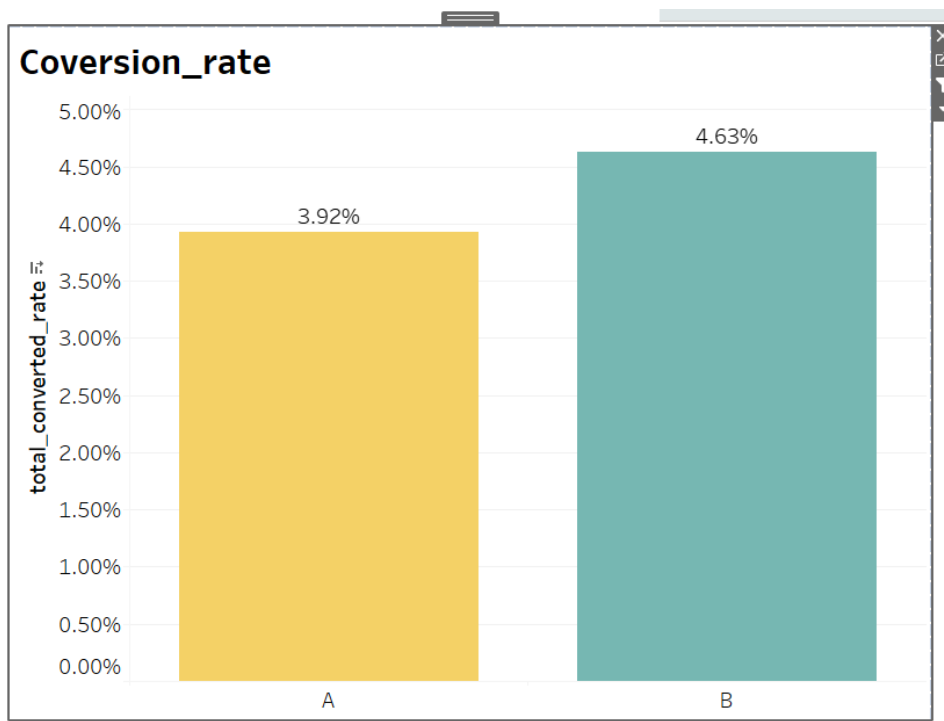
Test Finding

## Conversion Rate: confidence Interval (CI)

- The 95% confidence interval is between (0.0034,0.0106)

- The control group(A): CI is between 3.7% to 4.2%

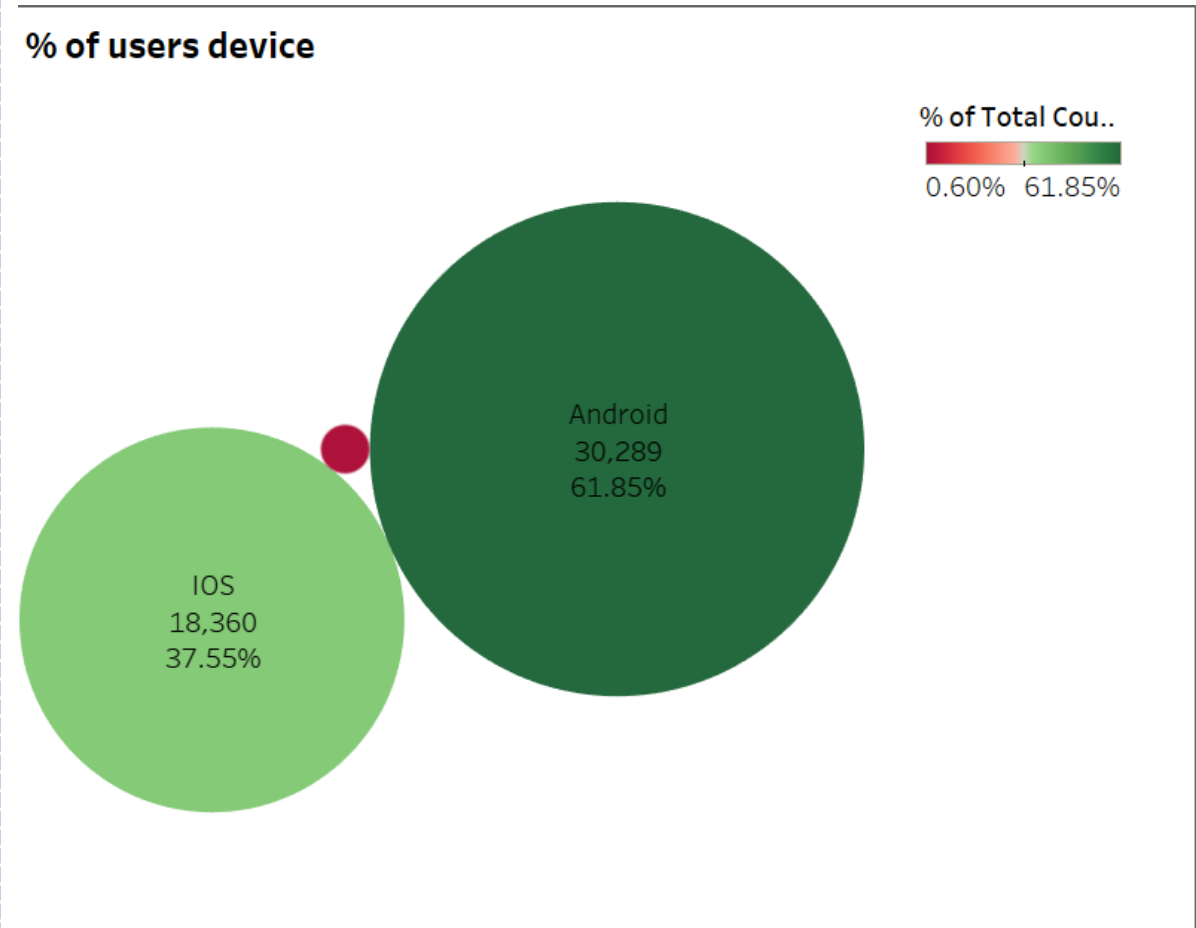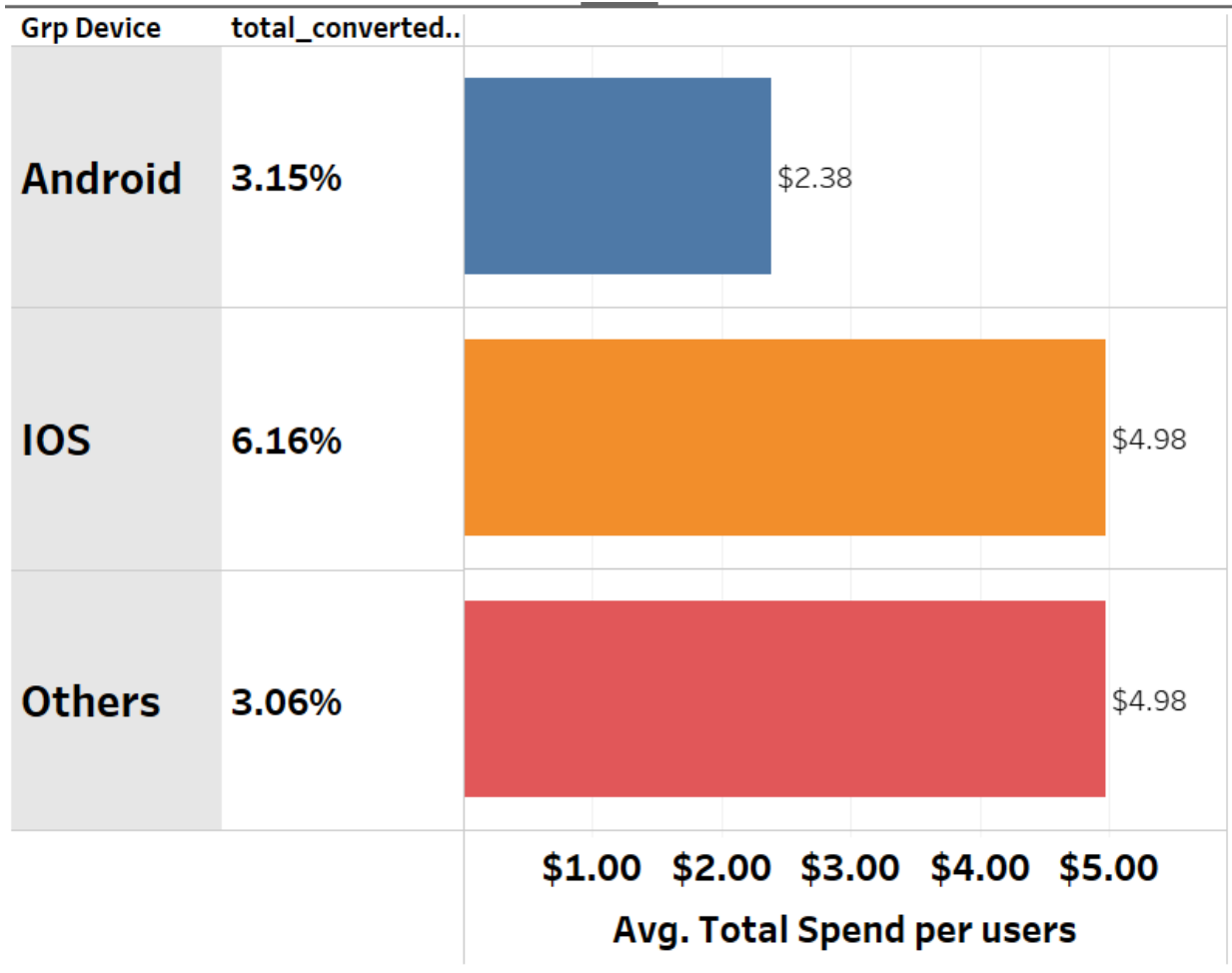- The Variant group(B):CI is between 4.4% to 4.9%

Test Findings

- The plot describe how many users fall in each category (bin).

- Most customers spend less than 100 dollar and few customers spend more than 340 dollar in both group.

Total Spend(bin siz 20)
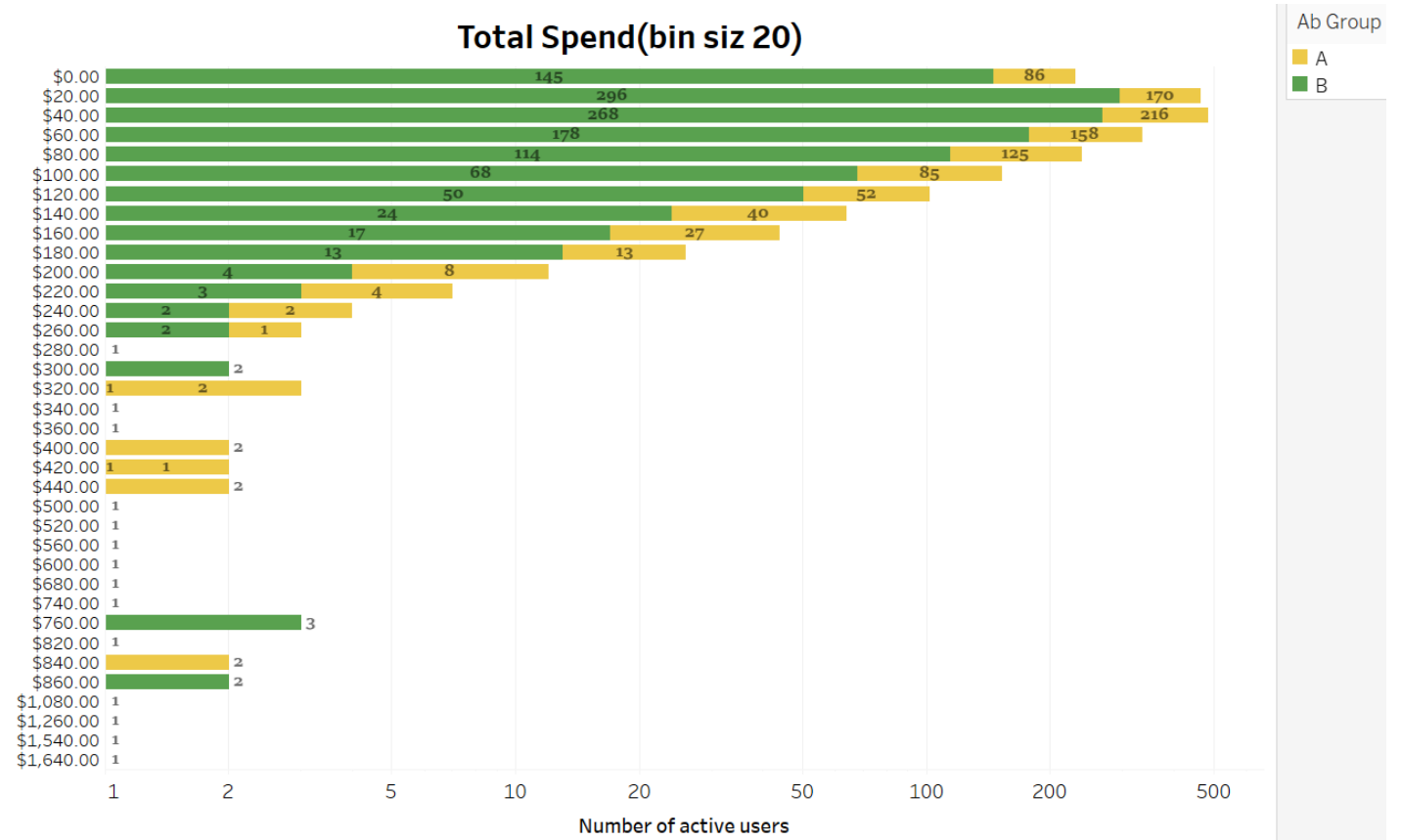
The relationship between conversion rate and average individual spend with the user's device

Grp Device	total_converted..	Avg. Total Spend per users
Android	**3.15%**	$2.38
IOS	**6.16%**	$4.98
Others	**3.06%**	$4.98

Avg. Total Spend per users: $1.00 $2.00 $3.00 $4.00 $5.00

% of users device

% of Total Cou..
0.60% 61.85%

Android
30,289
61.85%

IOS
18,360
37.55%

Relationship between conversion rate and average spend with the user's gender
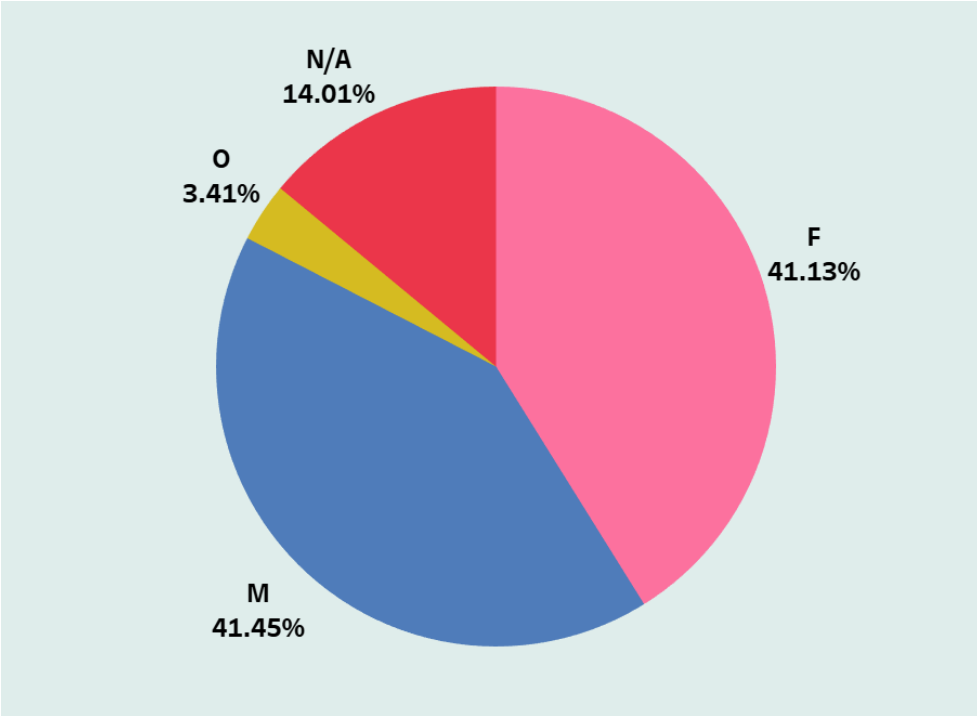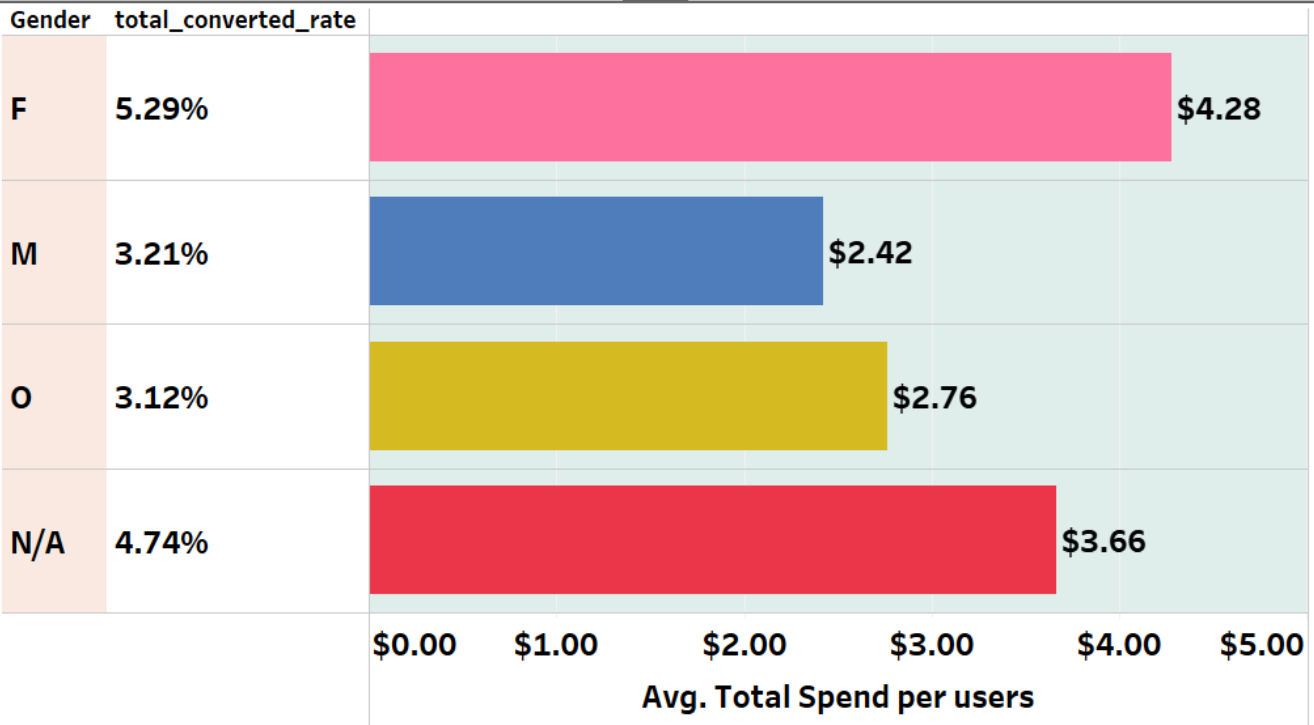
The relationship between conversion rate and average spend with user's county.

- Customers from the treatment group in GBR   are the most spender.

- In USA the control group spend more than the treatment

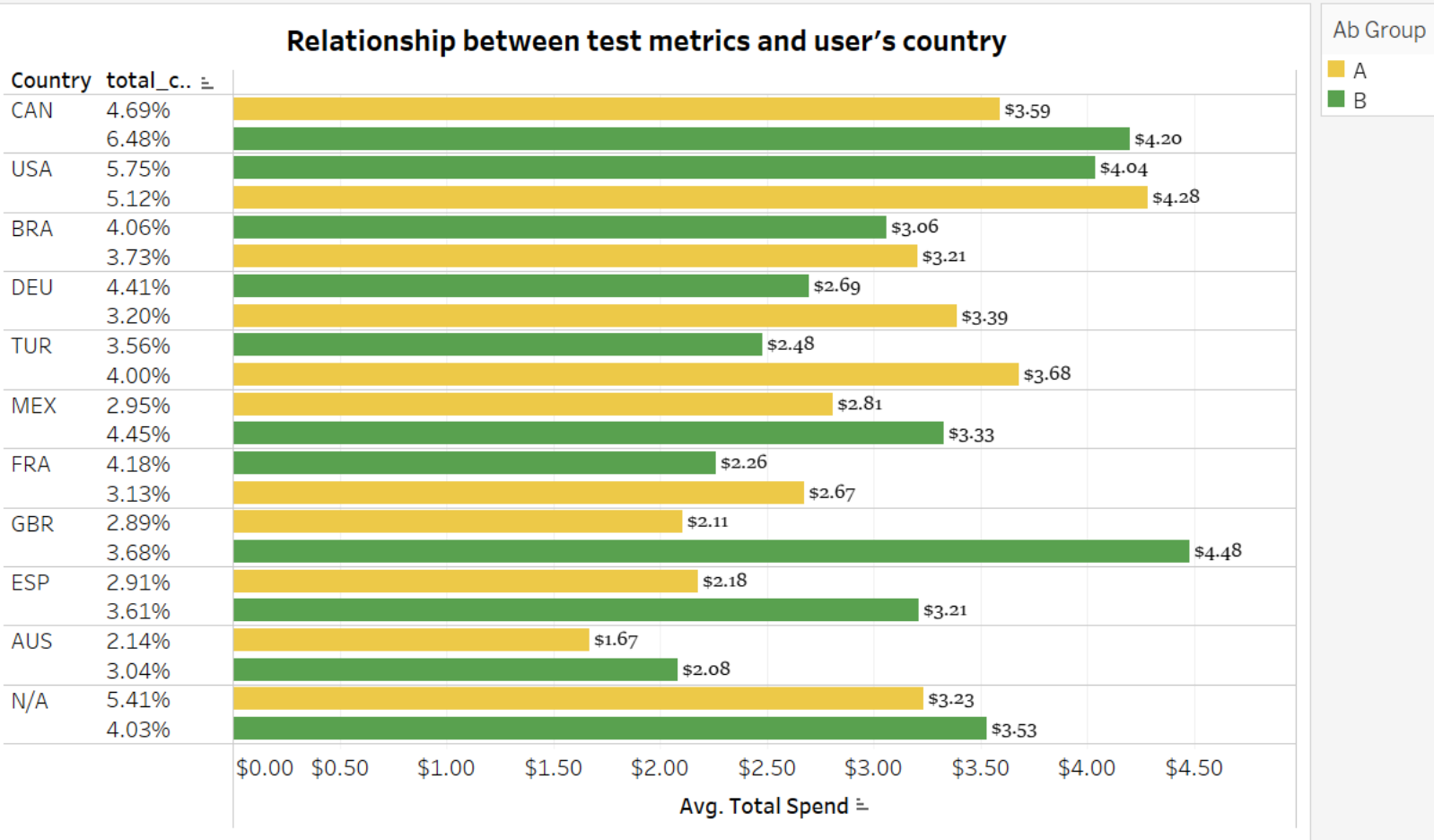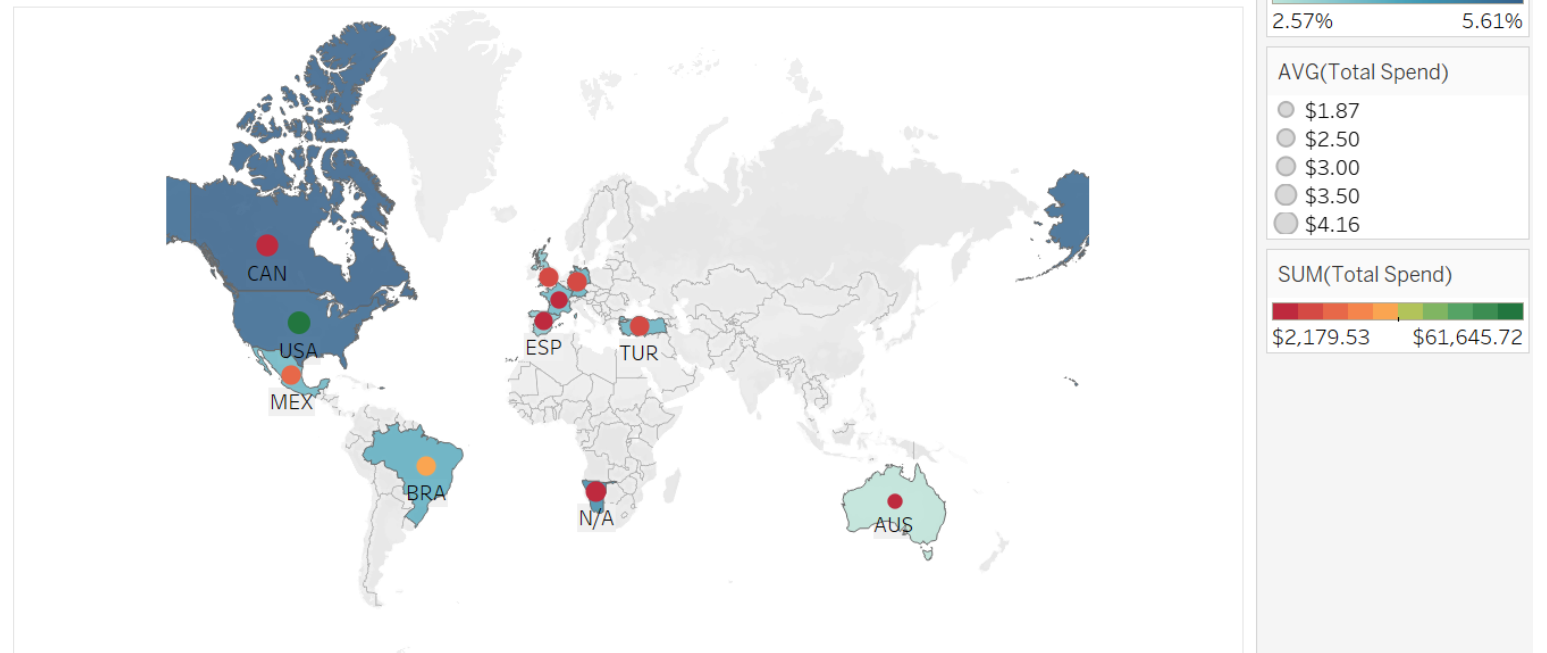

Relationship between test metrics and user's country

Country	total_c.. ≥	Ab Group

Country	total_c..	A (yellow)	B (green)
CAN	4.69%	$3.59	
	6.48%		$4.20
USA	5.75%		$4.04
	5.12%	$4.28	
BRA	4.06%		$3.06
	3.73%	$3.21	
DEU	4.41%		$2.69
	3.20%	$3.39	
TUR	3.56%		$2.48
	4.00%	$3.68	
MEX	2.95%	$2.81	
	4.45%		$3.33
FRA	4.18%		$2.26
	3.13%	$2.67	
GBR	2.89%	$2.11	
	3.68%		$4.48
ESP	2.91%	$2.18	
	3.61%		$3.21
AUS	2.14%	$1.67	
	3.04%		$2.08
N/A	5.41%	$3.23	
	4.03%		$3.53

Ab Group
- A
- B

$0.00 $0.50 $1.00 $1.50 $2.00 $2.50 $3.00 $3.50 $4.00 $4.50

Avg. Total Spend ≥

The relationship between conversion rate and average spend with user's county(Map)

- As the map shows Canada and USA are the county most people are converted However Canadian's total spending amount is low.

- In Europe there are relatively similar converted rate and low to medium spending habit.

- Mexico and Brazil have also moderate conversion rate and high spending amount next to USA.

Map

AGG(total_converted_r...

2.57%   5.61%

AVG(Total Spend)
○ $1.87
○ $2.50
○ $3.00
○ $3.50
○ $4.16

SUM(Total Spend)

$2,179.53 $61,645.72

Control group : conversion rate and average spend over time

- The bar chart shows the conversion rate of the control group over time.

- The line graph present the average spend during the test time frame.

- The conversion rate and average spend of the control group slightly decrease over the test duration
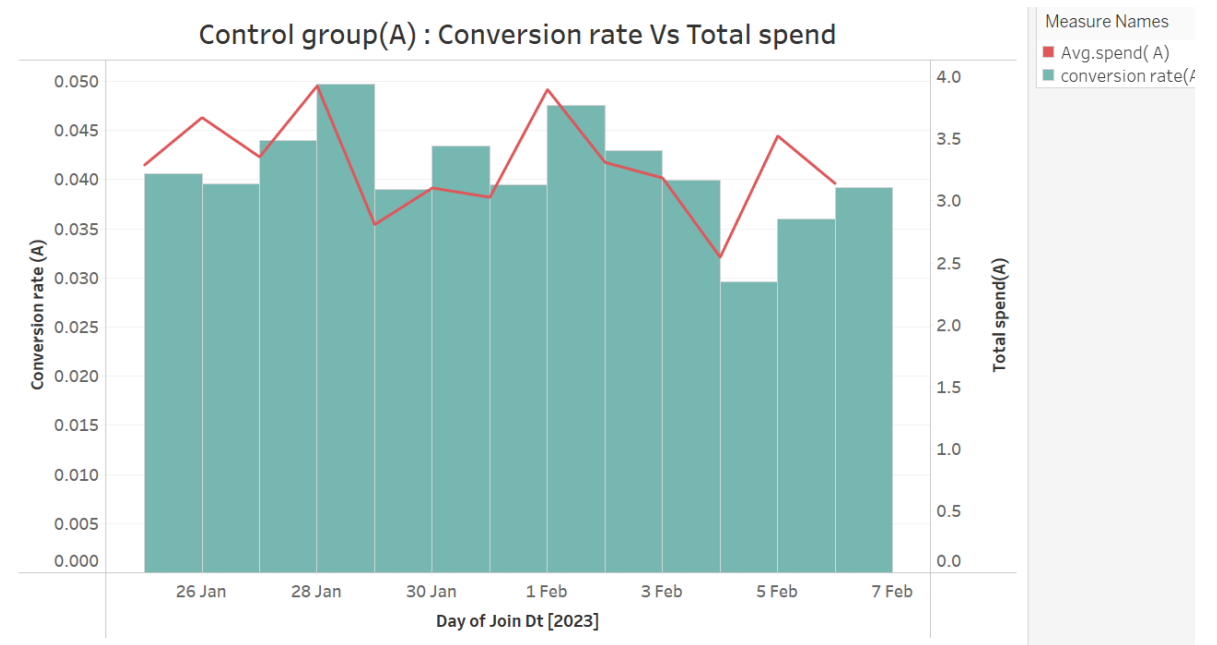
Treatment group: conversion rate and user's average spend over time

- The bar chart shows clearly the conversion rate of the treatment group over time.

- The line graph present the average spend during the test time frame.

- Here we can see that even if there is some fluctuation on the conversion rate, it increased over time.

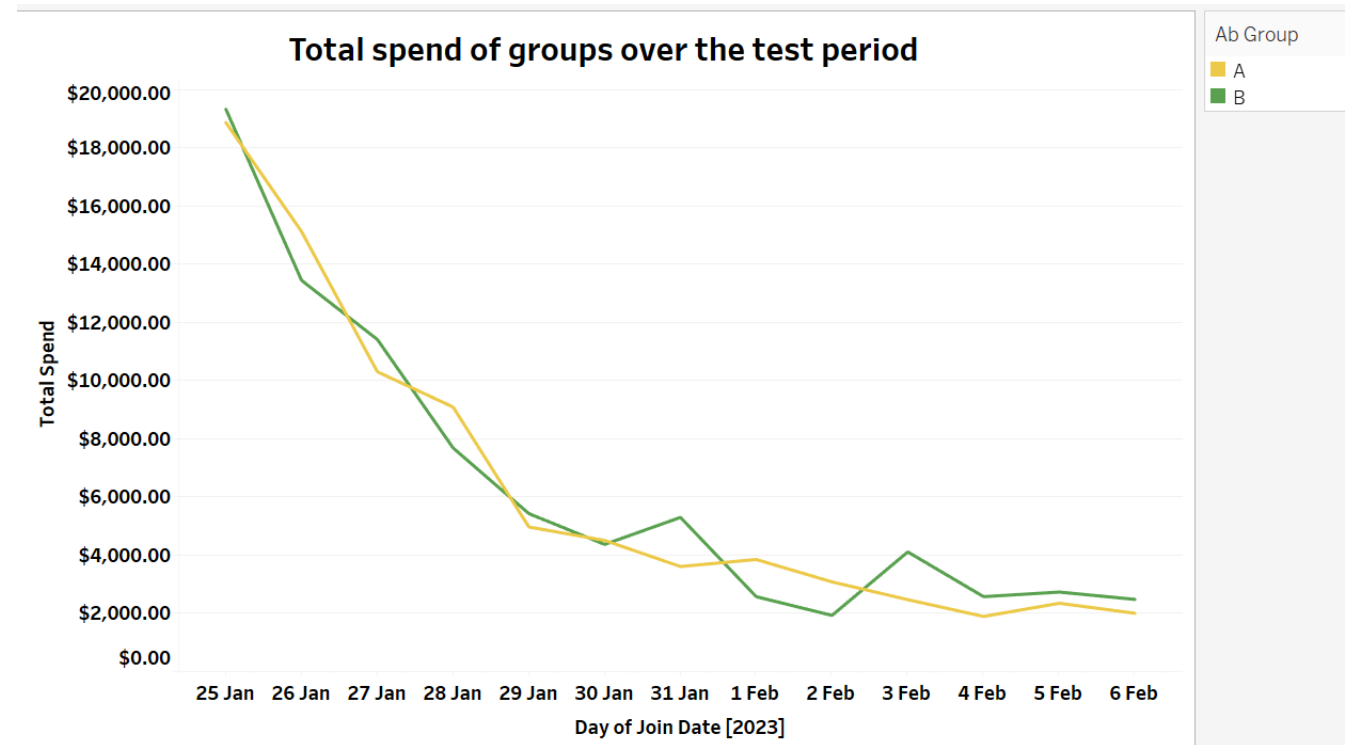- Average spend was drop on the first few days of Feb but back to normal .
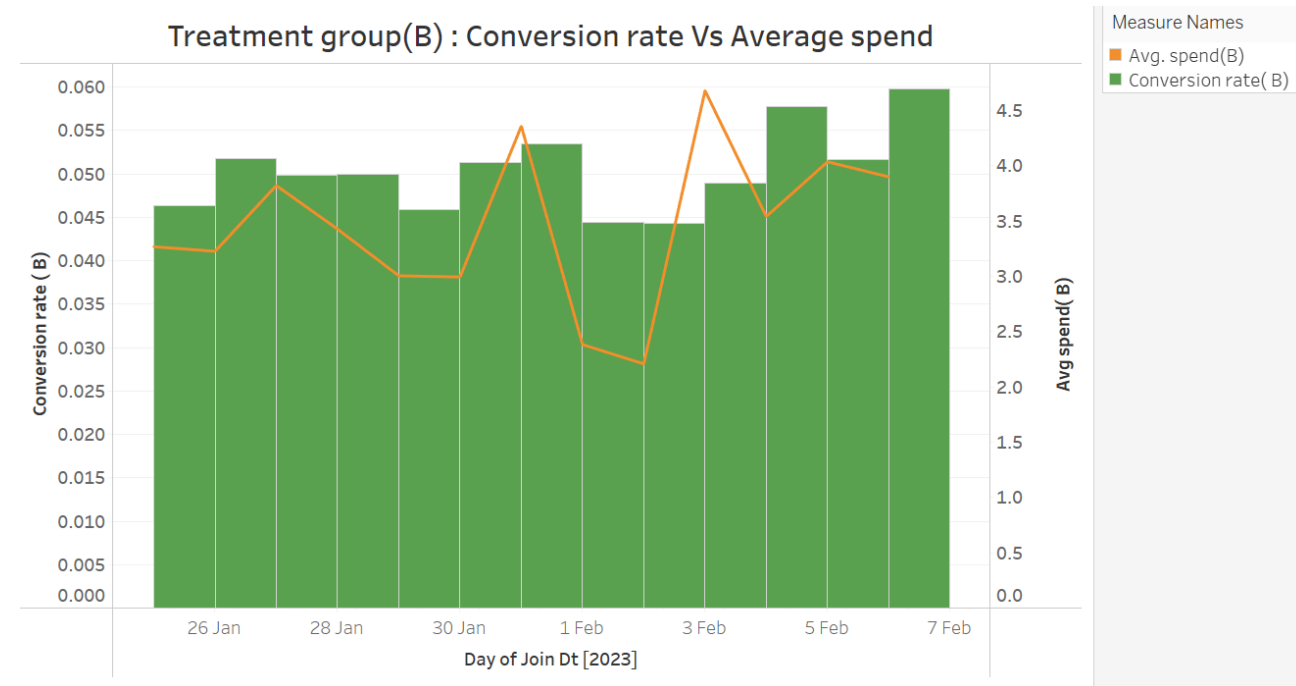
Novelty Effect

- Despite there is small difference in conversion rate between the test group, the trend is similar.

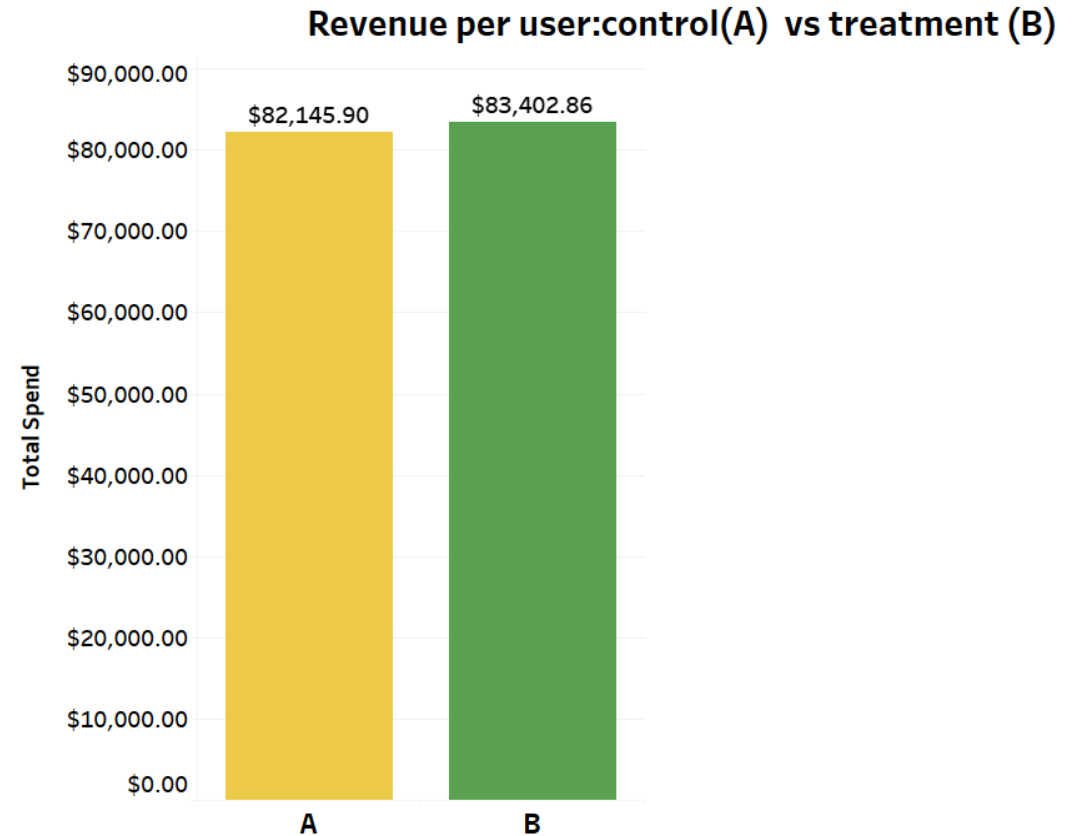- There is No clear novelty effect on the conversion rate.
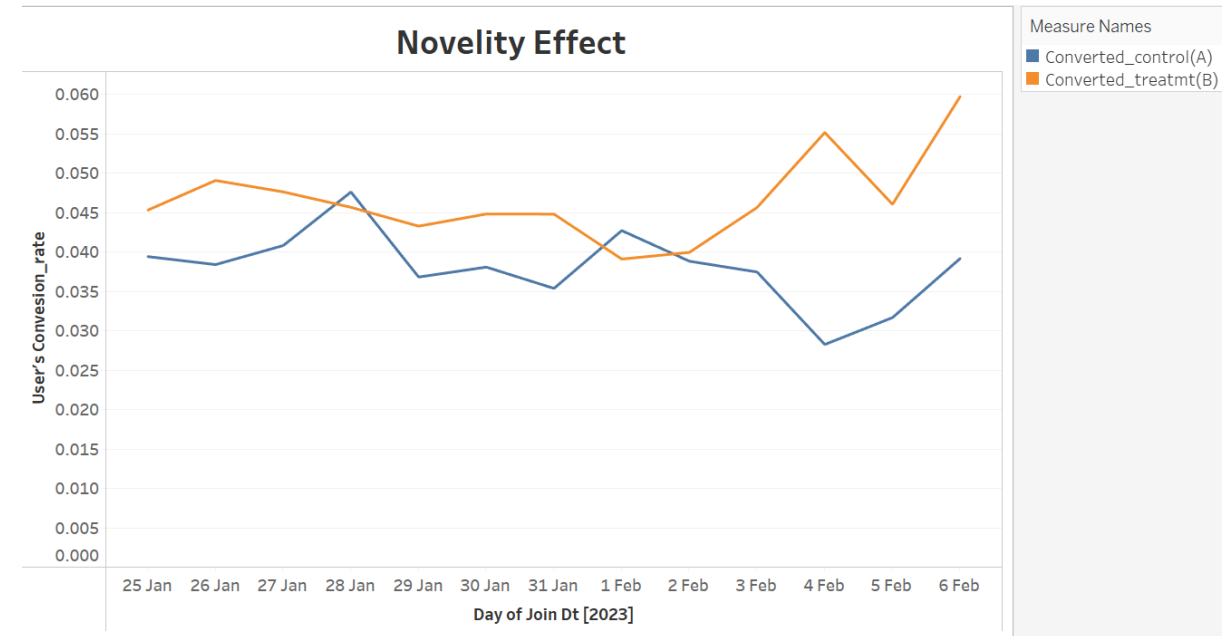
The trend of user's spending over the test period

- The general spending tendency during the test period from 25'th of Jan to 6'th of Feb has fallen with the time being in both group in similar fashion.

Total spend of groups over the test period

Ab Group
- A
- B

Total Spend axis: $0.00, $2,000.00, $4,000.00, $6,000.00, $8,000.00, $10,000.00, $12,000.00, $14,000.00, $16,000.00, $18,000.00, $20,000.00

Day of Join Date [2023]: 25 Jan, 26 Jan, 27 Jan, 28 Jan, 29 Jan, 30 Jan, 31 Jan, 1 Feb, 2 Feb, 3 Feb, 4 Feb, 5 Feb, 6 Feb

Recommendation: do not launch

- Depending on our test result ,there is no strong evidence for improving revenue in current state.

- But we saw a positive conversion rate which indicate there is a potential to maximize income

- For this reason, we advice further analysis with extended time at list 4 to 6 weeks to validate this assumption

Revenue per user:control(A) vs treatment (B)

The end