MuscleHub A/B Test

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Description

- Called on by Janet to determine the success of a free fitness test in garnering new customers since July 1st
- Used measurements of total visitors, applicants, and members, split among two groups (tested and untested)
- Examined the results to see if Janet's hypothesis was true

Data Used

4 Data sets used:

- Total Visits
- Visitors offered a fitness test
- Applications Submitted
- Memberships Purchased

Testimonials form selected clients

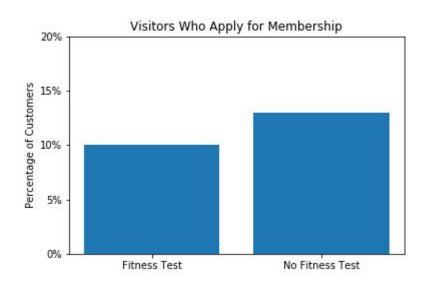
Testing Method Used -Chi Square Contingency

Due to having categorical for our three tests, I chose the Chi Square Contingency test to best examine the results.

Grouping the fitness test visitors into A and B cohorts required the Chi Square test as we could not run a binomial test or a T-test against the data. This allowed us to place a second condition into the mix (Is a member/isn't a member, applies/doesn't apply), and examine different portions of the membership acquisition process.

Test 1: Visitors who picked up an Application and became Members

We can see from the graph that more people picked up an application from the non-tested group. The p-val for the Chi test was < 0.05, so there is significant difference between the groups, which supports Janet's theory that the test might scare off prospective clients and rejects the null hypothesis.

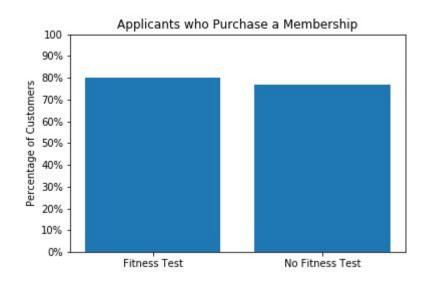


Test 2: Picked up Application and Purchased Membership

Among the group of people who completed the membership process, it looks like there is a higher percentage of members who took the fitness test than weren't given it.

This could be because the test itself filtered out potential applicants and kept them from taking the application to fill out.

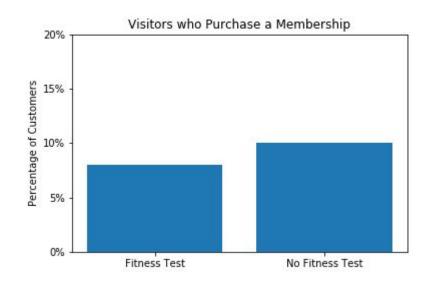
The p-val here is nowhere near significant, at over 0.43. This finding does not jibe with Janet's original hypothesis.



Test 3: Purchased Memberships among ALL Visitors

The results for ALL visitors who purchase memberships tracks similarly to the results of the first test.

The number of visitors who purchase after a fitness test is still lower than the number who purchase without the test, once again allowing us to reject the null hypothesis. The p-val is 0.014, meaning the data is significant enough to prove Janet correct.



Qualitative Data

From reading the interviews, it does appear that people shy from the "in your face" approach, but the intensity of the fitness test seems to make some prospective customers wary.

However with Test 2 showing that fitness test participants had higher membership rates, as a percentage, it indicates that some people like the test.

Still, looking at the test results, fitness test takers consistently become paid members at a lower rate.

Recommendation

Given the results, we feel it would be best to stop doing the fitness tests, as it may dissuade potential clients.

Results show that the "No Test" group had substantially higher signup rates and was more likely to take an application.

Making the application process easier may be the better solution for MuscleHub, given anecdotal data from customers, as well.