

# A/B Test to Improve Homepage of GloBox (An Online Marketplace)

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# Introduction

## Purpose of this project:

- A/B testing analysis for GloBox online marketplace

## Objective:

- Evaluate the effectiveness of launching a banner highlights food and drink category products
- Introduce this new product categories
- Increase the revenue

# A/B Test

- An experimental technique used by businesses.
- Compares two versions (A and B) of a webpage, advertisement, or product feature
- The goal is to determine which version performs better
- Customers or users are randomly assigned to either the A or B version
- Test helps businesses identify which version is more effective at achieving a specific goal

# A/B Test - GloBox

## GloBox

- Online marketplace
- Known for boutique fashion items and high-end decor products
- Sourcing unique and high-quality products from around the world

## Motivation for A/B Test

- Growing Food and Drink Offerings recently
- Rationale for conducting A/B testing
- Explore the potential of food and drink category to the users

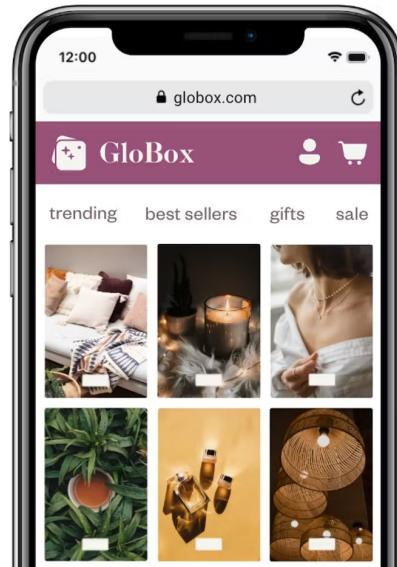
## A/B Test

- Whether or not: Add a banner highlighting new category

# A/B Test - Design

- Control group (Group A): Customers without the banner
- Treatment group (Group B): Customers with the banner

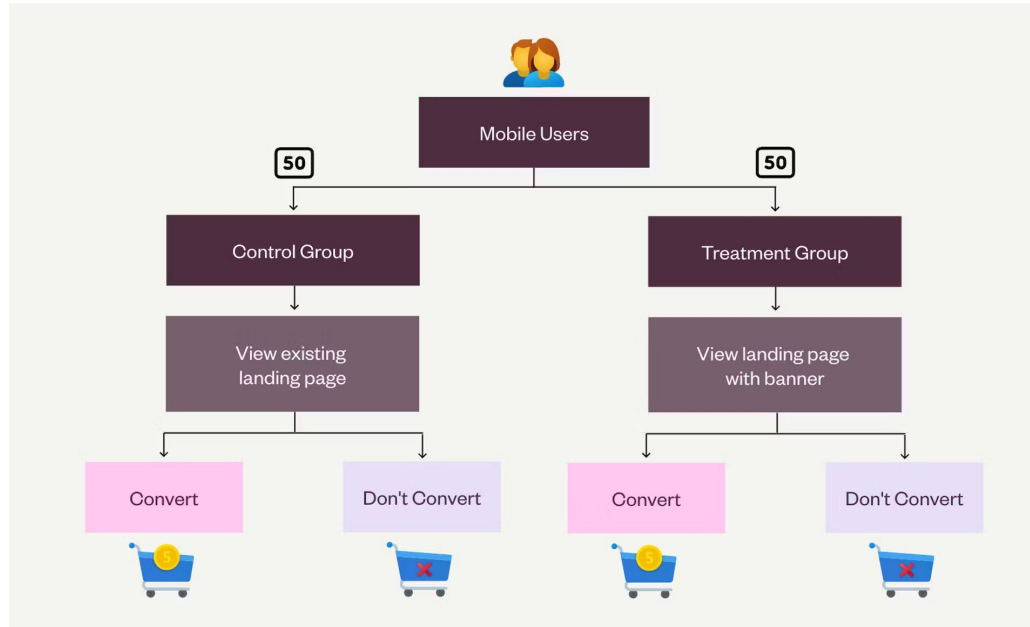
Group A: Control  
existing landing page



Group B: Treatment  
landing page with food & drink banner



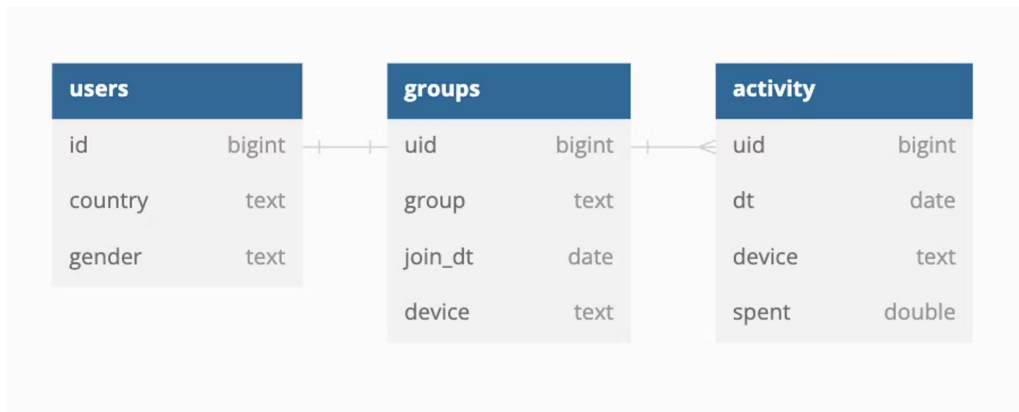
# A/B Test - Metrics of interest



- Conversion rate: Rate of purchases in each group
- Average amount spent: Average amount spent per user in each group

# GloBox Database

- GloBox stores its data in a relational database
- Data extraction using SQL queries
- Final dataset is the combination of 3 tables and with customizations
  - Add a an extra column for the conversion
  - Spent column is modified to total spent for each user.



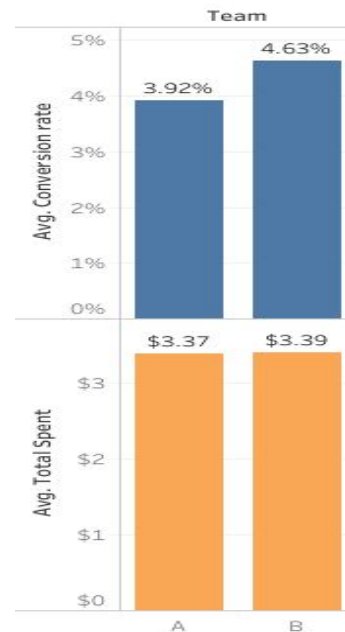
# Results of A/B Test (Statistical Analysis)

## Difference in Conversion rate between 2 groups

- Sufficiently strong evidence - Group B has higher conversion rate.
- Estimation of difference in conversion rate is between (0.35% and 1.07%)
- Very low (0.20%) probability of no difference in conversion rate

## Difference in Average amount spent between 2 groups

- Not sufficient evidence - Group B has higher average spent.
- Estimation of difference in average spent is between (-0.44\$ and 0.47\$)
- Very high (94.37%) probability of no difference in average spent





# Recommendation

Launch the banner for all website visitors

- Justification based on the significance of the conversion rate metric
- Low cost and effort associated with implementing the banner
- May result in more revenue

# Implementation and Next Steps

- Plan for launching the banner on the website
- Monitor the performance and track the impact on key metrics
- Future A/B testing opportunities and optimization strategies

*Thank  
You!*