# MuscleHub

Onboarding A/B test

# New customer onboarding test

A new user has to go through the following steps in order to buy a membership at MuscleHub:

1. Take a fitness test with a Personal Trainer
2. FIll out an application form
3. Send a payment for the first month's membership

The manager is proposing a new, simpler flow hypothesizing that by skipping the fitness test visitors will be more likely to purchase a membership at MuscleHub.

# Dataset

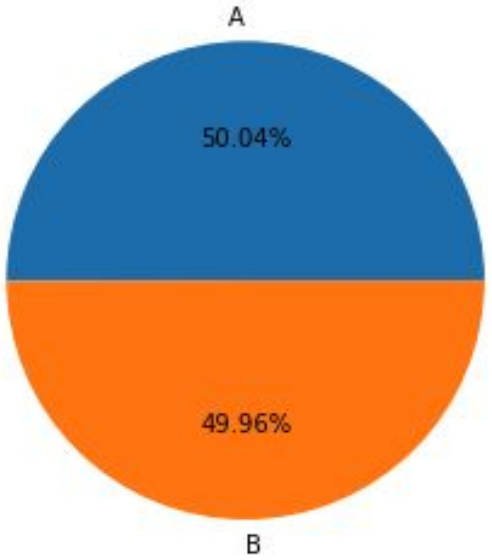
In order to perform our analysis we have in our disposal the following datasets:

- **visits** contains information about potential customers who have visited MuscleHub
- **fitness_tests** contains information about potential customers, who were given a fitness test
- **applications** contains information about any potential customers who filled out an application. Not everyone in visits will have filled out an application.
- **purchases** contains information about customers who purchased a membership

# Methodology

Visitors were randomly assigned to one of the two groups:

**Group A** had to complete a fitness test before completing an application
**Group B** could go straight into filling out an application



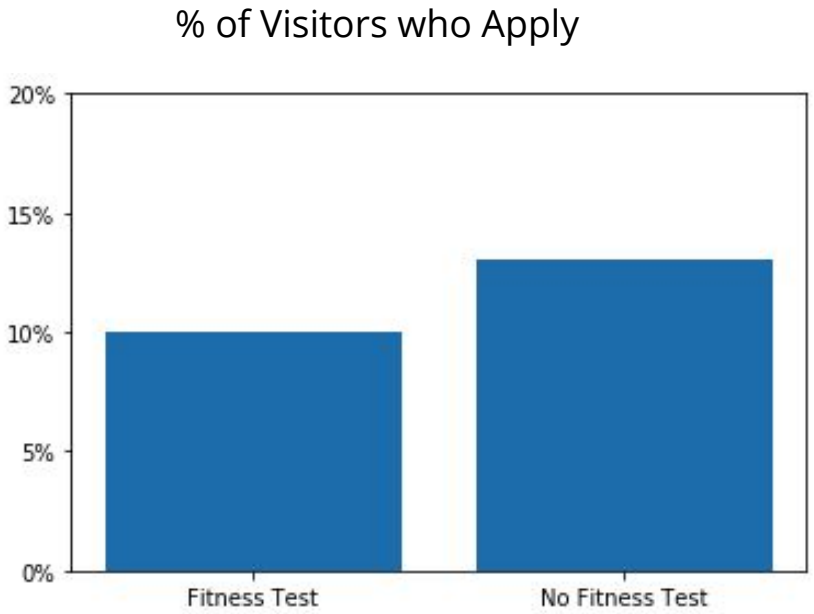
# Hypothesis 1: Group B is more likely to submit an application

We decided to use a chi-square test to evaluate whether there is significant difference between the application rate in the two groups because we have categorical data.

The null hypothesis is that there is no significant difference between Group A and Group B
With a p-value=0.00096 << 0.05 we can reject the null

This could be because there is no barrier to pick up an fill out a form - any visitor can do that without having to spend much time or energy completing the fitness test, where you may have to wait for a personal trainer to become available or may not be dressed appropriately etc

# Hypothesis 1: Group B is more likely to submit an application




**Visitors in Group B are more likely (13% vs 9.98%) to fill out an application and the difference is statistically significant.**

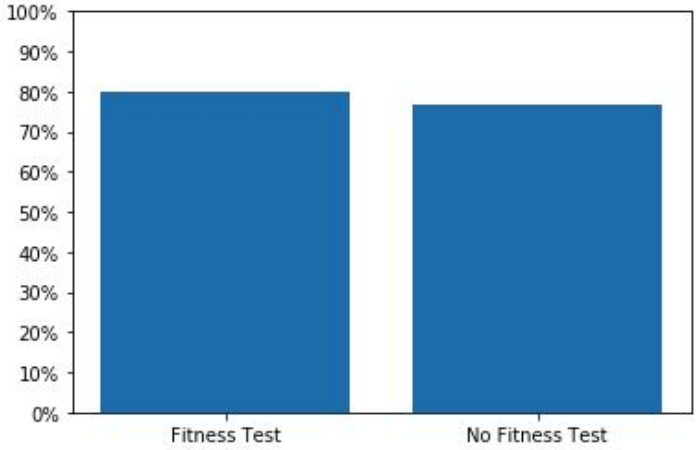
# Hypothesis 2: Group B is more likely to purchase a membership if they have picked up an application

Similarly we will use a chi-square test to evaluate whether the visitors in Group B are more likely to purchase a membership compared to Group A if they have picked up an application

The null hypothesis is that there is no significant difference between the two groups
With a p-value=0.432 >> 0.05 we cannot reject the null

# Hypothesis 2: Group B is more likely to purchase a membership if they have picked up an application

% of Applicants who Purchase



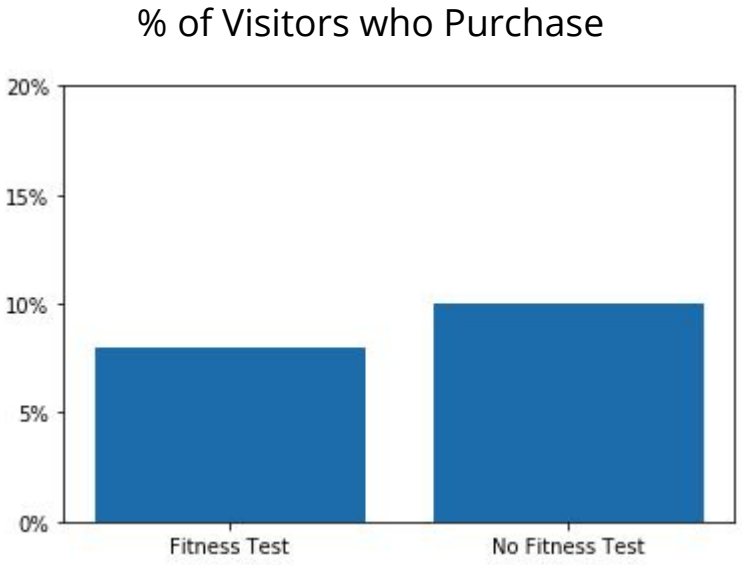

**Group A seems to be more likely to have an applicant become a member (8% vs 7.69%) but the results are not statistically significant**

# Hypothesis 3: Group B is more likely to purchase a membership overall

We will use a chi-square test to evaluate whether the visitors in Group B are more likely to purchase a membership compared to Group A.

The null hypothesis is that there is no significant difference between the two groups
With a p-value=0.014 << 0.05 we can reject the null

# Hypothesis 3: Group B is more likely to purchase a membership overall




**Visitors in Group B are more likely (10% vs 7.98%) to become members and the difference is statistically significant.**

# What did the customers think?

We also conducted some interviews with some of the potential customers to understand what motivates them to purchase a membership.

Some of the key insights were that:

- Some potential customers may find the fitness stress overwhelming and prefer to continue with a membership purchase without having to prove their abilities.
- Cleanliness is an important factor for potential customers to sign up.

# Recommendation

**After looking at the data and reading through the interview responses we recommend that 100% of the visitors are not requested to take a fitness test before filling out an application.**

The fitness test seems to be putting people off and stops them from becoming paying customers. Had we used the same onboarding flow (skipping the fitness test) for the duration of the test we could have had 50 additional purchased memberships.

However, there seem to be some visitors who really enjoyed having to do the fitness test, which had a motivating impact on them. It would be good to do further testing to understand what are the drivers that causing that reaction and maybe offer the fitness test as an optional step.