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# WARBY PARKER FUNNEL PROJECT

ANALYZE DATA WITH SQL

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WARBY  
PARKER

# ABOUT THE COMPANY



**WARBY PARKER** WAS FOUNDED WITH THE SOLE OBJECTIVE: TO OFFER DESIGNER EYEWEAR AT A REVOLUTIONARY PRICE, WHILE LEADING THE WAY FOR SOCIALLY CONSCIOUS BUSINESSES.

THEY FOLLOW A SINGLE MOTTO – *GOOD EYEWEAR, GOOD OUTCOME.*

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# ABOUT THE DATASETS

In this project, different Warby Parker's marketing funnels were analysed in order to calculate conversion rates. Here are the funnels and the tables that were provided:

1. Survey
2. Quiz
3. Home\_try\_on
4. Purchase

# ABOUT THE DATASETS

## ■ Survey

- *Question – The marketing questions*
- *User\_id – The user id tracked of the customer*
- *Response – Answers collected for each question*

Survey	
Question	text
User_id	text
Response	text

## ■ Quiz

- *User\_id – The user id tracked of the customer*
- *Style – The user id tracked of the customer*
- *Fit – Type of fit(S, M, L)*
- *Shape – Rectangular/Squarish/Circular*
- *Colour – Colour of the frame*

quiz	
User_id	text
style	text
fit	text
shape	text
colour	text

# ABOUT THE DATASETS

## ■ *Home\_try\_on*

- *User\_id* – The user id tracked of the customer
- *Number\_of\_pairs* – Number of pairs taken to try at home
- *Address* – Address entered by the user

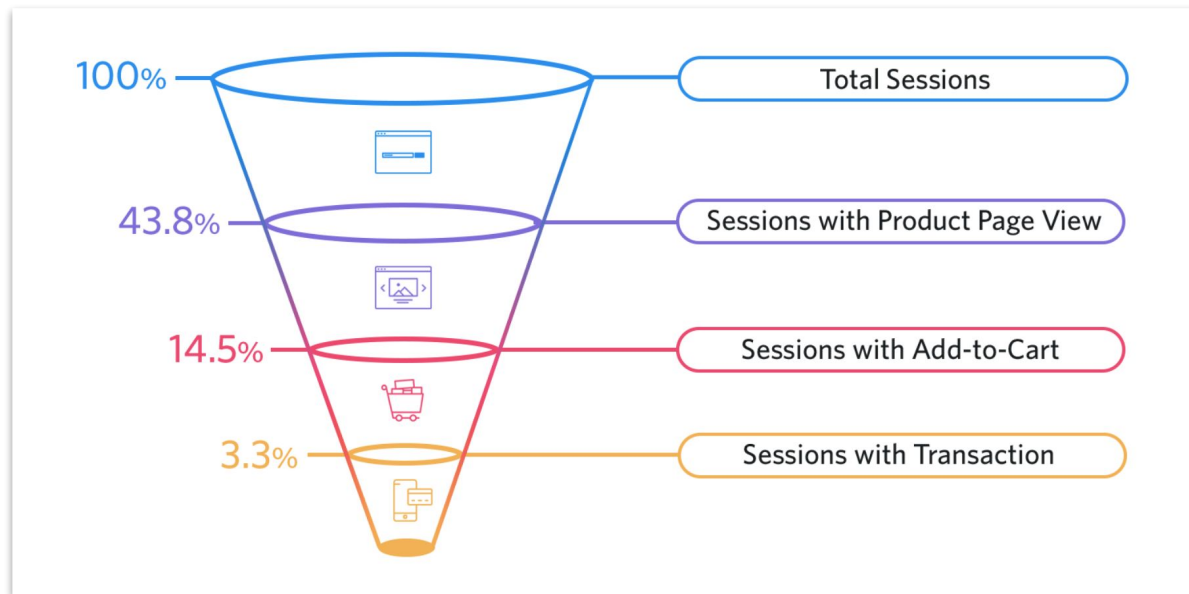
Home_try_on	
User_id	text
number_of_pairs	text
Address	text

## ■ *Purchase*

- *User\_id* – The user id tracked of the customer
- *Product\_id* – Tracker id of the product purchased
- *Style* – Style of the frame
- *Price* – Price of the frame
- *Colour* – Colour of the frame bought

Purchase	
User_id	text
Product_id	integer
style	text
model_name	text
price	integer
colour	text

# WHAT IS FUNNELING? WHAT IS AN A/B TEST?



Credits to: <https://sleeknote.com/blog/e-commerce-sales-funnel>

- A conversion funnel in e-commerce illustrates the route your customers take from first becoming aware of your brand to making a purchase.
- Every business has a different e-commerce conversion funnel depending on the specifics of how users navigate their businesses. The stages are the same, but the specifics depend on your product and audience.
- For instance, some businesses have shorter conversion funnels. When you sell a low-cost product, you can convert visitors faster because price becomes less of an obstacle.

- A/B testing (also known as split testing) is a comparison of two variations of the same product shown to two different target samples (of the same population) at the same time so as to compare which variation drives more comparisons.

Credits to: <https://vwo.com/ab-testing/>



ANSWERS FOR EVERY QUERY AND BRIEF DESCRIPTION



# QUERY I – BASIC UNDERSTANDING OF THE DATA

Style quiz answers for every user id and a basic understanding of the data in the table 'survey'.

- `SELECT * FROM survey LIMIT 10;`

- A small overview of the data – column name, data type of the values

project.sqlite

```
1  --Overview of the columns
2  select * from survey limit 10;
3
```

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

## QUERY 2 – QUITTERS AT EACH QUESTION

```
SELECT question, COUNT(user_id) AS quitters FROM  
survey  
GROUP BY I  
ORDER BY I;
```

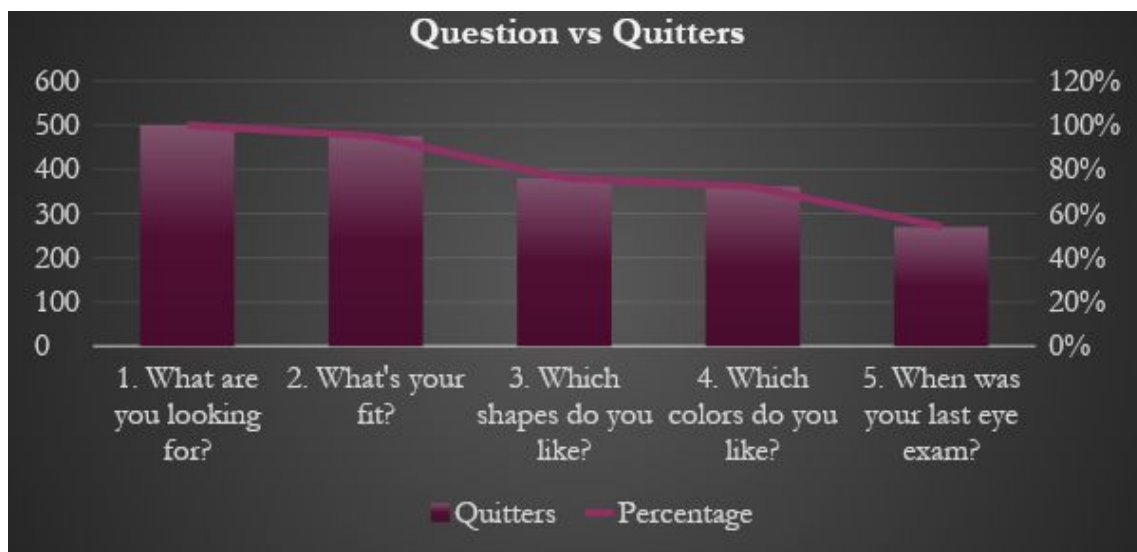
- By selecting the question from the survey table and counting the number of user\_id per question, we can find the number of people who had left after every question.

```
select question, count(user_id) as quitters from survey  
group by question  
order by 1;
```

question	quitters
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
..	..

## QUERY 3 – QUITTERS AT EACH QUESTION - ANALYSIS

question	Quitters	Percentage	Percentage Drop
1. What are you looking for?	500	100%	0%
2. What's your fit?	475	95%	5%
3. Which shapes do you like?	380	76%	24%
4. Which colors do you like?	361	72%	28%
5. When was your last eye exam?	270	54%	46%



- 100% of the target population had attempted the first question and clearly the number of people attempting the next question and the next question started to drop significantly
- At the end, only a little over 54% of the target population answered the final question

## QUERY 4 – REST OF THE TABLES

```
SELECT * FROM quiz  
LIMIT 5;
```

```
SELECT * FROM home_try_on  
LIMIT 5;
```

```
SELECT * FROM purchase  
LIMIT 5;
```

```
SELECT * FROM quiz  
LIMIT 5;  
  
SELECT * FROM home_try_on  
LIMIT 5;  
  
SELECT * FROM purchase  
LIMIT 5;|
```

- A small overview of the data in the other 3 tables – column name, data type of the values

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-acc-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

## QUERY 5 – UNIQUE REQUIREMENTS

```
SELECT DISTINCT qu.user_id,  
hto.user_id IS NOT NULL AS 'is_home_try_on',  
hto.number_of_pairs,  
pu.user_id IS NOT NULL AS 'is_purchase'  
FROM quiz qu  
LEFT JOIN home_try_on hto  
ON qu.user_id = hto.user_id  
LEFT JOIN purchase pu  
ON pu.user_id = qu.user_id  
LIMIT 10;
```


- In this query, we select the user\_id which is common in every table and we are checking if they have taken the 'try at home' option[1 or 0 for yes or no in the second column]
- If they have opted for the try at home option, then how many pairs have they chosen[after left joining home\_try\_on with quiz, number of pairs for every user who has chosen try at home is selected from the joined table]
- After trying the 3 or 5 pairs that they have taken home, we have found out whether they have purchased it or not[after left joining the joined table with purchase, if they have any entries in the purchase table, then they have completed the purchase]

Query Results			
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	Ø	0
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	1	5 pairs	0
ce965c4d-7a2b-4db6-9847-601747fa7812	1	3 pairs	1
28867d12-27a6-4e6a-a5fb-8bb5440117ae	1	5 pairs	1
5a7a7e13-fbcf-46e4-9093-79799649d6c5	0	Ø	0
0143cb8b-bb81-4916-9750-ce956c9f9bd9	0	Ø	0
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	1	5 pairs	0
b1dded76-cd60-4222-82cb-f6d464104298	1	3 pairs	0

## QUERY 6 – ADDITIONAL IN-DEPTH ANALYSIS

- Using the table generated in query – 5, there are a few insights which can be generated
- Analysis on the basis of pairs taken home:
  - The users who did not take pairs home, did not buy any spectacles at the store
  - As shown in the graph, the users who took 5 pairs at home, had a higher chance of buying a pair of spectacles





Thank you!  
Do kindly provide your feedback