



Funnels with Warby Parker

Learn SQL from Scratch

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Warby Parker is an eyewear company founded in 2010 that sells eyeglasses and sunglasses to their end customer. The following slides present data based on an A/B test that the company's marketing team conducted. The data provides further insight into what Warby Parker's customers are interested in, what kind of eyewear they desire, and how much those customers ultimately spend with Warby Parker.

2. Warby Parker Data Results

2.1 Warby Parker Quiz Response Rates

“When was your last eye exam?” had the lowest response rate of 75%. There could be a few different explanations for this:

- The respondent does not know the date and must leave the quiz to find it
- The respondent might be embarrassed that he or she has not been to the doctor for an exam for an extended period of time
- The respondent might feel it is too personal of a question to answer in an online quiz

Question	# of Responses	Response Rate
1) What are you looking for?	500	100%
2) What's your fit?	475	95%
3) Which shapes do you like?	380	80%
4) Which colors do you like?	361	95%
5) When was your last eye exam?	270	75%

2.2 Warby Parker Conversion Rates

1,000 users initially took the Warby Parker Quiz

- 750 of these users then progressed to the Home Try-On portion of Warby Parker's process, a conversion rate of 75%
- Of those 750 users 495 went on to purchase a pair of glasses, a conversion rate of 66% from the Home Try-On to Purchase steps
- Half (49.5%) of the users who initially took the quiz ended up purchasing glasses from Warby Parker

Step in Warby Parker Process	# of Users	Conversion Rate
Quiz	1,000	N/A
Home Try On	750	75%
Purchase	495	66%

```
WITH funnels AS(
SELECT DISTINCT q.user_id,
       h.user_id IS NOT NULL AS 'is_home_try_on',
       h.number_of_pairs,
       p.user_id IS NOT NULL AS 'is_purchase'
FROM quiz AS 'q'
LEFT JOIN home_try_on AS 'h'
      ON q.user_id = h.user_id
LEFT JOIN purchase AS 'p'
      ON p.user_id = q.user_id)
SELECT
       COUNT(*) AS 'initial',
       SUM(is_home_try_on) AS 'num_home',
       SUM(is_purchase) AS 'num_purchase'
FROM funnels;
```

2.3 Warby Parker Purchase Rates

Warby Parker conducted an A/B Test on users that reached the Home Try-On Stage to see if the number of glasses a user received impacted the user's propensity to buy

- 50% of users received 3 pairs of glasses for their Home Try-On
- The other 50% of users received 5 pairs of glasses for their Home Try-On

Users that received 5 pairs of glasses were 1.5x more likely to purchase a pair of glasses than users that received 3 pairs. Warby Parker should consider doing additional testing with 6, 7, and higher number of pairs to see if the trend continues while also factoring in the price of shipping the glasses.

Step	3 Pairs	5 Pairs
Number of Home Users	379	371
Purchase	201	294
Purchase Rate	53%	79%

```
WITH funnels AS(  
  SELECT DISTINCT q.user_id,  
    h.user_id IS NOT NULL AS  
    'is_home_try_on',  
    h.number_of_pairs,  
    p.user_id IS NOT NULL = 1 AS  
    'is_purchase'  
  FROM quiz AS 'q'  
  LEFT JOIN home_try_on AS 'h'  
    ON q.user_id = h.user_id  
  LEFT JOIN purchase AS 'p'  
    ON p.user_id = q.user_id)  
SELECT number_of_pairs,  
  COUNT(*) AS 'initial',  
  SUM(is_home_try_on) AS  
  'num_home',  
  SUM(is_purchase) AS 'num_purchase'  
FROM funnels  
GROUP BY 1;
```


2.4 Warby Parker Quiz Results

The Warby Parker Quiz had some interesting results:

- All of the questions had roughly 10% of respondents answer with I'm not sure. If the company would like to lower that they may include additional pictures in the quiz for further clarification
- 67 more women took the quiz than men
- Narrow and Medium fit represented 72% of the responses. Warby Parker may want to investigate adding additional styles of those fits
- Rectangular and Square shapes are much more popular (73% combined) than the Round shape (18%)
- The color preferences are relatively diverse

Style	# of Responses	% of Responses
Women's Styles	469	47%
Men's Styles	432	43%
I'm not sure. Let's skip it.	99	10%

Fit	# of Responses	% of Responses
Narrow	408	41%
Medium	305	31%
Wide	198	20%
I'm not sure. Let's skip it.	89	9%

Shape	# of Responses	% of Responses
Rectangular	397	40%
Square	326	33%
Round	180	18%
I'm not sure. Let's skip it.	97	10%

Color	# of Responses	% of Responses
Tortoise	292	29%
Black	280	28%
Crystal	210	21%
Neutral	114	11%
Two-Tone	104	10%

2.5 Warby Parker Purchase Information

- Despite being just 43% of Quiz participants Men drive 49% of the total purchase amount
- The Dawes is the most popular model by a fairly significant amount, driving \$16K of sales
- The Monocle has the weakest purchase figures but the revenue amounts could be cyclical and spike before Halloween
- Tortoise colors drive one third of the total purchase amount, however having Endangered Tortoise as an option may lead to some ethical questioning in the future.
- The classic Jet Black is the clear top earner in terms of colors
- More analysis could be done by further breaking down the colors and models by Style and even by location of the end user

Style	Purchase (\$)	Purchase (%)
Women's	\$28,670	51%
Men's	\$27,125	49%

Model	Purchase (\$)	Purchase (%)
Dawes	\$16,050	29%
Lucy	\$12,900	23%
Eugene Narrow	\$11,020	20%
Brady	\$9,025	16%
Olive	\$4,750	9%
Monocle	\$2,050	4%

Color	Purchase (\$)	Purchase (%)
Jet Black	\$12,900	23%
Driftwood Fade	\$9,450	17%
Elderflower Crystal	\$6,600	12%
Rosewood Tortoise	\$5,890	11%
Rose Crystal	\$5,130	9%
Layered Tortoise Matte	\$4,940	9%
Pearled Tortoise	\$4,750	9%
Sea Glass Gray	\$4,085	7%
Endangered Tortoise	\$2,050	4%