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Funnels with Warby Parker

Learn SQL from Scratch Bethlehem Mesfin August 4th, 2018



Agenda

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

From our survey table we can highlight the questions, unique user ids, and responses by each individual who completed a Style Quiz

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

SELECT question,

COUNT(DISTINCT user_id)

FROM survey

GROUP BY question;

A high level overview can show us the number of responses to each question. From the table, we can see the gradual decline of the responses

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

According to Quiz results, 100% of people know what they're looking for!

question	COUNT(DISTINCT user_id)	Percentage Completion
1. What are you looking for?	500	100%
2. What's your fit?	475	95%
3. Which shapes do you like?	380	76%
4. Which colors do you like?	361	72%
5. When was your last eye exam?	270	54%

When was your last eye exam?

Being that this typically happens on an annual basis, the low completion percentage can be attributed to not being able to recall or being unsure of their last eye exam.

Take Style Quiz

Home Try-On

Purchase the
Perfect Glasses

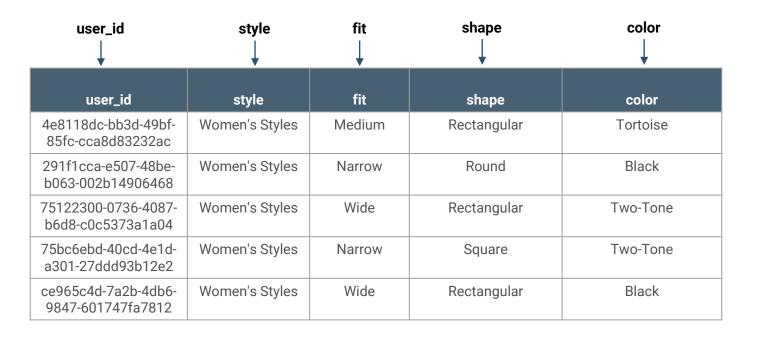
We used data from our quiz, home_try_on, and purchase tables to provide us the key components needed to calculate conversion rates

```
SELECT *
FROM quiz
LIMIT 5;

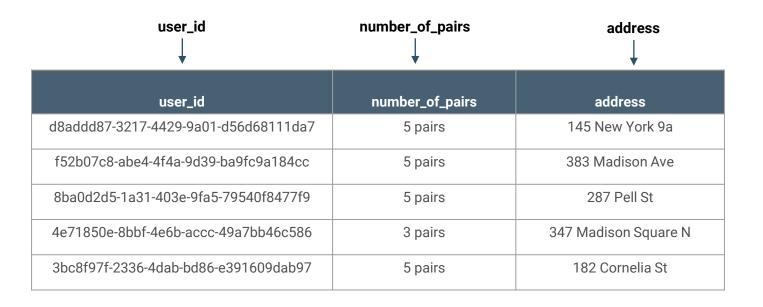
SELECT *
FROM home_try_on
LIMIT 5;

SELECT *
FROM purchase
```

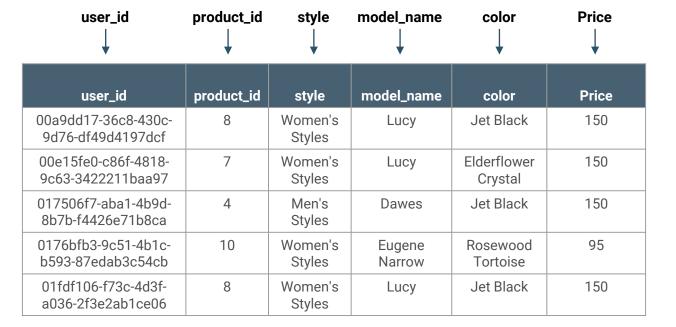
Quiz Table



Home Try On Table



Purchase Table



```
h.user_id IS NOT NULL 'is_home_try_on'
h.number_of_pairs,
p.user_id IS NOT NULL '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
LIMIT 10;
```

By combining the three tables, we can get a more detailed look at the customer Home Try On experience

user_id	is_home_try_on	number_of_pairs	is_purchase
4e8118dc-bb3d-49bf- 85fc-cca8d83232ac	1	3 pairs	0
291f1cca-e507-48be- b063-002b14906468	1	3 pairs	1
75122300-0736- 4087-b6d8- c0c5373a1a04	0	NULL	0
75bc6ebd-40cd-4e1d- a301-27ddd93b12e2	1	5 pairs	0
ce965c4d-7a2b-4db6- 9847-601747fa7812	1	3 pairs	1

user_id	is_home_try_on	number_of_pairs	is_purchase
28867d12-27a6-4e6a- a5fb-8bb5440117ae	1	5 pairs	1
5a7a7e13-fbcf-46e4- 9093-79799649d6c5	0	NULL	0
0143cb8b-bb81-4916- 9750-ce956c9f9bd9	0	NULL	0
a4ccc1b3-cbb6-449c- b7a5-03af42c97433	1	5 pairs	0
b1dded76-cd60-4222- 82cb-f6d464104298	1	3 pairs	0

Results

Quiz → Home Try On Rate: 75%

Home Try On → Purchase: 66%

num_quiz	num_home_try_on	num_purchase	overall_conv_rate	quiz_to_home_try_on	home_try_on_to_purchase
1000	750	495	0.495	0.75	0.66

Customers who tried on 5 pairs have a higher purchase rate

number_of_pai rs	num_q uiz	num_home_ try_on	num_pur chase	quiz_to_home _try_on	home_try_on_to_pur chase
NULL	250	0	0	0.0	NULL
3 pairs	379	379	201	1.0	0.530343007915567
5 pairs	371	371	294	1.0	0.792452830188679

SELECT response,
question,
COUNT(DISTINCT user_i
FROM survey
GROUP BY 1
ORDER BY 3 DESC;

Our most common answer was focused on looking for Men's Styles and a narrow fit

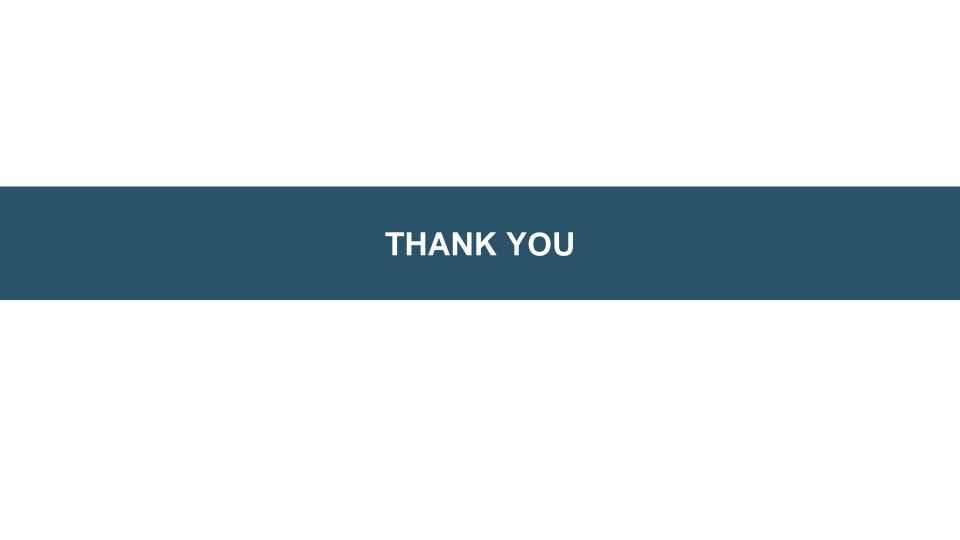
• • • • • • • • • • • • • • • • • • • •		COUNT(DISTINCT user_id)	response	question	COUNT(DISTIN CT user_id)
Men's Styles	1. What are you looking for?	242	Round	3. Which shapes do you like?	91
Women's Styles	1. What are you looking for?	209	Wide	2. What's your fit?	88
Narrow	2. What's your fit?	208	Crystal	4. Which colors do you like?	69
<1 Year	5. When was your last eye exam?	141	1-3 Years	5. When was your last eye exam?	56
Rectangular	3. Which shapes do you like?	141	3+ Years	5. When was your last eye exam?	37
Medium	2. What's your fit?	132	Neutral	4. Which colors do you like?	36
Square	3. Which shapes do you like?	119			
Tortoise	4. Which colors do you like?	117	Not Sure. Let's Skip It	5. When was your last eye exam?	36
Black	4. Which colors do you like?	112	No Preference	3. Which shapes do you like?	29
I'm not sure. Let's skip it.	1. What are you looking for?	92	Two-Tone	4. Which colors do you like?	27
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SELECT product_id, model_name, color, price, COUNT(DISTINCT user_id)
AS 'total_number_of_purchases'
FROM purchase
GROUP BY 1

The most common purchase was the Dawes model in Driftwood Fade



product_id	model_name	color	price	total_number_of_purchases
3	Dawes	Dawes Driftwood Fade		63
10	Eugene Narrow	Rosewood Tortoise	95	62
9	Eugene Narrow	Rose Crystal	95	54
1	Brady	Layered Tortoise Matte	95	52
6	Olive	Pearled Tortoise	95	50
4	Dawes	Jet Black	150	44
7	Lucy	Elderflower Crystal	150	44
2	Brady	Sea Glass Gray	95	43
8	Lucy	Jet Black	150	42
5	Monocle	Endangered Tortoise	50	41



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