

# Warby Parker's Marketing Analysis

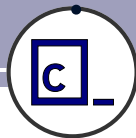


Analyze Data with SQL project

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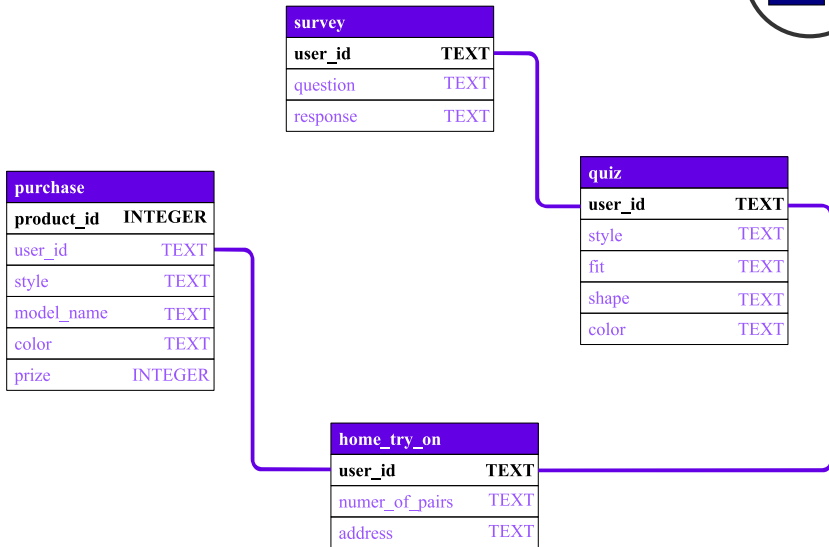
23/07/2021

# Main Objectives:



- Database presentation
- Investigate quiz completion rate
- Inspect Home-trial over purchase rate
- Address Purchase rate by "Try-on"
- Purchase rate by style
- Conclusion

# The Database



# The Database



survey	
question	TEXT
user_id	TEXT
response	TEXT

question	user_id	response
1. What are you looking for?	005c7f99-d48c-4fc[...]	Women's Styles
2. What's your fit?	005c7f99-d48c-4fc[...]	Medium
3. Which shapes do you like?	00a556ed-f13c-4c6[...]	Round
4. Which colors do you like?	00a556ed-f13c-4c6[...]	Two-Tone
1. What are you looking for?	00a556ed-f13c-4c6[...]	I'm not sure. Let's skip it.

quiz	
user_id	TEXT
style	TEXT
fit	TEXT
shape	TEXT
color	TEXT

user_id	style	fit	shape	color
4e8118dc-bb3d-49bf[...]	Women's Styles	Medium	Rectangular	Tortoise
291f1cca-e507-48be[...]	Women's Styles	Narrow	Round	Black
75122300-0736-408[...]	Women's Styles	Wide	Rectangular	Two-Tone
75bc6ebd-40cd-4e1[...]	Women's Styles	Narrow	Square	Two-Tone
ce965c4d-7a2b-4db[...]	Women's Styles	Wide	Rectangular	Black

# The Database



home_try_on	
<b>user_id</b>	<b>TEXT</b>
number_of_pairs	TEXT
address	TEXT

user_id	nun_of_pairs	address
d8add87-3217-442[...]	5 pairs	145 New York 9a
f52b07c8-abc4-4f4[...]	5 pairs	383 Madison Ave
8ba0d2d5-1a31-403[...]	5 pairs	287 Pell St
4e71850e-8bbf-4e6[...]	3 pairs	347 Madison Square N
3be8f97f-2336-4da[...]	5 pairs	182 Cornelia St

purchase	
user_id	TEXT
<b>product_id</b>	<b>INTEGER</b>
style	TEXT
model_name	TEXT
color	TEXT
prize	INTEGER

product_id	user_id	style	model_name	color	prize
8	00a9dd17-36c8-430[...]	Women's Styles	Lucy	Jet Black	150
7	00e15fe0-c86f-481[...]	Women's Styles	Dawes	Elderflower Crystal	150
4	017506f7-aba1-4b9[...]	Men's Styles	Eugene Narrow	Jet Black	150
10	0176bfb3-9c51-4b1[...]	Women's Styles	Lucy	Rosewood Tortoise	95
8	01fd106-f73c-4d3[...]	Women's Styles	Lucy	Jet Black	150

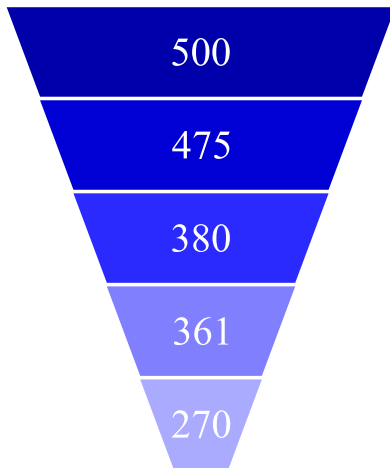
# Quiz completion rate



```
SELECT question,  
COUNT(question)  
FROM survey  
GROUP BY question  
ORDER BY question;
```

question	COUNT
1- What are you looking for	500
2 . What's your fit	475
3.What shape do you like?	380
4. Which colors do you like?	361
5. You last eye exam?	270

## Quiz Funnel



Drop rate



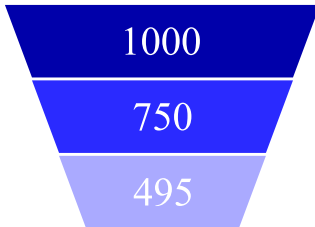
# Trial/purchase rate



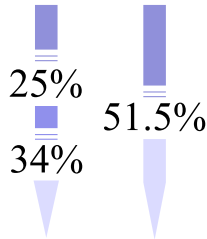
```
WITH q AS (  
  SELECT '1-quiz' AS stage, COUNT(user_id)  
  FROM quiz  
)  
,  
h AS (  
  SELECT '2-home_try_on' AS stage, COUNT(user_id)  
  FROM home_try_on  
)  
,  
p AS (  
  SELECT '3-purchase' AS stage, COUNT(user_id)  
  FROM purchase  
)  
SELECT *  
FROM q  
UNION ALL  
SELECT *  
FROM h  
UNION ALL  
SELECT *  
FROM p;
```

stage	COUNT
1-quiz	1000
2-home_try_on	750
3-purchase	495

## Purchase Funnel



## Drop rate



- 75% of visitors who take the quiz decide for home trial
  - 34% will not purchase
- 1 out of 2 quiz takers end up purchasing a pair of glasses

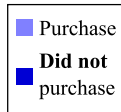
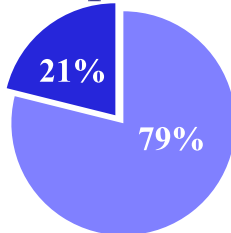
# Purchase rate by "Try-on" (*A/B Test*)



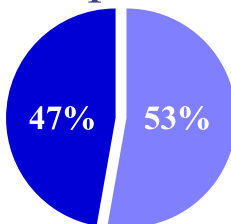
```
WITH tmp_table AS (  
  SELECT quiz.user_id,  
         home_try_on.user_id IS NOT NULL AS 'is_home_try_on',  
         home_try_on.number_of_pairs AS "number_of_pairs",  
         purchase.user_id IS NOT NULL AS "is_purchase"  
  FROM quiz  
  LEFT JOIN home_try_on  
    ON quiz.user_id = home_try_on.user_id  
  LEFT JOIN purchase  
    ON purchase.user_id = quiz.user_id  
)  
SELECT number_of_pairs AS "AB_test",  
       SUM(is_home_try_on) AS 'home_trial',  
       SUM(is_purchase) AS 'purchase'  
FROM tmp_table  
WHERE AB_test IS NOT NULL  
GROUP BY number_of_pairs;
```

AB_test	nun_of_pairs	purchase
3 pairs	379	201
5 pairs	371	294

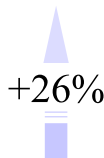
5 pairs



3 pairs



Purchase rate  
growth





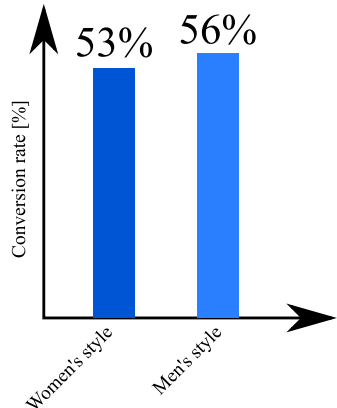
# Purchase rate by style



```
SELECT quiz.style,  
       COUNT(quiz.style),  
       COUNT(purchase.style)  
FROM quiz  
LEFT JOIN purchase  
  ON quiz.user_id = purchase.user_id  
GROUP BY 1  
ORDER BY 2 DESC;
```

style	COUNT(quiz)	COUNT(purchase)
Women's style	469	252
Men's style	432	243
I am not sure	99	0

## Purchase conversion rate



# Conclusion



- Question **3** and **5** have the largest drop rate (**20%** and **25%**)
- About **1 out of 2 (51%)** quiz takers will not purchase
- **1 out 3** users (**34%**) who chooses home-trial will not buy
- *A/B test* shows an increase in the purchase rate of **26%** when **5 pairs of glasses** are offered for the home-trial
- Sails for Men's style fall below Women's style (**243** to **252**). However conversion rate is larger for the former category (**56%** to **53%**)

THANK

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YOU