

Musclehub Testing

A/B Testing Description

- This test breaks down Musclehub potential members into two key groups:
 - Group A – people who were given a fitness test
 - Group B – those that weren't given a fitness test
- Then with these groups the information is broken down to find out three key phases of membership. Those that visited did they apply. Those that applied did they purchase and finally those that visited how many purchased.
- We utilized a Chi Square Test for each hypothesis testing, this was because it is the best method to test when comparing two different categorical groups for an A/B test
- So is this fitness did helping or potentially hurting the gym's membership?

The Datasets

- For this test we utilized the visitor data from the Gym, however to make sure that it was all relevant to the testing only data was used from July 17th onward.
- The other datasets used were the applications information, and the fitness test information, and finally purchases information.
- This resulted in a group of 5004, 2504 for group A, Fitness Testers, 2500 for group B, Non-Fitness Testers

Results of Application

- The first test, which group turned in the application more? Group B surprisingly. 13% of these individuals turned in their applications while, only 9% turned in their applications. This is also statistically significant as illustrated in the p value of .0009.
- I believe this is due to the rigor or lack thereof that fitness test, if they believe the gym or the instructors aren't doing well enough at selling the process or illustrating the benefits of the gym then they are making up the mind of the consumer that this gym isn't even worth the application.
- We used

Results of Memberships from Application

- This test showed up the results of those who turned in an application how many went on to purchase a membership. However, this statistical test wasn't significant. The p value = .43, p value's need to be below .05 to be considered significant and meaningful.
- IT did show that members of Group A purchased at an 80% rate vs Group B of a 77% rate.

Result of Visitors that Purchase

- This final test showed all individuals that visited which group was more likely to purchase? Again it was group B! With a p value of .015 we understand these results to be significant and meaningful.
- 10% of Group B individuals who visited the gym were likely to purchase a membership where only 7.9% of the Group A individuals who had a fitness test were likely to make a purchase.

My Recommendation

- Get surveys out to the individuals who took the fitness test. Try to understand what it is in that process that is making these individuals less likely to sign up? Are trainers too pushy, is the rigor of the test too lacking or too much?
- For the time, cut this out of their program for visitors, they are more likely to sign up individuals at this point with just the walk in visitors and it will help get trainers back to people who are already members.