



Warby Parker's Marketing Funnels: Capstone

Learn SQL from Scratch
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1. Quiz results - helping customers shop!

To help users find their perfect frame, Warby Parker has a [Style Quiz](#) that has the following questions:

1. "What are you looking for?"
2. "What's your fit?"
3. "Which shapes do you like?"
4. "Which colors do you like?"
5. "When was your last eye exam?"



1.1

Q: Which question(s) of the quiz have a lower completion rates?

Q: What do you think is the reason?

question	COUNT(DISTINCT user_id)	% users lost	% of users in each step
1. What are you looking for?	500	0%	100%
2. What's your fit?	475	-5%	95%
3. Which shapes do you like?	380	-20%	76%
4. Which colors do you like?	361	-5%	72%
5. When was your last eye exam?	270	-25%	54%

A: Questions 3-5 have lower completion rates, I think this is because customers may be unsure of what their options are as far as shapes or colors. They might not know which styles are offered or look best on them personally. How can we solve for that?

1.2

Based on answers completed in questions 1 & 2 we can assist customers by making suggestions based on popular styles! Let's try and engage users on these two questions:

What are the most popular shapes purchased?

For people with Narrow?

Medium?

Wide?



What are the most popular colors purchased?

For Men?

For Women?



1.3

Popular styles and colors data - Shapes

	Narrow	Medium	Wide
Most popular	Rectangular	Rectangular	Square
Second	Square	Square	Rectangular
Third	Round	Round	Round

We can use this data to suggest popular styles for each fit to help customers choose a frame shape that works well for their face based on what other customers with their same fit have tried on and purchased.

```
SELECT quiz.user_id, fit, shape, COUNT(*)
FROM quiz
JOIN purchase p
ON quiz.user_id = p.user_id
WHERE fit in ('Narrow')
GROUP BY shape
LIMIT 100;
```

```
SELECT quiz.user_id, fit, shape, COUNT(*)
FROM quiz
JOIN purchase p
ON quiz.user_id = p.user_id
WHERE fit in ('Medium')
GROUP BY shape
LIMIT 100;
```

```
SELECT quiz.user_id, fit, shape, COUNT(*)
FROM quiz
JOIN purchase p
ON quiz.user_id = p.user_id
WHERE fit in ('Wide')
GROUP BY shape
LIMIT 100;
```

1.4

Popular styles and colors data - Colors

Style	Color	Orders
Women's Styles	Rosewood Tortoise	62
Women's Styles	Rose Crystal	54
Women's Styles	Pearled Tortoise	50
Women's Styles	Elderflower Crystal	44
Women's Styles	Jet Black	42
Style	Color	Orders
Men's Styles	Driftwood Fade	63
Men's Styles	Layered Tortoise Matte	52
Men's Styles	Jet Black	44
Men's Styles	Sea Glass Gray	43
Men's Styles	Endangered Tortoise	41

```
SELECT style, color, COUNT(*) orders
FROM purchase
WHERE style in ("Women's Styles")
GROUP BY color
ORDER BY 3 DESC
LIMIT 100;
```

```
SELECT style, color, COUNT(*) orders
FROM purchase
WHERE style in ("Men's Styles")
GROUP BY color
ORDER BY 3 DESC
LIMIT 100;
```

2. A/B test results - what makes a buyer?

Warby Parker's purchase funnel is:

Take the Style Quiz → Home Try-On → Purchase the Perfect Pair of Glasses

During the Home Try-On stage, we will be conducting an A/B Test:

- 50% of the users will get **3** pairs to try on
- 50% of the users will get **5** pairs to try on

Let's find out whether or not users who get more pairs to try on at home will be more likely to make a purchase.



2.1

First let's calculate the conversion:

- Percentage of users from **browse** to at **home try on**

Number of people browsing	Number of people browsing who convert to home try on	% browse_to_home_try_on
1000	750	75%

- Percentage of users from **home try on** to **purchase**

Number of people browsing	Number of people browsing who convert to home try on	Number of people who purchased	% try_on_to_purchase
1000	750	495	66%

It seems that more customers are lured in by the idea of trying on for free at home, but maybe they are only trying for fun and to try a cool new service. Now let's dig into whether trying on 3 or 5 pairs at home made a difference...

2.2

A/B test data shows that customers who **tried 5 pairs at home** are more likely to purchase (out of 100 customers)

3 pairs > purchase	5 pairs > purchase
53	77
53%	77%



```
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 q  
LEFT JOIN home_try_on h  
  ON q.user_id = h.user_id  
LEFT JOIN purchase p  
  ON p.user_id = q.user_id  
WHERE number_of_pairs = '3 pairs'  
limit 100;
```

```
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 q  
LEFT JOIN home_try_on h  
  ON q.user_id = h.user_id  
LEFT JOIN purchase p  
  ON p.user_id = q.user_id  
WHERE number_of_pairs = '5 pairs'  
limit 100;
```

3. Actionable insights for Warby Parker

1. Based on questions one and two of the style quiz, we can try and engage users more by showing and suggesting popular styles and colors based on prior purchases by people in the same demographics.
2. Offering customers more at-home-try-on pairs (3 vs. 5) can give them more variety and a better shopping experience that leads to more purchases.



Round



Rectangular



Square



Cat-eye