

## A/B Testing Analysis: Evaluating the Impact of Advertising Banner on Mobile Website

# Overview

- ▶ **Context**

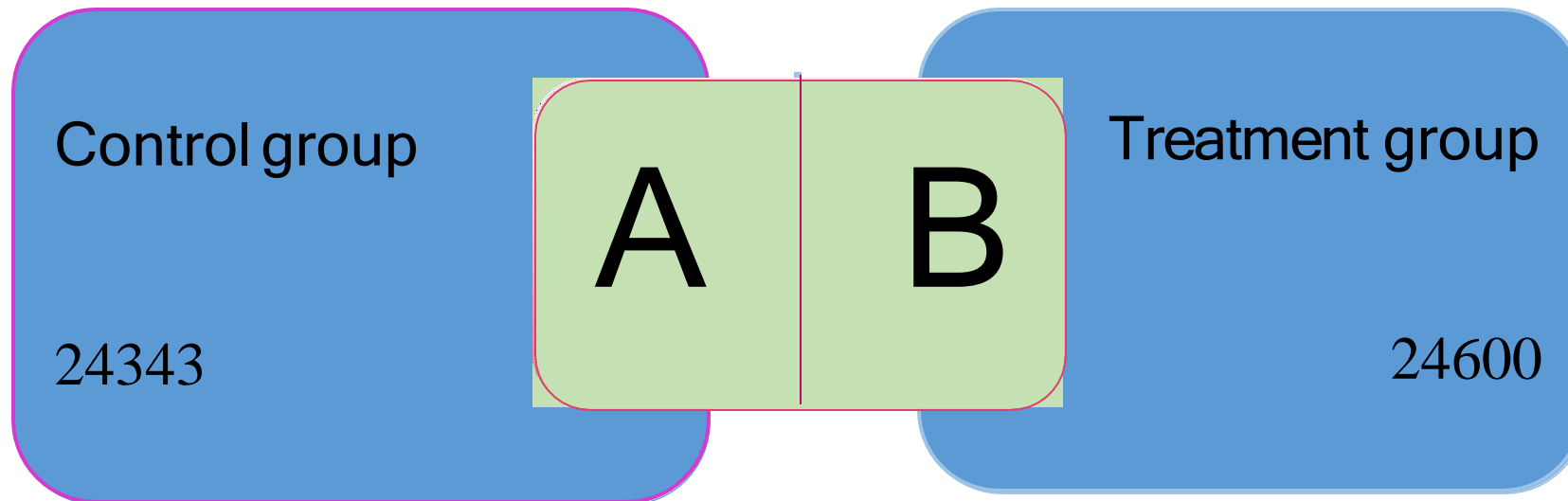
- ▶ A/B groups
- ▶ Conversion rate **VS** Average amount Spent(**Metrics**)
- ▶ The probability that our findings are due to chance(**p-value**)
- ▶ Differences between both **metrics**
- ▶ Metrics **VS** Different Objects

- ▶ **Key results**

- ▶ **Recommendation**

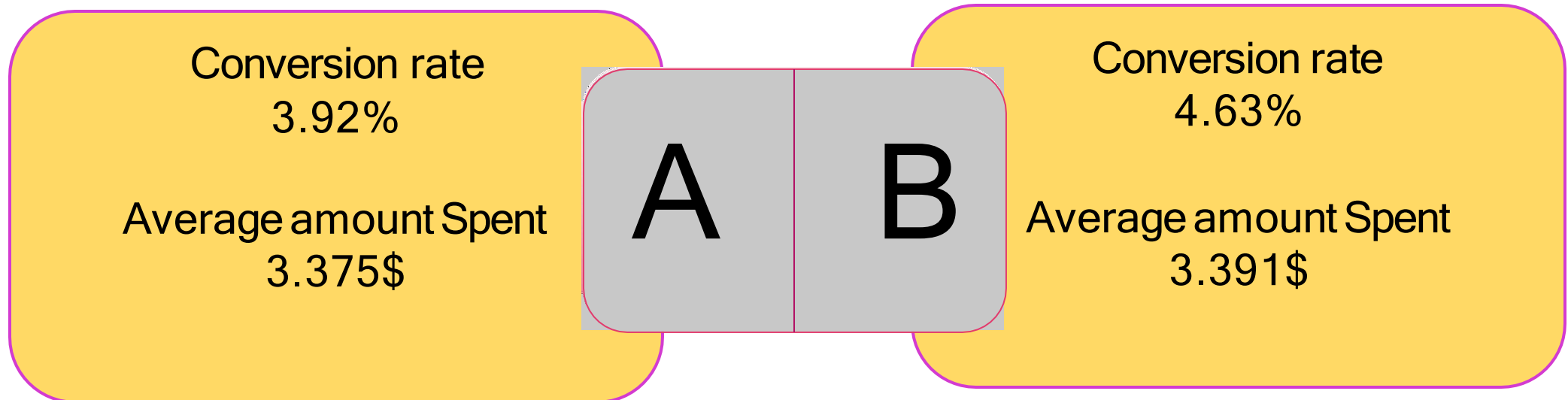
# Context (A/B groups)

- ▶ During 13 days in 2023



# Conversion rate **VS** Average amount Spent(**Metrics**)

- ▶ **Converted:** People who purchased
- ▶ **Conversion rate:** converted / all users
- ▶ **Average spent:** Average of total spent



# KEY FINDING

## Conversion rate

- ▶ Null hypothesis=Reject

### Result

strong evidence of the positive impact of the advertising banner

## Average amount spent

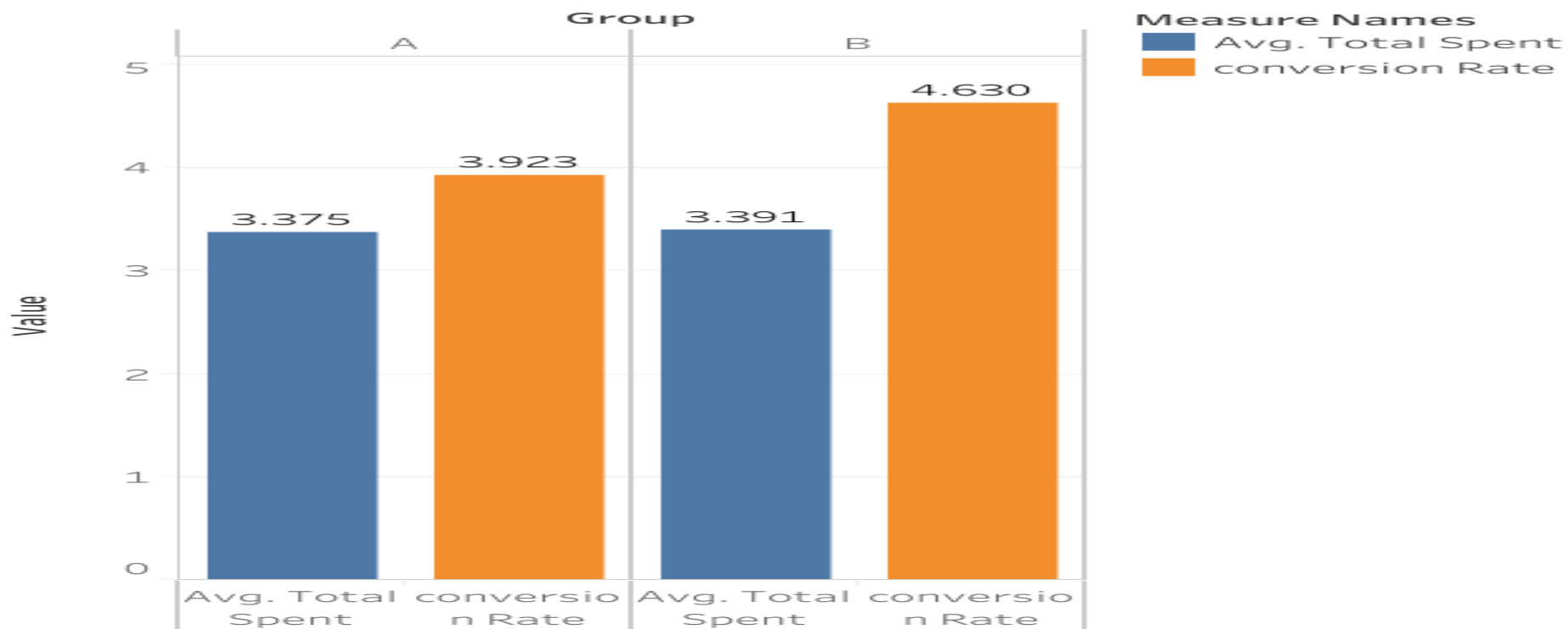
- ▶ Null hypothesis= Fail To Reject

### Result:

lack of significant evidence advertising banner

# Differences between both metrics

Compare the conversion rate and average amount spent between the test groups.



# Metrics **VS** device types

The relationship between the test metrics and the user's *device*



## Result:

**Conversion rate:**

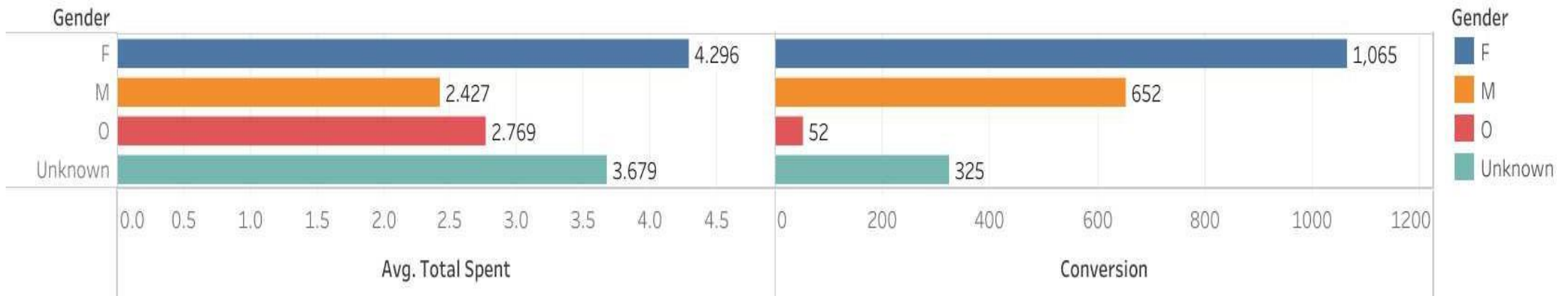
Ipnone>Android>Unknown Device

**Average amount spent:**

Unknown device>Ipnone> Android

# Metrics VS Gender

The relationship between the test metrics and the user's *gender*



## Result:

**Conversion rate:**

Female>Non-  
available>Male>Other

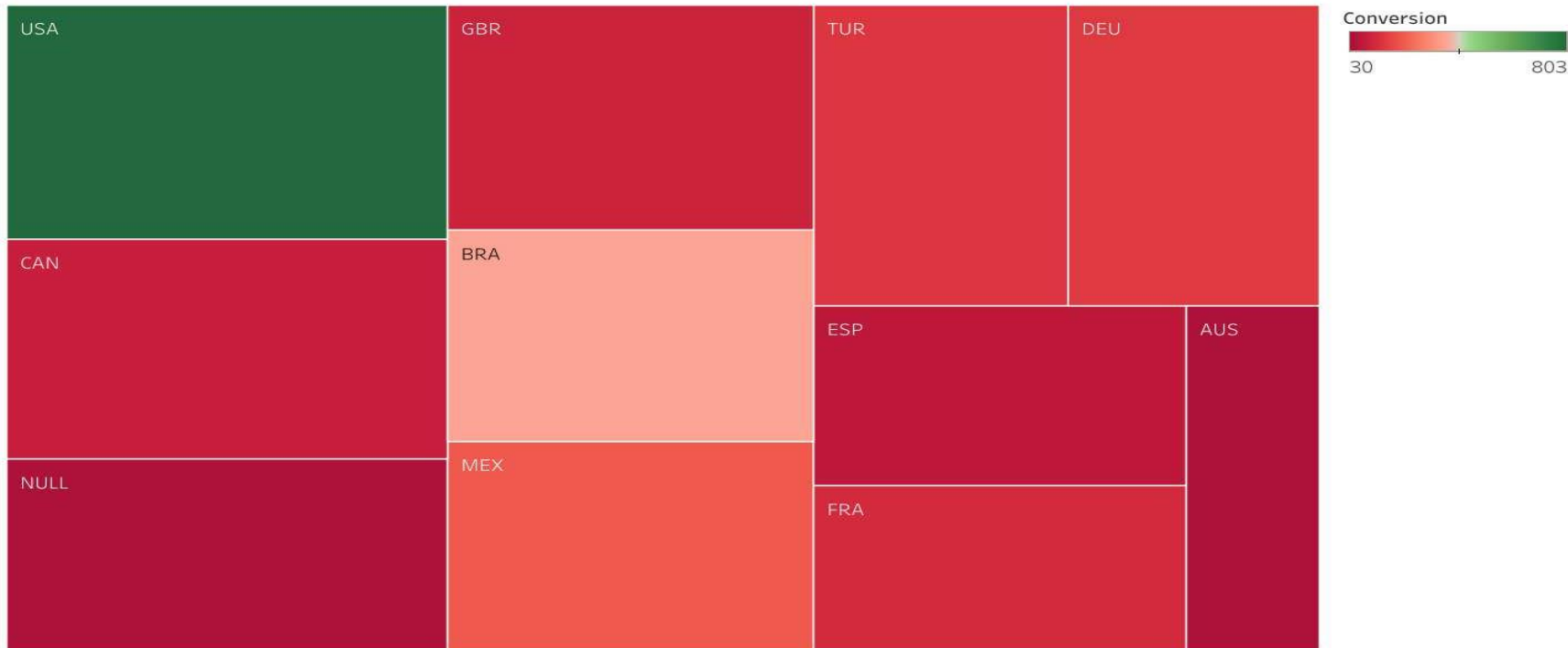
**Average amount spent:**

Female>Non- available>Other> Male



# Metrics **VS** Country

The relationship between the test metrics and the user's country



Result:

**Conversion rate:**

CAN>USA>BRA>DEU>TUR>MEX  
>FRA>GBR>ESP>AUS

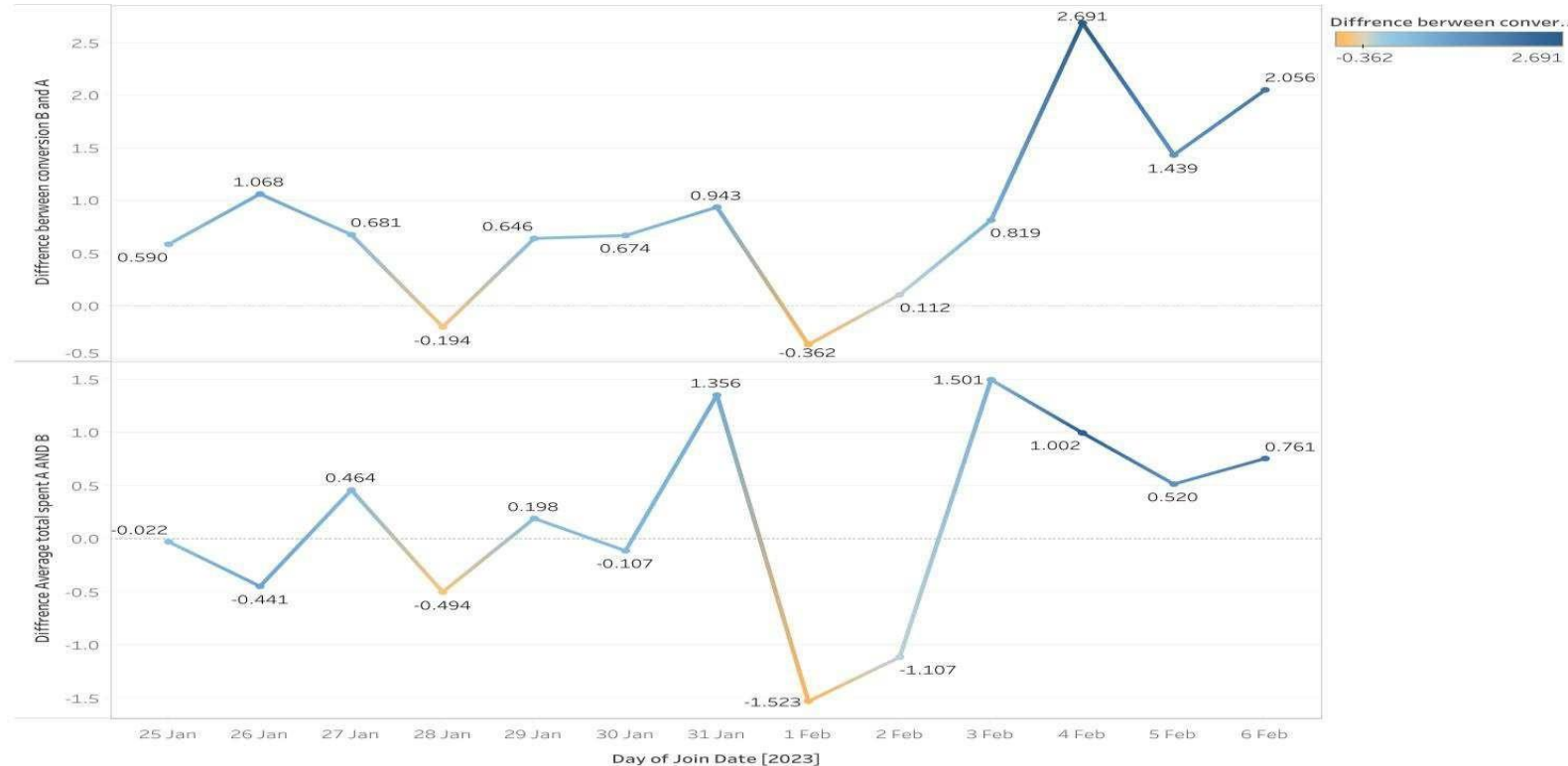
**Average amount spent:**

USA>CAN>GBR>BRA>MEX>TUR  
>DEU>ESP>FRA>AUS

# Novelty Effect

## Novelty Effect

After thoroughly analyzing the difference in conversion rate and average amount spent rate between two groups, namely Group A (no banner) and Group B (banner), we have ..




Result:  
There is no  
evidence  
of the novelty  
effect

# Key Results



Advertising banner  
had a impact  
on the “conversion  
rate”



Banner may attract  
more users to make  
purchases, but it does  
not directly influence  
the “average amount  
spent per user”

# Recommendation

- ▶ Continue using the advertising banner on the mobile website.
- ▶ Considering its positive impact on the conversion rate.
- ▶ Additional strategies may be required to further enhance the average amount spent per user.
- ▶ Continuous monitoring and analysis of user behavior and testing various approaches can provide valuable insights for future optimization efforts.