Mastery Project: Globox

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Data Analytics March 2023 Cohort

Objectives

1. To demonstrate which version of website that users convert more.
2. To analyze other insights from the data
3. To visualize and communicate all insights audience.

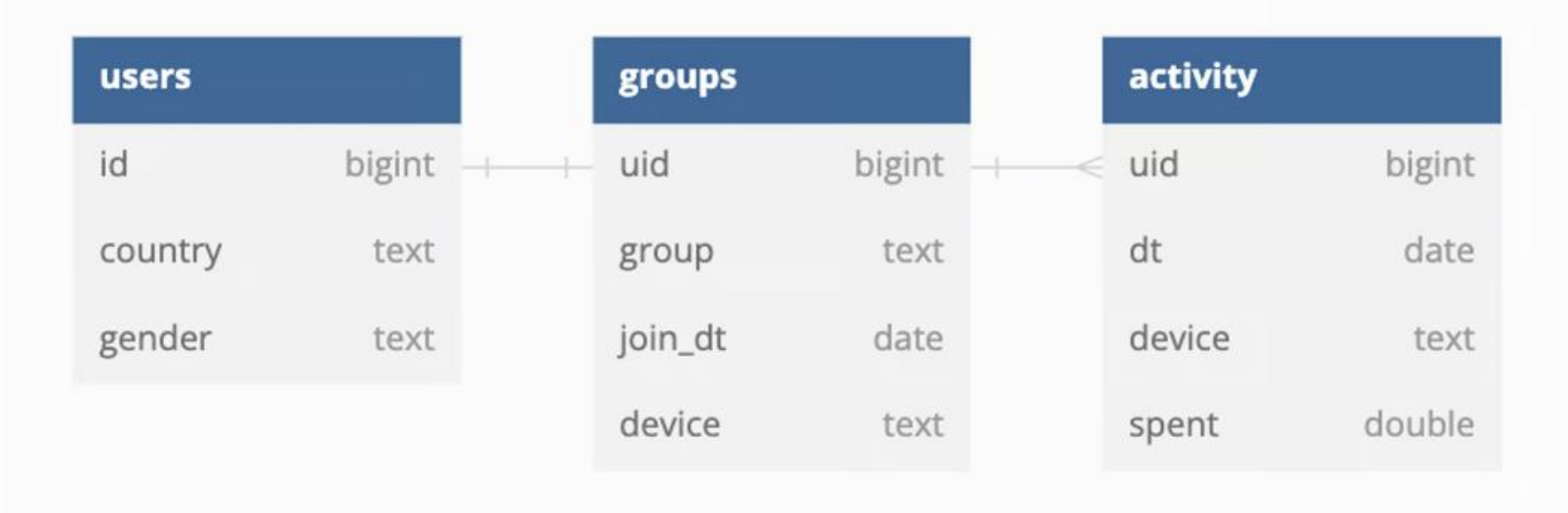
Group A: Control

existing landing page

Group B: Treatment

landing page with food & drink banner

Data



Source: Project Overview (https://cms.master.school/project-overview)

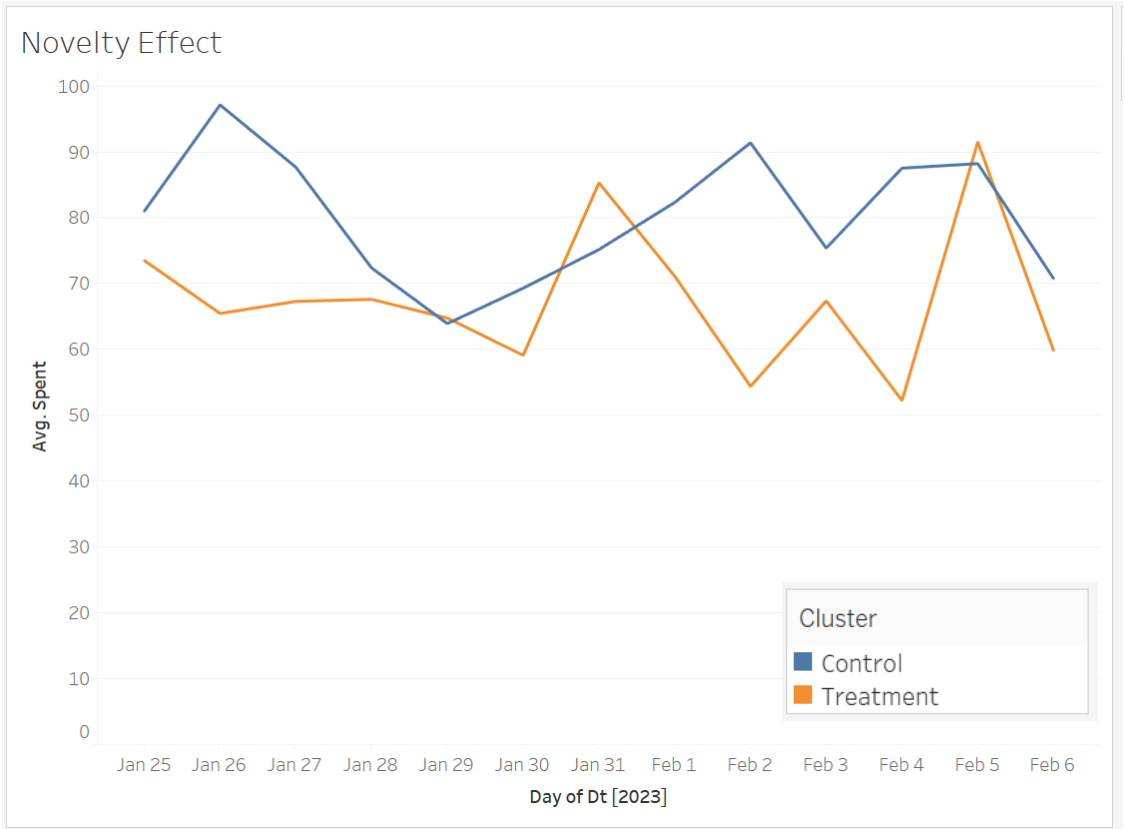
Methodology

- Average Spending: Use two-sample t-test with unpooled variance at 5% significance level
- Conversion Rate: Use two-sample z-test with pooled proportion at 5% significance level.

Results

Tests	Group	Values	Majority of Values	Conclusion
Average Spending	Control	$3.375	$3.049 - $3.700	No significant difference
	Treatment	$3.391	$3.073 - $3.708	
Conversion Rate	Control	3.816%	3.815% - 3.818%	***Significant*** difference
	Treatment	4.455%	4.454% - 4.457%	

Further Analysis



Novelty Effects:
There is a novelty effect on the data which shown in the above figure since it fluctuates over the recording time.

Power Analysis

Topics	Recommended Sample Size
Average Spending [1]	2,090
Conversion Rate [2]	37,700

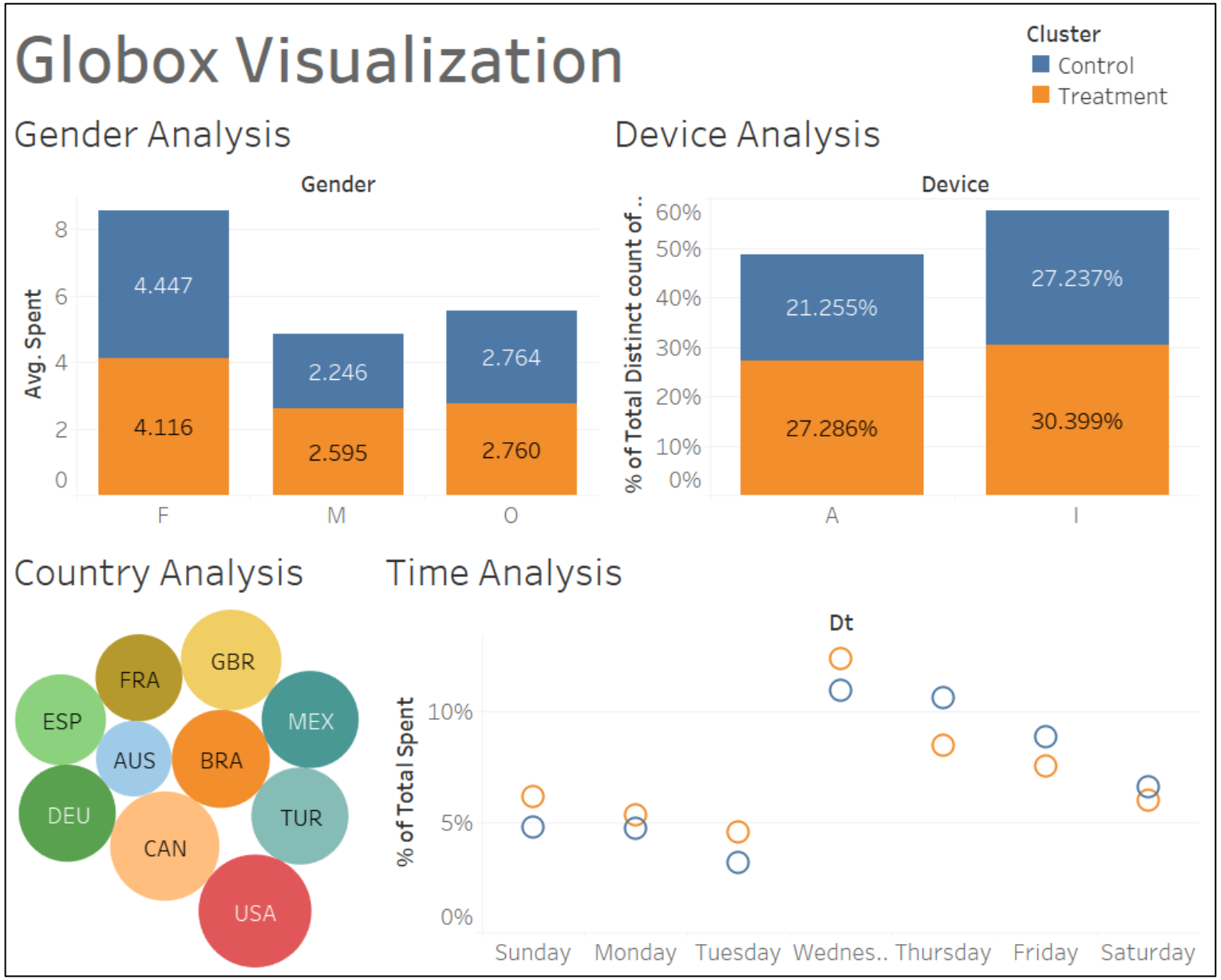
[1] Statulator sample size calculator result for Means
[2] Statsig sample size calculator result for Conversions

- The data : 24,402 samples for control group and 24,680 samples for treatment group.
- Enough data for average spending analysis
- Requires more data for conversion analysis.

Other insights

Keys takeaway:

- Females spent more than other gender and the least was males.
- iOS users have more conversion rate than Android users.
- The nationality that has the most conversion is USA.
- The days that users spent the most is Wednesday.



Conclusion

- There is no significant difference on average spending between control group and treatment group.
- There is significant different on conversion rate between control group and treatment group.
- There is a novelty effect on the given data.
- The data is enough for average spending analysis but requires more data for conversion rate analysis.

Suggestion

- Due to the novelty effect and insufficient data for target analysis, my suggestion is to continue collecting data and re-analyze again after the amount of data meets the requirement.

Thank You