Funnel Project

Learn SQL from Scratch

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June 28, 2018

Sections

1. Get familiar with Warby Parker
2. What is the Quiz Funnel
3. A/B Testing with Home Try-On Funnel

Work

Task 1

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?

```
Query for Task 1.
Select *
From quiz
Limit 10;
```

Task 1 results

question	user_id	response
1. What are you looking for?	1	Women's Styles
2. What's your fit?	2	Medium
3. Which shapes do you like?	3	Round
4. Which colors do you like?	4	Two-Tone
1. What are you looking for?	5	I'm not sure. Let's skip it.

question	user_id	response
2. What's your fit?	6	Narrow
5. When was your last eye exam?	7	<1 Year
3. Which shapes do you like?	8	Square
5. When was your last eye exam?	9	<1 Year
2. What's your fit?	10	Medium

Explanation

The first ten rows show these questions answered, which user_id, and the response to those questions.

Task 2

How many users get through questions 1-5?

Query

```
SELECT question,
   COUNT(DISTINCT
user_id)
FROM survey
GROUP BY 1;
```

Task 2 results

question	COUNT(DISTINCT user_id
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

Task 2 & 3.

For each question here is the number of responses and also in percentage form as well.

Question 1 had 500. 100%

Question 2 had 475. 95%

Question 3 had 380 76%

Question 4 had 361 72%

Question 5 had 270 54%

Task 2&3 results

Question 5 has lower completion rates than the first four. The first four questions are at a 70%+ completion rate compared to question 5 at a 54%.

The reason for a lower completion rate, might be that the user does not want to be judge of when they last went to the eye exam.

Task 4 Home Try-On stage

Will users purchase if they try more pairs at home?

```
Query
SELECT *
FROM quiz
LIMIT 5;

SELECT *
FROM home_try_on
LIMIT 5;

SELECT *
FROM purchase
LIMIT 5;
```

Task 4 results (quiz)

user_id	style	fit	shape	color
1	Women's Styles	Medium	Rectangular	Tortoise
2	Women's Styles	Narrow	Round	Black
3	Women's Styles	Wide	Rectangular	Two-Tone
4	Women's Styles	Narrow	Square	Two-Tone
5	Women's Styles	Wide	Rectangular	Black

Task 4 results cont. (home_try_on)

user_id	number_of_pairs	address
6	5 pairs	145 New York 9a
7	5 pairs	383 Madison Ave
8	5 pairs	287 Pell St
9	3 pairs	347 Madison Square N
10	5 pairs	182 Cornelia St

Task 4 cont. (Purchase)

user_id	product_id	style	model_name	color	price
11	8	Women's Styles	Lucy	Jet Black	150
12	7	Women's Styles	Lucy	Elderflower Crystal	150
13	4	Men's Styles	Dawes	Jet Black	150
14	10	Women's Styles	Eugene Narrow	Rosewood Tortoise	95
15	8	Women's Styles	Lucy	Jet Black	150

Task 5 showing results of purchase.

How many users purchase after trying them on at home?

```
Query
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
LIMIT 10;
```

Task 5 results

user_id	is_home_try_on	number_of_pairs	is_purchase
1	1	3	0
2	1	3	1
3	0	null	0
4	1	5	0
5	1	3	1
6	1	5	1
7	0	null	0
8	0	null	0
9	1	5	0
10	1	3	0

Explanation

Looking at the data we received back out of 10 users, 7 tried on glasses at home. Out of those 7, four of the users brought home 3 pairs and the remaining three users brought home 5 pairs.

Task 6 comparing conversion rates.

Comparing conversion rates from quiz to home_try_on and home_try_on to purchase.

```
WITH funnels as (
SELECT DISTINCT q.user_id,
  h.number_of_pairs,
  h.user_id IS NOT NULL AS 'is_home_try_on',
  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 (*) 'quiz',
  Sum(is_home_try_on) as 'is_home_try_on',
  Sum(is_purchase) as 'is_purchase',
  1.0 * SUM(is_home_try_on) / COUNT(*),
  1.0 * SUM(is_purchase) / SUM(is_home_try_on)
  From funnels;
```

Task 6 results

quiz	is_home_try_on	is_purchase	1.0 * SUM(is_home_try_on) / COUNT(*)	1.0 * SUM(is_purchase) / SUM(is_home_try_on)
1000	750	495	0.75	0.66

Explanation

With the data we pulled, we are comparing conversion rates from quiz to home to purchase. From the table we can see 1000 people took the quiz from there 750 people had pairs go to their home. The 750 people who had pairs go to their home, 495 bought pairs. From trying it at home there is a 75% that a user will order the pairs to their home. From trying it on at home to purchasing there is a 66% that the user will purchase the pairs.