



Funnels with Warby Parker

Learn SQL from Scratch

Cindy Griffin

July 2018

1.1 Quiz Funnel - Columns

The query included a LIMIT command to show only the first 10 rows of the table. The result of the query of the survey table show the following columns: question, user_id, response.

Query Results		
question	user_id	response
1. What are you looking for?	005e7f99-d48c-4fce-b605-10506c85aaf7	Women's Styles
2. What's your fit?	005e7f99-d48c-4fce-b605-10506c85aaf7	Medium
3. Which shapes do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Round
4. Which colors do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Two-Tone
1. What are you looking for?	00a556ed-f13e-4c67-8704-27e3573684cd	I'm not sure. Let's skip it.
2. What's your fit?	00a556ed-f13e-4c67-8704-27e3573684cd	Narrow
5. When was your last eye exam?	00a556ed-f13e-4c67-8704-27e3573684cd	<1 Year
3. Which shapes do you like?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Square
5. When was your last eye exam?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	<1 Year
2. What's your fit?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Medium

1.2 Quiz Funnel - Number of Responses

The query included COUNT and GROUP BY commands to count the number of responses to each question. The number of responses to each question are:

1 - 500
2 - 475
3 - 380
4 - 361
5 - 270

Query Results	
question	COUNT (question)
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

1.3 Quiz Funnel - Completion Rates

Based on the responses to each question, the completion rates for each question are as follows:

2 - $475/500 = 95\%$

3 - $380/475 = 80\%$

4 - $361/380 = 95\%$

5 - $270/361 = 75\%$

The question with the lowest completion rate is question 5. A potential reason for the low completion rate is that not everyone will remember the date of their last eye exam which is not a subjective/opinion question like the first four questions.

1.4 Home Try-On Funnel - Columns

The query included a LIMIT command to show only the first 5 rows of each table. The result of the query of each table show the following columns:

Table - quiz

- user_id
- style
- fit
- Shape
- color

Table - home_try_on

- user_id
- number_of_pairs
- address

Table - purchase

- user_id
- product_id
- style
- model_name
- color
- price

1.4 Home Try-On Funnel - Columns

Query Results					
user_id		style	fit	shape	color
4e8118dc-bb3d-49bf-85fc-cca8d83232ac		Women's Styles	Medium	Rectangular	Tortoise
291f1cca-e507-48be-b063-002b14906468		Women's Styles	Narrow	Round	Black
75122300-0736-4087-b6d8-c0c5373a1a04		Women's Styles	Wide	Rectangular	Two-Tone
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2		Women's Styles	Narrow	Square	Two-Tone
ce965c4d-7a2b-4db6-9847-601747fa7812		Women's Styles	Wide	Rectangular	Black
user_id		number_of_pairs		address	
d8addd87-3217-4429-9a01-d56d68111da7		5 pairs		145 New York 9a	
f52b07c8-abe4-4f4a-9d39-ba9fc9a184cc		5 pairs		383 Madison Ave	
8ba0d2d5-1a31-403e-9fa5-79540f8477f9		5 pairs		287 Pell St	
4e71850e-8bbf-4e6b-accb-49a7bb46c586		3 pairs		347 Madison Square N	
3bc8f97f-2336-4dab-bd86-e391609dab97		5 pairs		182 Cornelia St	
user_id	product_id	style	model_name	color	price
00a9dd17-36c8-430c-9d76-df49d4197dcf	8	Women's Styles	Lucy	Jet Black	150
00e15fe0-c86f-4818-9c63-3422211baa97	7	Women's Styles	Lucy	Elderflower Crystal	150
017506f7-aba1-4b9d-8b7b-f4426e71b8ca	4	Men's Styles	Dawes	Jet Black	150
0176bfb3-9c51-4b1c-b593-87edab3c54cb	10	Women's Styles	Eugene Narrow	Rosewood Tortoise	95
01fdf106-f73c-4d3f-a036-2f3e2ab1ce06	8	Women's Styles	Lucy	Jet Black	150

1.5 Home Try-On Funnel - Left Join

The query included a LEFT JOIN command that combined each table and matched each row based on the 'user_id' column. In order to create the new 'is_home_try_on' and 'is_purchase' columns, the query included a CASE command that made the value of the column true if the value was not null and false otherwise as well as an AS command to create an alias column name.

Query Results			
user_id	is_home_try_on	number_of_pairs	is_purchase
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	true	3 pairs	false
291f1cca-e507-48be-b063-002b14906468	true	3 pairs	true
75122300-0736-4087-b6d8-c0c5373a1a04	false	Ø	false
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	true	5 pairs	false
ce965c4d-7a2b-4db6-9847-601747fa7812	true	3 pairs	true
28867d12-27a6-4e6a-a5fb-8bb5440117ae	true	5 pairs	true
5a7a7e13-fbcf-46e4-9093-79799649d6c5	false	Ø	false
0143cb8b-bb81-4916-9750-ce956c9f9bd9	false	Ø	false
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	true	5 pairs	false
b1dded76-cd60-4222-82cb-f6d464104298	true	3 pairs	false

1.6 Additional Insights

From the previous query, added a COUNT command on the 'quiz.user_id' field, then added GROUP BY command for the fields 'is_home_try_on', 'home_try_on.number_of_pairs', and 'is_purchase'. The result shows the following:

Query Results			
COUNT(quiz.user_id)	is_home_try_on	number_of_pairs	is_purchase
250	false	Ø	false
178	true	3 pairs	false
201	true	3 pairs	true
77	true	5 pairs	false
294	true	5 pairs	true

1.6 Additional Insights

The query shows:

- 250/1000 or 25% did not opt for home try on after completing the quiz
- 379/750 received 3 try on pairs; 371/750 received 5 try on pairs
- Of the 379 that received 3 try on pairs, 178 or 47% did not purchase
- Of the 371 that received 5 try on pairs, 77 or 21% did not purchase

Based on the results, it is recommended that 5 try on pairs be sent to increase the probability of purchasing a pair of glasses.

Query Results			
COUNT(quiz.user_id)	is_home_try_on	number_of_pairs	is_purchase
250	false	Ø	false
178	true	3 pairs	false
201	true	3 pairs	true
77	true	5 pairs	false
294	true	5 pairs	true

1.6 Additional Insights - Fit

The query included COUNT and GROUP BY commands to count the number of responses to each question. In addition, the results were sorted by the COUNT using a ORDER BY command to determine the most popular fits.

Based on the results, it is recommended that the definitions of fit be clearer to reduce the number of 'I'm not sure. Let's skip it.' responses. Also, it is recommended that few options are made available in the Wide fit.

Query Results	
fit	fit_count
Narrow	408
Medium	305
Wide	198
I'm not sure. Let's skip it.	89

1.6 Additional Insights - Model and Color

The query included COUNT and GROUP BY commands to count the number of purchases by model and color. In addition, the results were sorted by the COUNT using a ORDER BY command to determine the most popular models.

Based on the results, it is recommended that Warby Parker explore new colors for the Eugene Narrow model as it is the most popular mode in two different colors. In addition, Warby Parker should consider additional models in Jet Black as two different models in that color were in the top sellers.

Query Results		
model_name	count_model	color
Dawes	63	Driftwood Fade
Eugene Narrow	62	Rosewood Tortoise
Eugene Narrow	54	Rose Crystal
Brady	52	Layered Tortoise Matte
Olive	50	Pearled Tortoise
Dawes	44	Jet Black
Lucy	44	Elderflower Crystal
Brady	43	Sea Glass Gray
Lucy	42	Jet Black
Monocle	41	Endangered Tortoise