

# A/B TEST - LIVE BUTTON

Sofascore Academy HM6

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## 0.1 Pretest analysis

As seen in chart persented below, CTR for live button remains at a plateau and doesn't seem to increase (nor decrease) significantly. Since users, by clicking on it, are lead to new screen where they can track live games, it is more likely that they will spend more time inside the app and have more engagement, hence more revenue and overall better experience. For that reason, it would be usefull to implement new version of live button (if shown better and more engaging).



# 1 Hypotesis

The main hypotesis in this experiment is that there is no difference in CTR between users that have old version of live button versus new version. To formalize:

 $H_0$ : There is no difference between CTR for users that have old version of live button versus new.

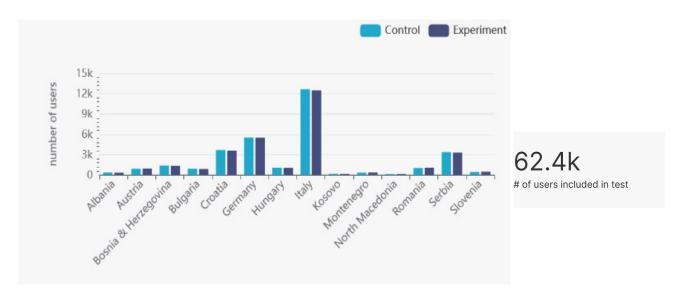
(1)

 $H_1$ : There is statistically significant difference.

(2)

# 1.1 Analytics events & sample

To correctly analyze results of this test, it is important to check if event of clicking on live button is implemented as expected. Also, we will track ads and odds impressions, add favourite event, open event, open team/league/playera and follow team/league/playera since these are most prominent services provided when live button is activated. Hence, should be implemented as expected as they will be part of secondary metrics that will further give insight into possible improvement which new version of live button brought. Sampling is done randomly in 50:50 ratio, across various countries, as seen in chart below.



Slika 1: Model bez interakcije

#### 1.2 Metrics

Goal metrics (OEC): Daily CTR for live button, Live button feature retention

**Secondary metrics:** # of add favorite event per user, # of open(s) per user, # of follow(a) per user, Add favorite event feature retention, Daily average engagement time per user

Guardrail metrics: # of odds impressions per user, # of ads impressions per user

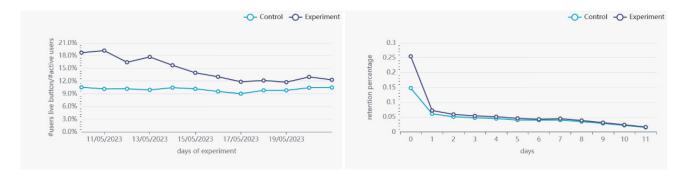
#### 1.3 Succes criteria

- ⇒ Significant improvement in retention and CTR, and odds/ads impression
- LAUNCH
- $\Rightarrow$  Significant improvement in retention and CTR, odds/ads impressions are not worse LA-UNCH
- $\Rightarrow$  Significant improvement in retention and no significant improvement in CTR, significant improvement of odds/ads impressions or are not worse LAUNCH
- $\Rightarrow$  No significant improvement in retention and significant improvement in CTR, significant improvement of odds/ads impressions or are not worse LAUNCH
- $\Rightarrow$  No significant improvement in retention and CTR, odds/ads impressions are significantly better LAUNCH
- $\Rightarrow$  No significant improvement in retention and CTR, odds/ads impressions are not worse PO's decision, possible retest with different copy
- ⇒ Retention and CTR and/or odds/ads impressions are worse NO LAUNCH
- $\Rightarrow$  Other PO's decision

## 2 Results

#### 2.1 Goal metrics

After conducting A/B test, analysis is made. Firstly, we will compare groups by goal metrics.



Slika 2: Daily CTR

Slika 3: Daily retention rate

As seen above, there are some differences, but by conducting statistical test, conclusion is that Daily CTR **IS** significantly better for treated group, hence we reject the nul hypotesis stated in (1). On the other hand, there si **NO** significant difference between groups for daily retention rate, hence we don't reject null hypotesis. Welch's t-test is used since we are conducting tests on CTR and retention data.

## 2.2 Secondary metrics