Fitness Test ROI

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Description

- This A/B test will show the return on investment in providing a fitness test from a personal trainer.
- All were given or have access to a membership form but not all were given a fitness test.
- We also interviewed potential members to gain feedback with this test.

Summary of Dataset

We need the following information to safely study how to increase sales.

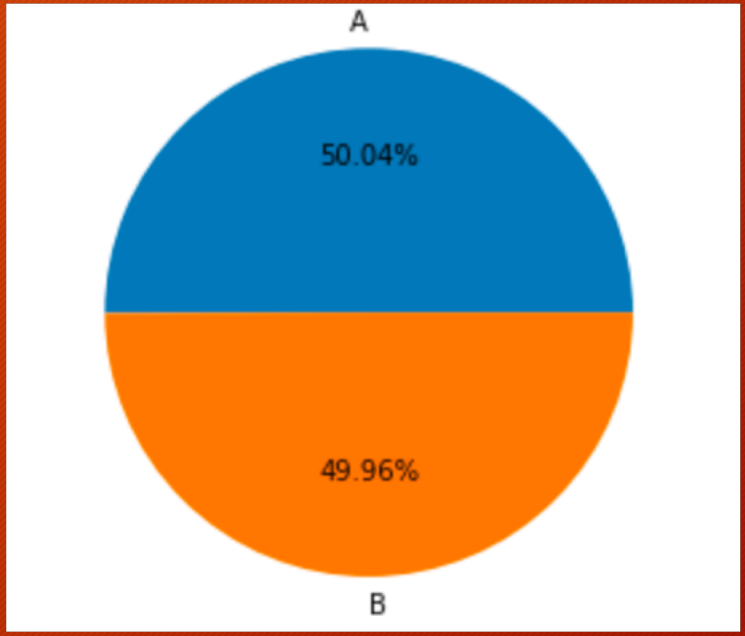
- VISIT information
  - This shows potential clients who has visited MuscleHub
- FITNESS test
  - Potential clients that were given a fitness test during the visit.
  - We will call this batch - Group A
- APPICATION information
  - Potential clients who filled out an application form to join MuscleHub
  - Not all applicants were given a fitness test
- PURCHASES information
  - Clients that joined MuscleHub and who purchased a membership

Three Hypothesis Tests

(1) REVIEW our target audience and identify the group that was given a fitness test by a personal trainer.

A pie chart would show a better representation of how many applicants were given a fitness test versus applicants without fitness test.

The image shows that half of our target audience was given a fitness test by a personal trainer.



is_application	ab_test_group	Application	No Application	Total	Percent with Application
0	A	250	2254	2504	0.09984
1	B	325	2175	2500	0.13000

(2) Who picks up an application? Group A or Group B

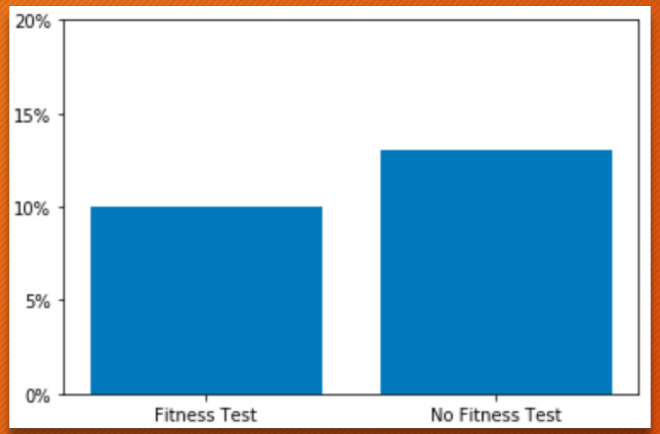
We've pulled the data by counting the number of applications that was submitted by both groups. Using a pivot table, it shows that most of our applicants are from group b. This is the group that we're not given the fitness test.

(3) Conversion from submitted application to purchased membership

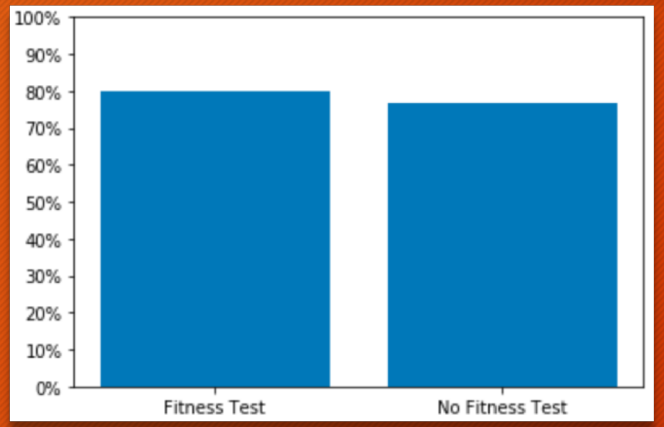
Using a pivot table we could compare the conversion rate of membership when given a fitness test.

is_member	ab_test_group	Member	Not Member	Total	Percent Purchase
0	A	200	50	250	0.800000
1	B	250	75	325	0.769231

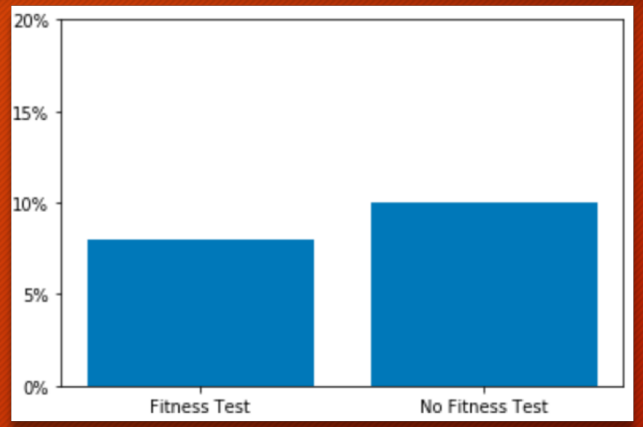
Summary



The first data shows that most applications were filled or submitted by the group that were not given a fitness test by a personal trainer.



This chart shows the percentage of applicants that purchase the membership program with MuscleHub.



This data shows the percentage of visitors that purchased the membership.

During this test we discovered that potential members that received a fitness test from the personal trainer are less likely to submit an application by 4%. Once the application has been submitted, potential members are highly likely to purchase if given a fitness test.

Recommendation for MuscleHub

My recommendation is to include a fitness test with a personal trainer only when an application has been submitted and based from visitor's feedback/interview I suggest to keep the facility clean to be more competitive to other fitness facility.