

A black and white photograph of a person in a gym setting, performing a deadlift. The person is crouched low to the ground, gripping a barbell with both hands. Their legs are extended, and they are wearing athletic shoes. The barbell has large weight plates on both ends. The floor is made of dark, square tiles. The lighting is dramatic, with strong shadows.

MuscleHub Analysis

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Overview of A/B test

A black and white photograph of a person in a gym setting, performing a deadlift. The person is wearing a plaid shirt and dark pants, and is lifting a barbell with weights. The background shows a tiled floor and a wall.

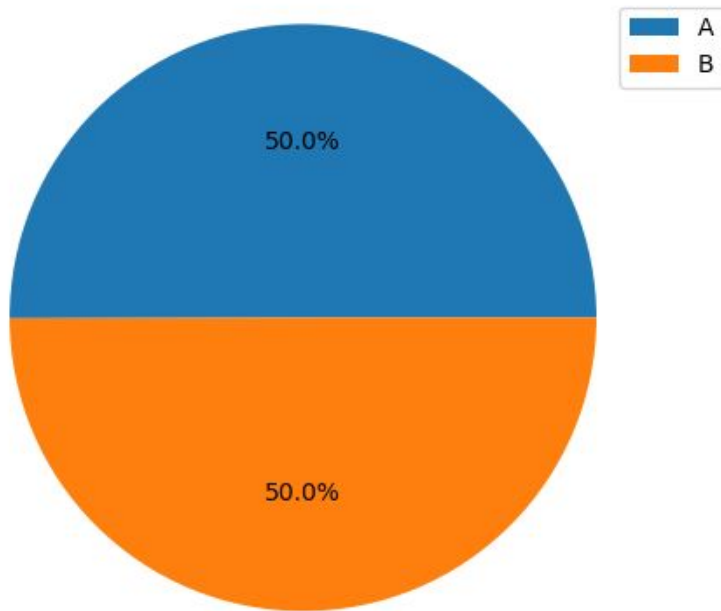
We started the A/B test on 7-1-17. Splitting visitors into two even groups (see graph in slide 4)

Group A were asked to take a fitness test with a personal trainer

Group B skipped the fitness test and proceed directly to the application

Janet's suspicion prior to the test was that Group B will be more likely to eventually purchase a membership to MuscleHub. This was based on the idea that fitness tests can intimidate new visitors.

Quick pie chart showing the even groups roughly 2500 in each



A black and white photograph of a person in a gym, captured from the waist down, performing a deadlift. The person is wearing athletic shorts and sneakers, and is bent over at the hips, gripping a barbell with both hands. The barbell has large weight plates on each end. The floor is made of dark, square tiles. The lighting is dramatic, with strong shadows. The text "The Analysis" is overlaid in white on the left side of the image.

The Analysis

Approach to Analysis

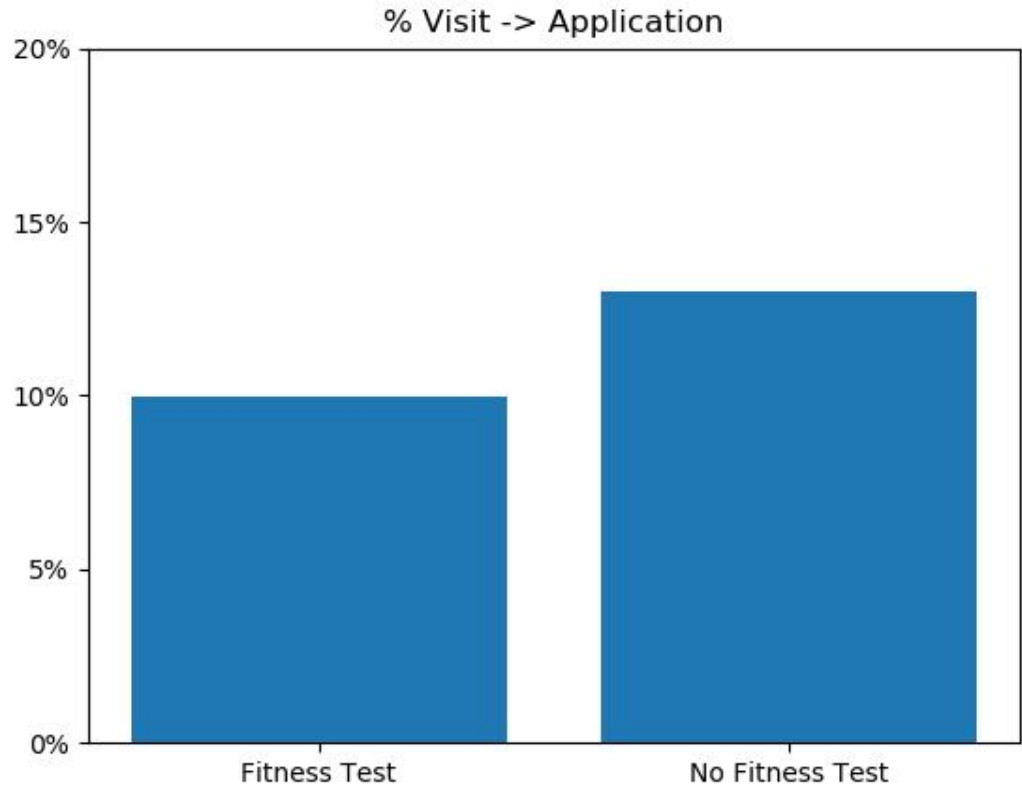
- First of all I combined all our key data together using SQL queries so we had a thorough dataframe to work with
- Then analysed the differences between the two groups in 3 scenarios
 - 1. Visit -> Application
 - 2. Application -> Member
 - 3. Visit -> Member
- I then ran chi squared tests to analyse if the differences between Group A and Group B were significant (pvalue ≤ 0.05)
 - This test was chosen as it is good at comparing evaluating contingency tables and multiple data points as we had in this experiment.
- Finally I visualised these findings for you now


A black and white photograph of a person in a gym, captured from the waist down, performing a deadlift. The person is wearing athletic shorts and sneakers, and is bent over, gripping a barbell with both hands. The barbell has large weight plates on each end. The floor is made of dark, square tiles. The lighting is dramatic, with strong shadows.

Visit ---> Application

% Visit -> Application

- Here I looked at the percentage of visitors who picked up an application after their visit. Split into the two groups (Group A = Fitness Test, Group B = No Fitness Test)
- It's clear to see that a greater % of visitors picked up an application if they didn't have to complete a fitness test.
- This finding is statistically significant with a p-value of 0.0009

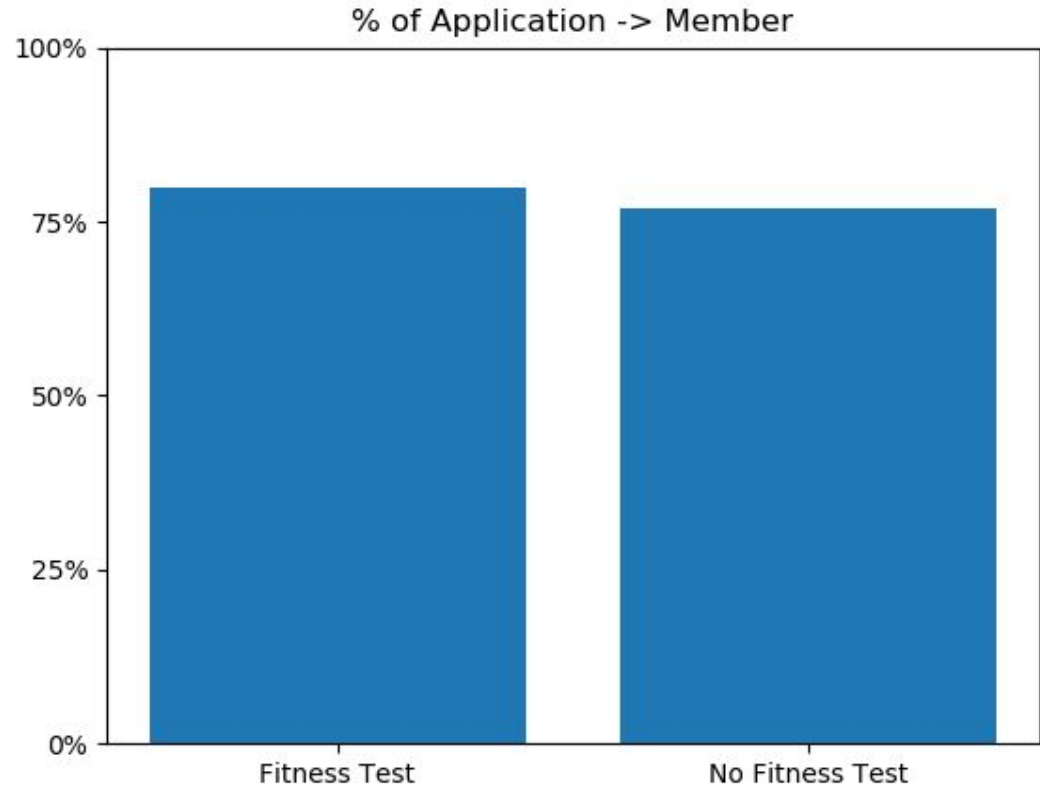


A black and white photograph of a person in a gym, captured from the waist down, performing a deadlift. The person is wearing athletic shorts and sneakers, and is bent over at the hips, gripping a barbell with both hands. The barbell is on the floor, and the person's legs are extended back. The floor is made of large, dark tiles. The text "Application -> Member" is overlaid in the center of the image.

Application -> Member

Application -> Member

- Here we can see that once an application has been taken there is a very high conversion to becoming a member.
- There is no clear difference here between the groups and the significance test agreed with a p-value of 0.43

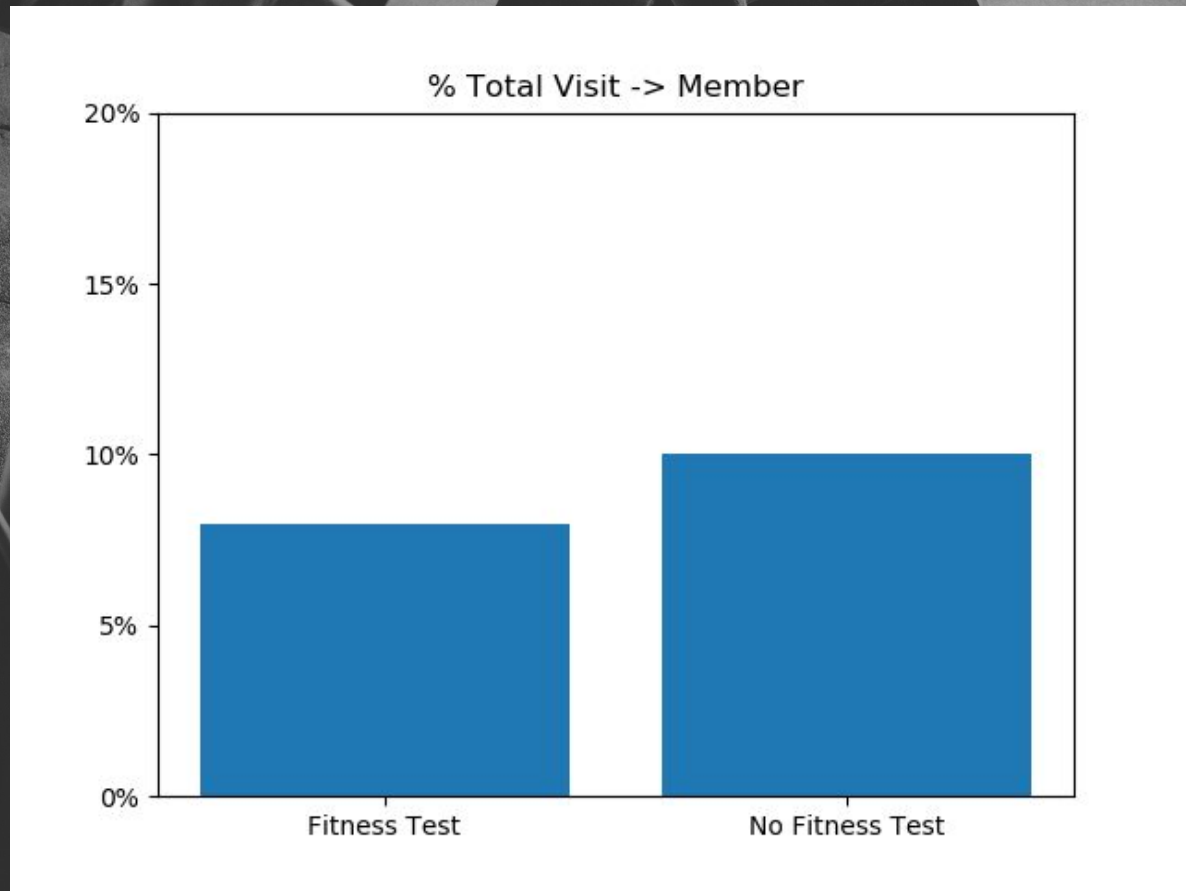


A black and white photograph of a person in a gym, captured from the waist down, performing a deadlift. The person is wearing athletic shorts and sneakers, and is bent over, gripping a barbell with both hands. The barbell has large, dark weight plates on either end. The floor is made of large, square tiles. The lighting is dramatic, with strong shadows. The text "Total Visits -> Member" is overlaid in the center of the image.

Total Visits -> Member

Total Visits -> Member

- Straight away you can see that the overall conversion of visitors to members is nowhere near as high as application to member.
- Also it is interesting to see that the conversion is higher for the visitors who did not have to do the fitness test. This finding is significant with a p-value of 0.014



A black and white photograph of a person performing a squat in a gym. The person is wearing a plaid shirt, shorts, and sneakers. They are holding a barbell with weights. The floor is made of large square tiles. The text "The Interviews" is overlaid on the left side of the image.

The Interviews

A black and white photograph of a person performing a deadlift. The person is in a low, athletic stance, gripping a barbell with both hands. Their legs are extended, and their back is straight, demonstrating proper form. The barbell is on the floor, and the person's feet are positioned under the bar. The background is a dark, textured floor, likely in a gym.

Interviews with participants in the experiment

- The overall sentiment reflects the findings in the data that fitness tests are a real hassle
- “I took the MuscleHub fitness test because my coworker Laura recommended it. Regretted it.” - Sonny
- “I tried to sign up for LiftCity last year, but the fitness test was way too intense. This is my first gym membership EVER, and MuscleHub made me feel welcome.” - Shirley
- “Down at LiftCity they had me doing burpees 30 seconds after I walked in the door and I was like “woah guys slow your roll, this is TOOOO much for Jesse!”” - Jesse

A black and white photograph of a person in a gym setting, captured from the waist down. They are in a low, athletic stance, performing a deadlift with a barbell. The person is wearing dark shorts and sneakers. The barbell is on the floor, and the person's hands are gripping it. The floor is made of large, dark tiles. The word "Recommendations" is overlaid in white text on the left side of the image.

Recommendations

Recommendations

- I would suggest that the data and interviews point to getting rid of the fitness test in the sign up process.
- It is seen as abrasive and costs us customers
- The performance of Group B was significantly greater than that of Group A.
- Moving forward without the fitness test would give MuscleHub an advantage over our rivals LiftCity who have a fitness test.
- Listen to our customer's other complaints about the cleanliness of the gym
- Continue to work on improving Visit -> Application conversion