Warby Parker Usage Funnels

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Survey Funnel

Style Quiz and Survey Table

- The Style Quiz asks the following questions:
 - What are you looking for?
 - What's your fit?
 - Which shapes do you like?
 - Which colors do you like?
 - When was your last eye exam?

The quiz responses are stored in the 'survey' table with the following schema:

name	type
question	TEXT
user_id	TEXT
response	TEXT

Which quiz questions have lower completion rates? Why?

- Questions 3 and 5 saw the largest decreases in answer rates.
- People may not know the names of the shapes, or when their last eye exam was.

```
SELECT question,

COUNT(DISTINCT user_id) AS 'num_responses'

FROM survey

GROUP BY question;
```

question	num_responses
1. What are you looking for?	500
2. What's your fit?	475
3. Which shapes do you like?	380
4. Which colors do you like?	361
5. When was your last eye exam?	270

Home Try On Funnel

Quiz Table Schema:

nametypeuser_idTEXTstyleTEXTfitTEXTshapeTEXTcolorTEXT

Home Try On Table Schema:

name	type
user_id	TEXT
number_of_pairs	TEXT
address	TEXT

Purchase Table Schema:

name	type	
user_id	TEXT	
product_id	INTEGER	
style	TEXT	
model_name	TEXT	
color	TEXT	
price	INTEGER	

What are the overall conversion rates?

- 75% of those who completed the quiz completed the home try on.
- 49.5% of those who completed the home try on ended up making a purchase.

```
WITH hto 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 h.user id = q.user id
  LEFT JOIN purchase AS 'p'
    ON p.user id = h.user id)
SELECT
  COUNT(*) AS 'num quiz',
  SUM(is home try on) AS 'num home try on',
  SUM(is purchase) AS 'num purchase',
  1.0 * SUM(is home try on) / COUNT(user id)
    AS 'quiz to home try on',
  1.0 * SUM(is purchase) / COUNT(is home try on)
    AS 'home try on to purchase'
FROM hto funnel;
```

num_quiz	num_home_try_on	num_purchase	quiz_to_home_try_on	home_try_on_to_purchase
1000	750	495	0.75	0.495

What is the difference in purchase rate between customers with 3 pairs and those with 5 pairs?

- 53% of those who had 3 pairs made a purchase.
- 79% of those who had 5 pairs made a purchase.

```
WITH hto 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 h.user_id = q.user_id
  LEFT JOIN purchase AS 'p'
    ON p.user id = h.user id)
SELECT
  number of pairs,
  SUM(is home try on) AS 'num home try on',
  SUM(is purchase) AS 'num purchase',
  ROUND(1.0 * SUM(is_purchase) / COUNT(is_home_try_on), 2)
    AS 'home try on to purchase'
FROM hto funnel
GROUP BY number of pairs
HAVING number of pairs > 0;
```

number_of_pairs	num_home_try_on	num_purchase	home_try_on_to_purchase
3 pairs	379	201	0.53
5 pairs	371	294	0.79

Are users who get more pairs to try on at home more likely to make a purchase?

- 26% more people made a purchase when provided with 5 pairs during the home try on period.
- If the cost of providing an additional 2 pairs is not too high, the home try on program can benefit from implementing this change.