



Warby Parker – Usage Funnels

Learn SQL from Scratch

Mackenzie Habersetzer

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1. Creating Funnels for Warby Parker

1.1 Quiz Funnel

Which questions of the quiz have lower completions rates? What do you think is the reason?

- Question 3: 80% completion rate, I believe this is because people aren't sure what shapes they like best, which is why they are taking the quiz
- Question 4: 75% completion rate, I believe this is because people may not remember when their last eye exam was

question	Distinct_users	% Completion
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%

```
SELECT question,  
       count(DISTINCT user_id) as distinct_users  
FROM survey  
GROUP BY question;
```

1.2 Home Try-On Funnel

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.

- Below is a table to gather all necessary data, including if a user utilized home try on, how many pairs they received and if they purchased.

user_id	is_home_try_on	number_of_pairs	is_purchase
1	1	3 pairs	0
2	1	3 pairs	1
3	0		0
4	1	5 pairs	0
5	1	3 pairs	1
6	1	5 pairs	1
7	0		0
8	0		0
9	1	5 pairs	0

```
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 q.user_id = p.user_id  
LIMIT 10;
```

2. Developing Business Metrics

2.1 Purchase Rates

Utilizing the Home Try On Funnel, we are able to calculate the quantity of users in each test and quantity that made a purchase.

- The Purchase Rate for 3 pairs is 53%
- The Purchase Rate for 5 pairs is 79%

This tells us that Warby Parker is more likely to have a purchase if they provide 5 pairs of glasses for at home try on.

number_of_pairs	purchased	Qty_users	Purchase Rate
3 pairs	FALSE	178	47%
3 pairs	TRUE	201	53%
5 pairs	FALSE	77	21%
5 pairs	TRUE	294	79%

```
WITH funnel 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 q.user_id = p.user_id
)

SELECT number_of_pairs,
    CASE WHEN is_purchase = 0
        THEN "FALSE"
    ELSE "TRUE"
    END as purchased,
    COUNT(DISTINCT user_id) as qty_users
FROM funnel
WHERE number_of_pairs IS NOT NULL
GROUP BY number_of_pairs, is_purchase;
```

2.1 Buying Trends

Looking at purchases from the at home try on, we learn:

- The most popular Women's style is Eugene Narrow
- The most popular Men's style is Dawes

style	model_name	qty_sold	% Sales
Women's Styles	Eugene Narrow	116	23%
Men's Styles	Dawes	107	22%
Men's Styles	Brady	95	19%
Women's Styles	Lucy	86	17%
Women's Styles	Olive	50	10%
Men's Styles	Monocle	41	8%

```
SELECT Style,  
       Model_Name,  
       COUNT(user_id) as qty_sold  
FROM purchase  
Group by 1, 2  
;
```