

MuscleHub

Data Analysis

A/B TEST PRESENTED BY USMAN SHAIKH

Becoming a member

- ▶ At MuscleHub becoming a member requires following three steps:
 1. Taking a fitness test with a personal trainer.
 2. Filling out an application for the gym.
 3. Sending in a payment for the first month's membership.
- ▶ Lately it has been observed that some of the prospective members feel intimidated by the gym's fitness test and this appears to be impacting new memberships.
- ▶ In order to verify this we conducted an A/B Test

What's an A/B Test and why do it?

- ▶ An A/B test allows individuals, teams, and companies to make careful business decisions and help them choose among two different options either A or B
- ▶ The test enables analysts to hypothesize and predict why certain elements of a business affect decision making.
- ▶ In other words, a manager can be proven right or wrong. Her or her opinion about the best experience for a given goal can be proven right or wrong through an A/B test.

Group A and B

- ▶ In order to conduct the test we divided our sample in to two groups.
 1. Group A was asked to take a fitness test with a personal trainer.
 2. Group B skipped the fitness test and proceeded directly to the application.
- ▶ Hypothetically it is believed that visitors who do not take a fitness test are more likely to purchase a membership to MuscleHub!

Analysis

Total participants = **5004**

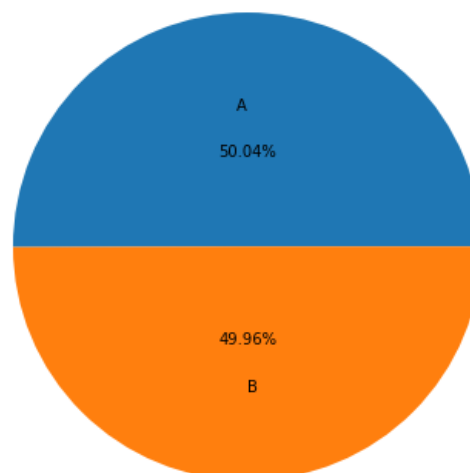
“WERE ASKED TO TAKE FITNESS TEST”

Group A = 2504 50.04%

“DID NOT TAKE A FITNESS TEST”

Group B = 2500 49.96%

A/B TEST GROUPS



Breakdown of group A and B

	ab_test_group	gender	first_name	Percent
0	A	female	1255	25.08
1	A	male	1249	24.96
2	B	female	1309	26.16
3	B	male	1191	23.80

Analysis Cont'd

- People who visited and picked up an application

is_application	ab_test_group	Application	No Application	Total	Percent with Application
0	A	250	2254	2504	9.98
1	B	325	2175	2500	13.00

- People who picked up applications and purchased memberships

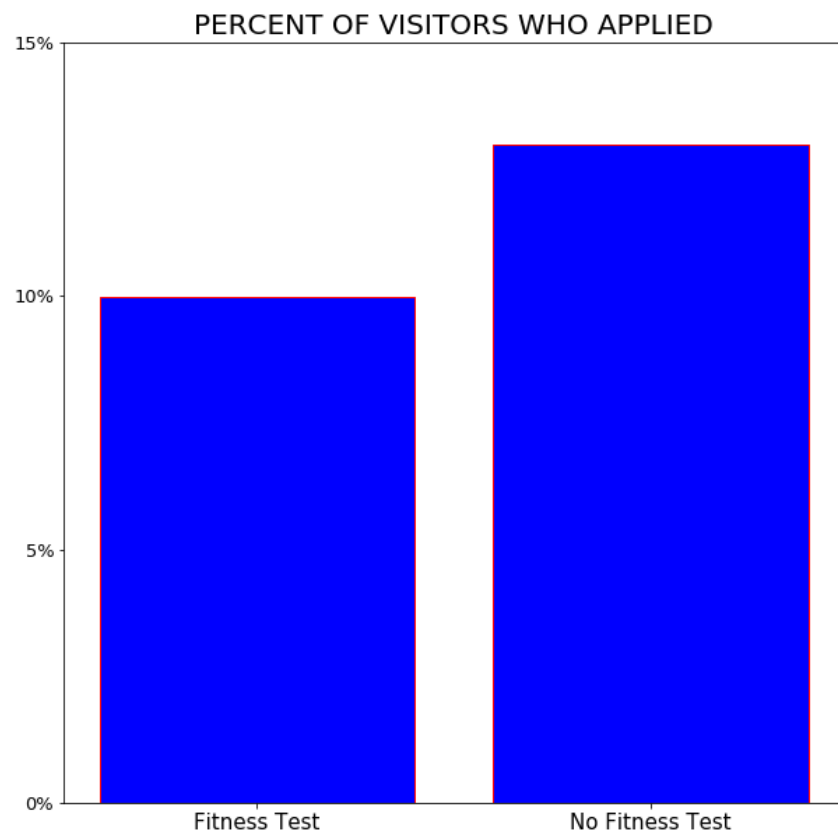
is_member	ab_test_group	Member	Not Member	Total	Percent Purchase
0	A	200	50	250	80.00
1	B	250	75	325	76.92

- Percentage of all visitors who purchased memberships

is_member	ab_test_group	Member	Not Member	Total	Percent Purchase
0	A	200	2304	2504	7.99
1	B	250	2250	2500	10.00

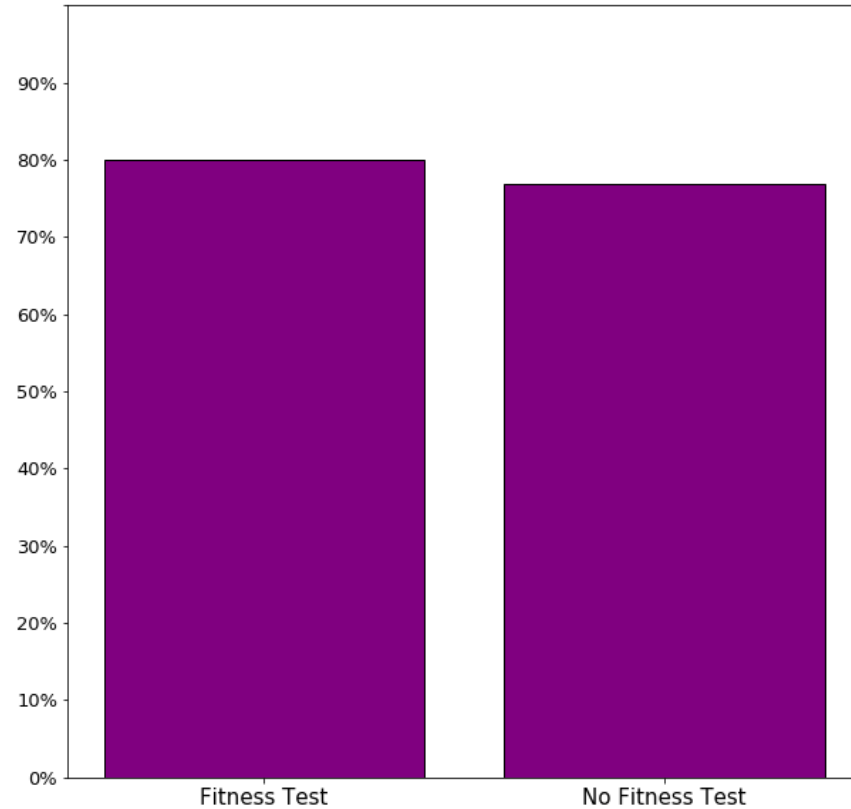


Percentage of visitors who applied

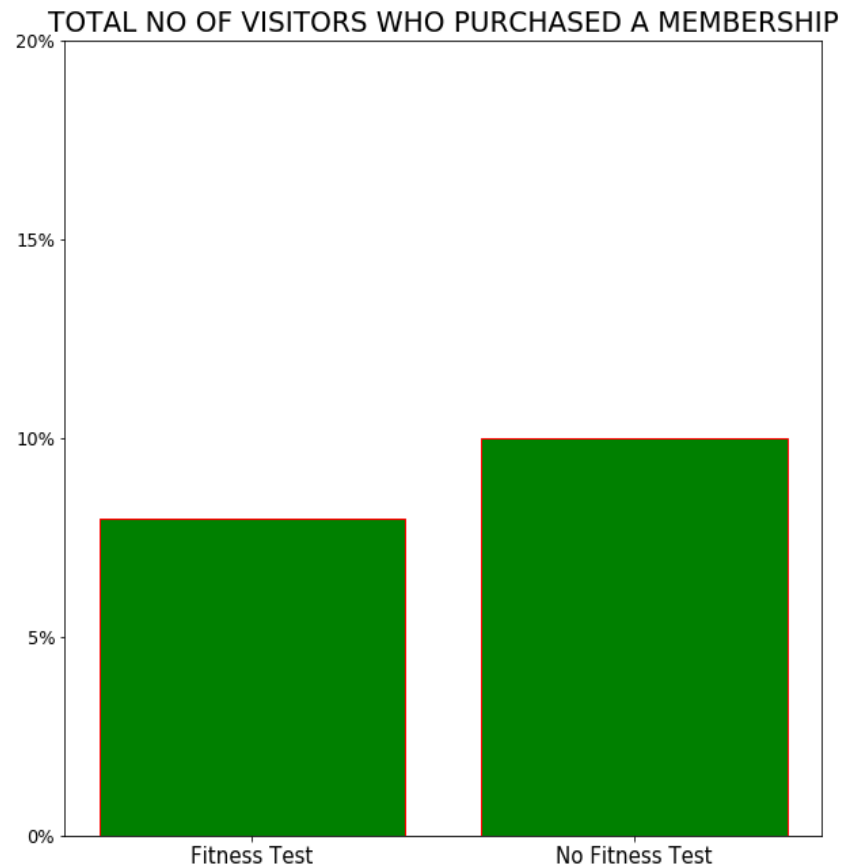


Applicants who purchased a membership

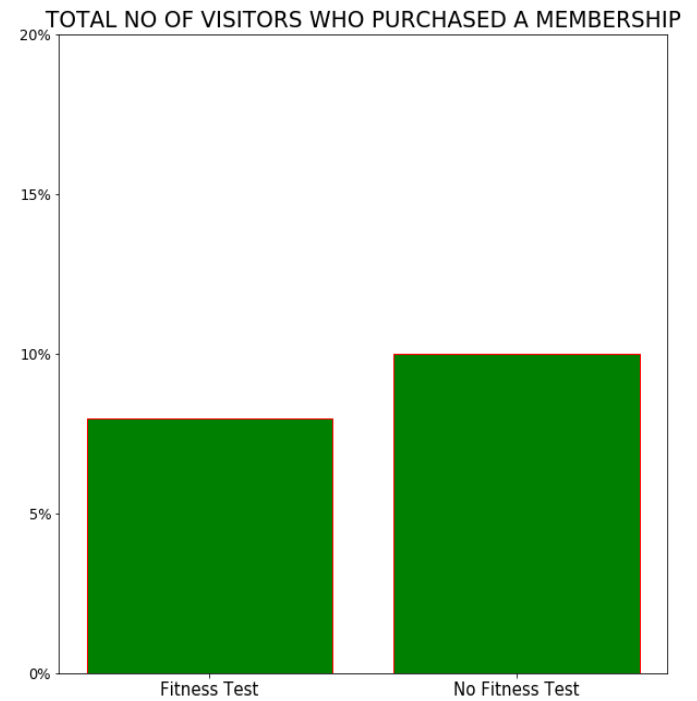
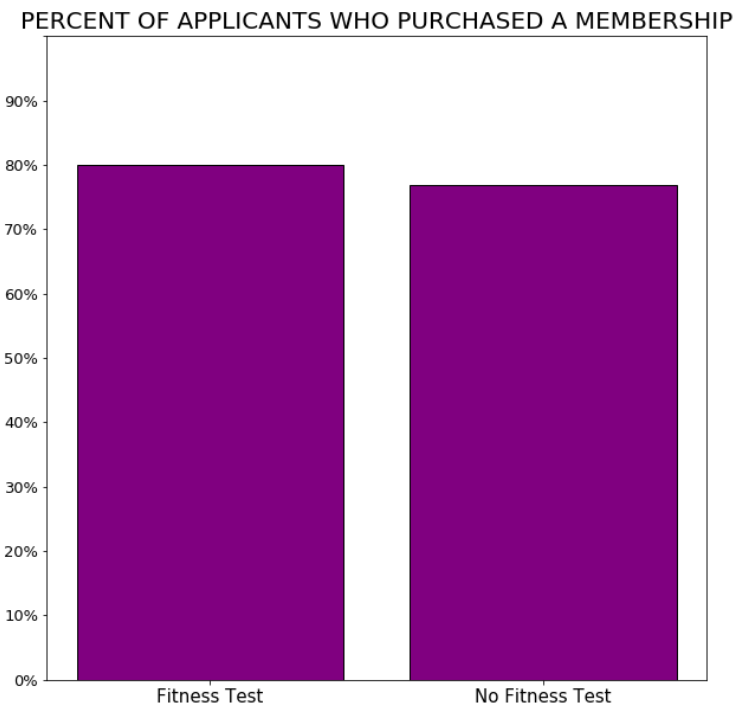
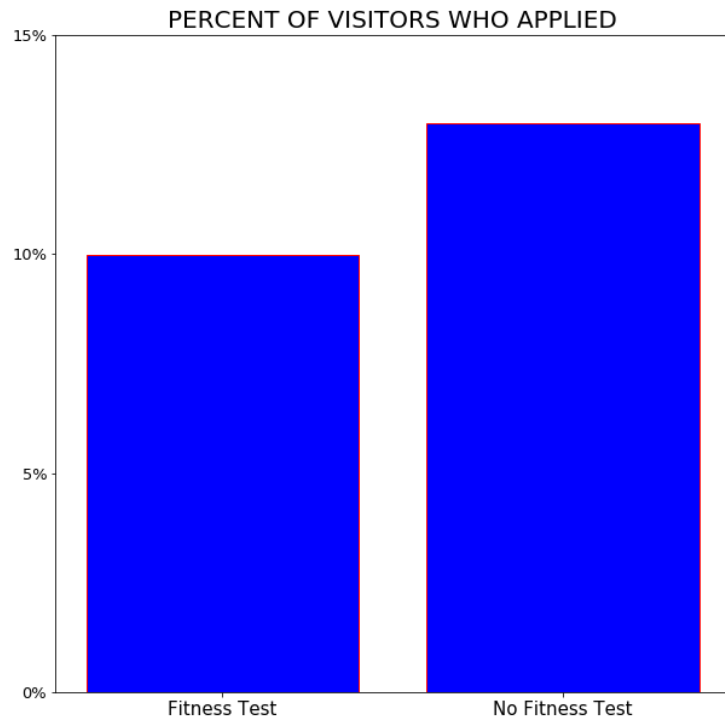
PERCENT OF APPLICANTS WHO PURCHASED A MEMBERSHIP



Total number of visitors who purchased a membership



Side by side analysis



Conclusion

- ▶ People who go through a fitness test are less likely to apply for a membership
- ▶ People who do not take a fitness test are more likely to apply for a membership
- ▶ Those who take the fitness test are more likely to purchase a membership
- ▶ Those do not take fitness test are less likely to purchase a membership
- ▶ Overall those who do not take a fitness test are more likely to purchase a membership

