



WP Marketing Funnels

Learn SQL from Scratch

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5/14/2019

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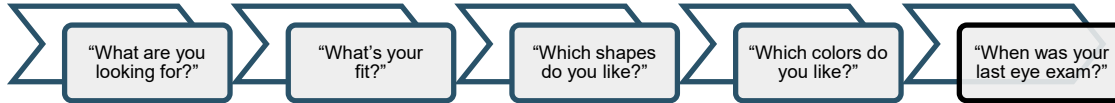
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1. Get Familiar with Warby Parker

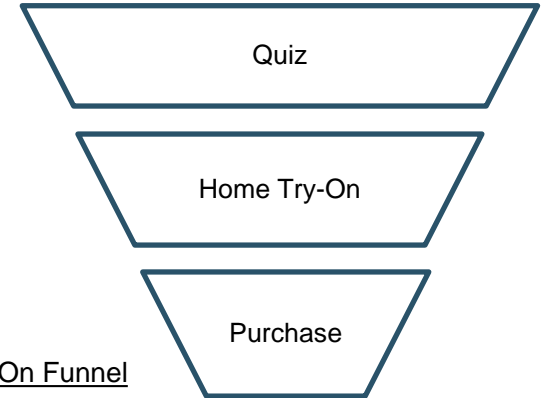
1.1 Marketing Funnels

A funnel is a marketing model which illustrates the theoretical customer journey towards the purchase of a product or service. Warby Parker has 2 marketing funnels.

- Quiz Funnel : Answering each part of a 5 question survey that leads to trying on the product
- Home Try-on Funnel: Quiz → Home Try-on → Purchase



Quiz Funnel



Home Try-On Funnel

1.2 Marketing Funnels, Quiz Funnel

The user responses are stored in one table called survey. What columns are in the table?

- question
- user_id
- response

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

----Quiz Funnel

```
SELECT *  
FROM survey  
LIMIT 10;
```

1.3 Marketing Funnels, Home Try-on Funnel

The data of home-try on funnel are distributed across the three tables called quiz, home_try_on and purchase. What are the column names?

- quiz: user_id, style, fit, shape, color
- home_try_on: user_id, number_of_pairs, address
- purchase: user_id, product_id, style, model_name

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

```
SELECT *  
FROM quiz  
LIMIT 10;
```

```
SELECT *  
FROM home_try_on  
LIMIT 10;
```

```
SELECT *  
FROM purchase  
LIMIT 10;
```

2. What is the Quiz Funnel?

2.1 Quiz Funnel, Analysis

What is the number of responses for each question? Which questions have the lower completion rate? What do you think the reason is?

- Question 3 and 5 have a lower completion rate, it is likely that the user is not familiar with the shapes of the glasses and not sure what's the best fit, the user may think that Question 5 is irrelevant since its about frames
- Suggestions: for Question 3 the survey can suggest shape types based on user's face shape, remove Question 5

```
SELECT COUNT(user_id), question
FROM survey
GROUP BY 2;
```

COUNT(user_id)	question	Percent completed this question
500	1. What are you looking for?	100%
475	2. What's your fit?	95%
380	3. Which shapes do you like?	80%
361	4. Which colors do you like?	95%
270	5. When was your last eye exam?	75%

3. A/B Testing with Home Try-on Funnel

3.1 Home Try-on Funnel, Conversion Rates

Calculate the overall conversion rate and compare the conversion rate of each steps of the funnel.

- The overall conversion rate is 49.5%
- 75% of users who took the quiz agreed to try-on, and 66% who tried on made a purchase
- The conversion rate for [quiz → try-on] is higher than [try-on → purchase.]

```
WITH newtable AS
(
SELECT quiz.user_id AS user_id,
       home_try_on.user_id IS NOT NULL AS 'is_home_try_on',
       home_try_on.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 (1.0*SUM(is_home_try_on))/(1.0*COUNT(user_id)) AS
quiz_tryon,
(1.0*SUM(is_purchase))/(1.0*SUM(is_home_try_on)) AS tryon_purchase,
(1.0*SUM(is_purchase))/(1.0*count(user_id)) AS overall_conversion
FROM newtable;
```

quiz_tryon	tryon_purchase	overall_conversion
0.75	0.66	0.495

3.2 Home Try-on Funnel, A/B Testing

We found that customers who tried on 5 pairs has a much higher purchase rate than customers who tried on 3 pairs.

- 3 pairs → 53% purchase rate
- 5 pairs → 79% purchase rate
- Having all the customers tried on 5 pairs instead of 3 pairs will maximize the overall conversion rate.

```
SELECT COUNT(number_of_pairs IS NOT NULL) AS  
  '#try_on',  
  number_of_pairs AS 'try_on_pairs',  
  COUNT(price > 0) as '#sold',  
  ((1.0*COUNT(price > 0))/count(number_of_pairs IS NOT  
  NULL))*100 AS '%convert'  
FROM home_try_on  
LEFT JOIN purchase  
  ON home_try_on.user_id = purchase.user_id  
GROUP BY 2;
```

#try_on	try_on_pairs	#sold	%convert
379	3 pairs	201	53.0343007915567
371	5 pairs	294	79.2452830188679

1.1 Home Try-on Funnel, Extras

- From users' quiz response, we found that Women's Styles and Rectangular shape are the most popular.

COUNT(user_id)	style
99	I'm not sure. Let's skip it.
432	Men's Styles
469	Women's Styles

COUNT(user_id)	shape
397	Rectangular
326	Square

- From purchase data, we found that the color Jet Black is the most popular, and product ID 3 and 10 are the best sellers.

COUNT(user_id)	color
86	Jet Black
63	Driftwood Fade
62	Rosewood Tortoise

COUNT(user_id)	product_id
63	3
62	10