



Funnels with Warby Parker

Learn SQL from Scratch

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Quiz Funnel's & Home Try-On Funnel's Tables of Contents

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1. Quiz Funnel

1.1 Table survey :

The table named survey has three columns, which are showed on the right side. They are question, user_id and response in sequence.

```
/*The query about the column  
of Table survey*/  
  
select * from survey limit 10;
```

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 The number & percentage of responses for each question :

- The number of responses and its response-question ratio (completion rate) for each question are showed in the figure on the right side.
- The percentage of each question answered by users descends in ascending order of ordinal number of question, and the lowest one is fifth, just only 54%.
- The reasons for lower completion rate of the fifth question may be that it is a matter of memory, not personal preference or users never take eye exams before. These will increase the difficulty answering the question.
- The 3rd & 4th questions are more abstract than the previous two, especially without finer description and display in the picture. Both are not easy to guide the users to make a decision - choosing a single option from these selections.

question	Number of responses	response-question ratio
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%

2. Home Try-On Funnel

2.1 Overview of the three table :

The table named quiz has five columns, which are showed as below illustration. and they are user_id, style, fit, shape and color in sequence. Each record represents her or his demands for a pair of glasses/sunglasses.

```
/*The query about the columns of  
Table quiz, home_try_on and  
purchase*/
```

```
select * from quiz limit 5;
```

```
select * from home_try_on limit 5;
```

```
select * from purchase limit 5;
```

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

The table named home_try_on has three columns, which are showed as below illustration, and they are user_id, number of pairs and address in sequence. Each record represents the number of pairs that the user can try on free at home and where these glasses should be delivered to.

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-acco-49a7bb46c586	3 pairs	347 Madison Square N
3bc8f97f-2336-4dab-bd86-e391609dab97	5 pairs	182 Cornelia St

The table named purchase has six columns, which are showed as below illustration, and they are user_id, product_id, style, model_name, color and price in sequence. Each record represents the information of the product purchased by the user who has a user_id in the website.

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

2.2 Overview of combining the above three tables :

The first 10 rows selected from combining the above three table under instructions are as below:

user_id	is_home_try_on	Number of pairs	is_purchased
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	TRUE	3 pairs	FALSE
291f1cca-e507-48be-b063-002b14906468	TRUE	3 pairs	TRUE
75122300-0736-4087-b6d8-c0c5373a1a04	FALSE	Null	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	Null	FALSE
0143cb8b-bb81-4916-9750-ce956c9f9bd9	FALSE	Null	FALSE
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	TRUE	5 pairs	FALSE
b1dded76-cd60-4222-82cb-f6d464104298	TRUE	3 pairs	FALSE

2.3 Overall Conversion Rates

- The number of the users who took the quiz is 1000, but the number of those who finally purchased the glasses is 495. The overall conversion rate is 0.495.
- The number of the users who chose to try on at home is 750, hence conversion rate from quiz transferring to home_try_on is 0.75.
- According to the above statistics, conversion rate from home_try_on transferring to purchase is 0.66.

is_home_try_on	Number of users	Number of is_purchased	Conversion rate from quiz transferring to home_try_on	Conversion rate from home_try_on transferring to purchase	Overall conversion rate
TRUE	750	495	0.75	0.66	0.495
FALSE	250	0	0	0	

2.4 Purchase Rates of A/B Test

- The result of A/B test for purchase rate is showed as Figure 1. The purchase rate of 5 pairs customers had is much higher than 3 pairs the ones had.
- Please see Figure 2. Whatever 3 pairs and however 5 pairs, the purchase rate of men’s styles is more than women’s styles.

Figure 1

Number of pairs customers had	Number of is _home_try_on	Number of is_purchased	Purchase rate
3 pairs	379	201	0.53
5 pairs	371	294	0.793

Figure2

Number of pairs customers had	Style	Number of is _home_try_on	Number of is_purchased	Purchase rate
3 pairs	Men’s Styles	165	103	0.624
3 pairs	Women’s Styles	177	98	0.554
3 pairs	Skip	37	0	0.00
5 pairs	Men’s Styles	155	140	0.903
5 pairs	Women’s Styles	184	154	0.837
5 pairs	Skip	32	0	0.00

3. The Influence of Skipping Questions in the Quiz

3. Influence of skipping questions for Purchase Rates

- The below table shows that all the users who skipped the question of style in the quiz didn't purchase the glasses, even if they had tried on them at home.
- In contrast to the style question, skipping the questions of fit and shape doesn't make an influence on purchase rate. It seems that the style question is an important factor to help the customers find their favorite frames. The more feedback we can get from customers about style question, the more conversion rate we can raise.

The type of questions which are skipped	is_home_try_on	Number of users	Number of is_purchased	Purchase rate
Style	TRUE	69	0	0
Style	FALSE	30	0	0
Fit	TRUE	64	45	0.703
Fit	FALSE	25	0	0
Shape	TRUE	71	53	0.747
Shape	FALSE	26	0	0

4. Analysis for Hot Items

4.1 Analysis for hot items

- The top 3 of model name of WARBY PARKER's hot sale items is Eugene Narrow, Dawes and Brady in sequence, and the top 2 almost accounts for 50 percentage of all sales.
- The proportion of colors for the glasses sold is showed as the table in the lower right corner, and Jet Black is the most popular color.

Model name of the product sold	Number of pairs sold	Percentage of all sold
Eugene Narrow	116	23.4%
Dawes	107	21.6%
Brady	95	19.2%
Lucy	86	17.4%
Olive	50	10.1%
Monocle	41	8.3%

Color of the product sold	Number of pairs sold	Percentage of all sold
Jet Black	86	17.4%
Driftwood Fade	63	12.7%
Rosewood Tortoise	62	12.5%
Rose Crystal	54	10.9%
Layered Tortoise Matte	52	10.5%
Pearled Tortoise	50	10.1%
Elderflower Crystal	44	8.9%
Sea Glass Gray	43	8.7%
Endangered Tortoise	41	8.3%

4.2 Analysis for Sales on Style and Price

- The visitors of women's styles in the quiz are a bit more than that of men's styles, but there is no difference in percentage of all sold between men's styles and women's styles. The men's styles is 49.1% and the women's styles is 50.9%. It's because of higher purchase rate of men's styles
- \$95 is the most popular price for women's styles, and \$95 and above are popular for men's styles.
- In contrast to female products, both male high-priced products and low-priced ones seem to have higher acceptance.

Style chosen by users in the quiz	Number of users	Percentage of all style question
Men's Styles	432	43.2%
Women's Styles	469	46.9%
Skip	99	9.9%

Style of the product sold	Price of the product sold	Number of pairs sold	Percentage of all sold
Men's Styles	50	41	8.3%
Men's Styles	95	95	19.2%
Men's Styles	150	107	21.6%
Women's Styles	95	166	33.5%
Women's Styles	150	86	17.4%