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Warby Parker Marketing Funnel Analysis

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Warby Parker is a leading eyewear brand that pioneered the home-try-on business model in the optical industry

Background

- Founded in 2010
- Valued at $1.75 billion
- Prescription eyeglass and sunglass products
- Affordable, competitive prices ranging from $50-150
- Home-try-on and store purchase options

WARBY PARKER

eyewear

In order to **increase revenue** from the **home-try-on program**, we can analyze Warby Parker's **marketing funnel** to gain insight and make recommendations for improvement

Utilized Warby Parker database containing survey and home-try-on funnel data to conduct a marketing analysis

Leading Questions

- Which questions on the Style Survey have the lowest completion rates? Why?
- Are users who get more pairs of glasses to try on at home more likely to make a purchase?
- What percentage of users are making it through each step in the home-try-on funnel?

Database Schema

Survey Funnel

Style Survey table

Home-try-on Funnel

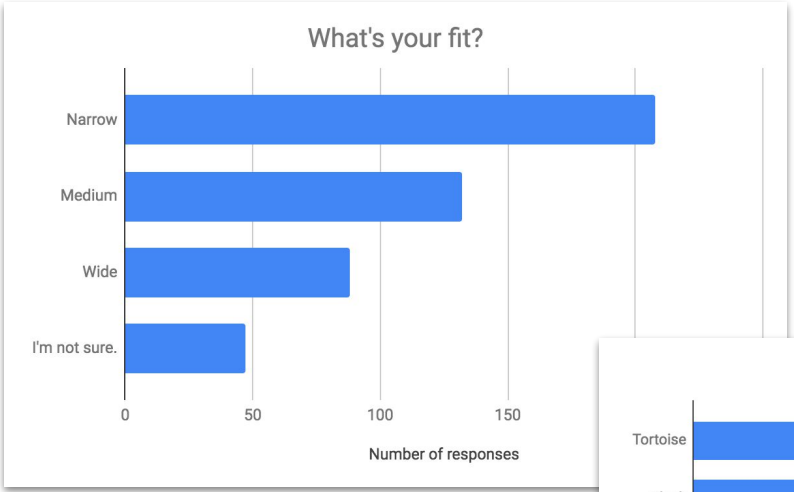
Quiz table

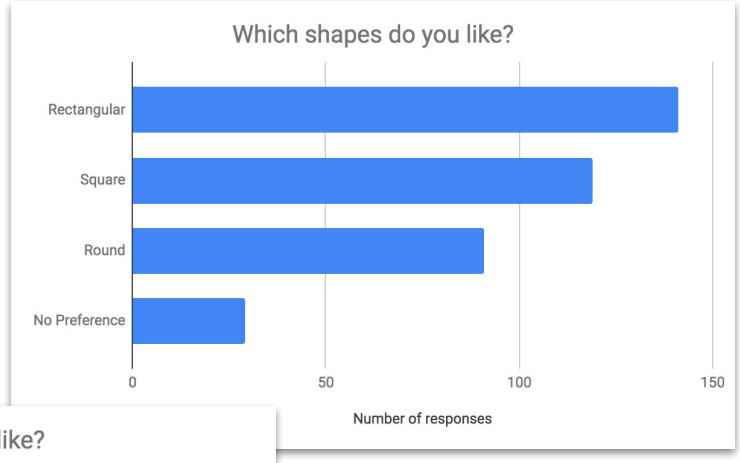
Home-try-on table

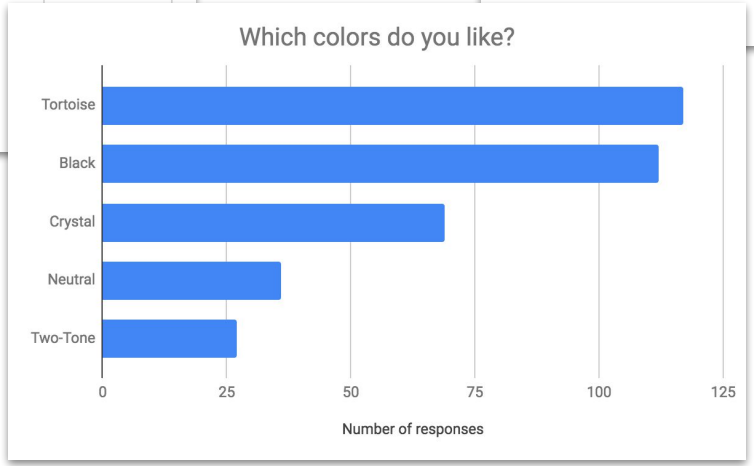
Purchase table

Style Survey Funnel

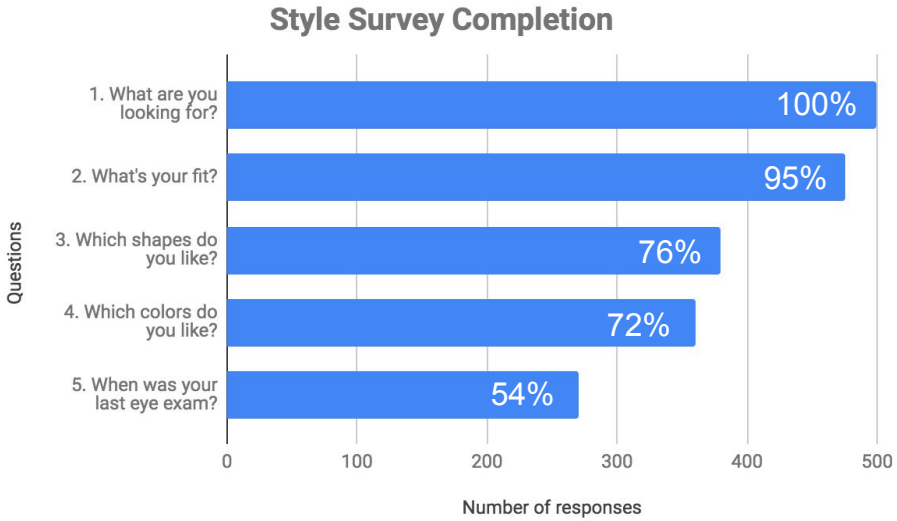
Style Survey indicates narrow fit, rectangular shape, and tortoise color are most popular







Only half of users who start the Style Survey finish it, suggesting questions or survey format are a deterrent



Insights:

- Only 54% of users finish the survey, suggesting it is presenting a barrier to entry for the home-try-on program
- Completion rates drop significantly at Q3 and Q5
- Q2 and Q3 are similar in nature, suggesting format or repetition may be to blame for a drop in completion
- Q5 has lowest completion rate, suggesting it might be viewed as too personal or not relevant to a style survey

Conduct A/B tests to assess impact of question content and survey format changes on completion rates

Question Content Recommendations:

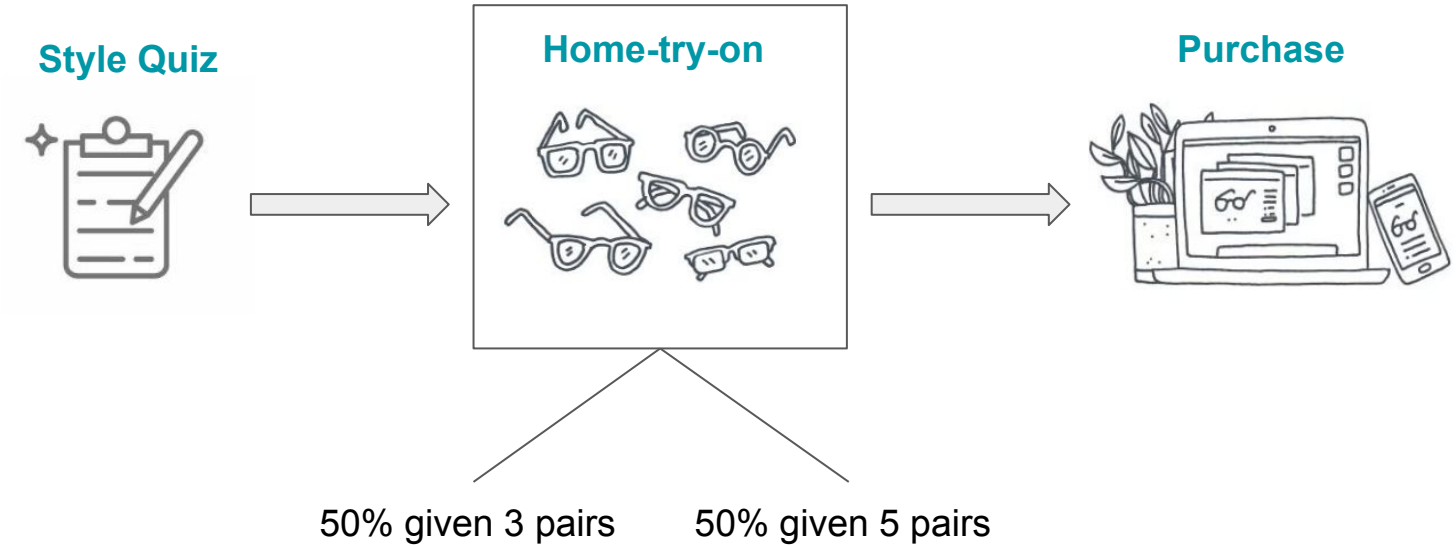
- Combine Q2 and Q3 fit and shape questions into one question or make them more distinct
- Remove Q5 eye exam question altogether or keep it but include information why it is relevant

Format Recommendations:

- Cartoon graphics may not differentiate style shape enough, consider using photos to make answering questions easier
- Consider placing “I’m not sure” selection closer to main options to encourage question completion
- Reduce the number of shape options to prevent overwhelming user

Home-try-on Funnel

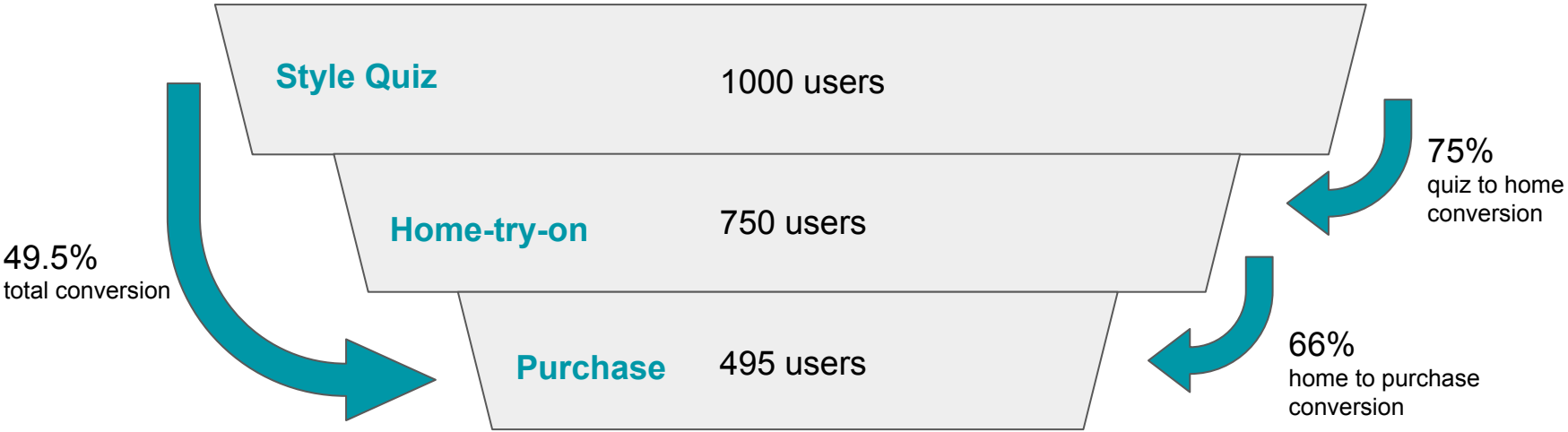
Home-try-on funnel is composed of 3 phases: style quiz, home-try-on, and purchase



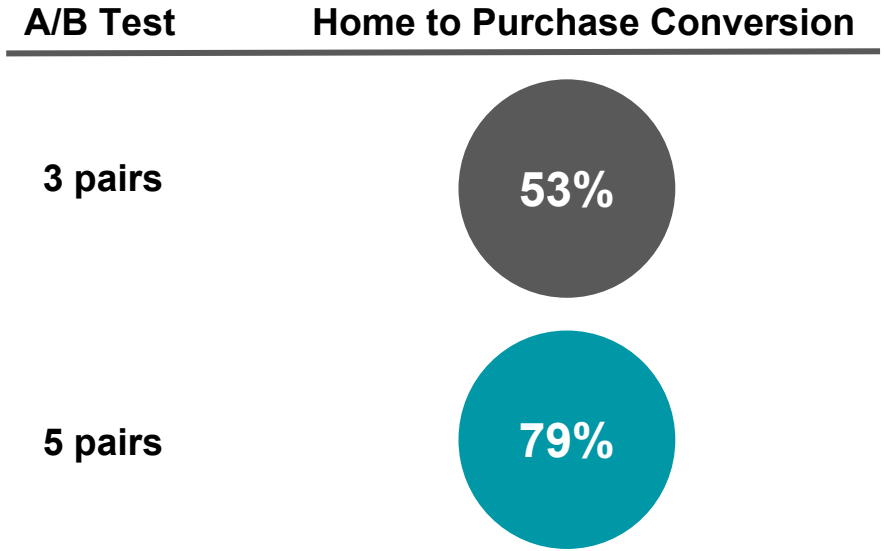
An **A/B test** was conducted to examine **purchase rates** for those given 3 or 5 pairs of glasses to try at home

Less than half of quiz responses lead to a purchase

Home-try-on funnel conversion rates



Users who get 5 pairs of glasses at home are more likely to purchase than those who get 3 pairs



Give users **5 pairs of glasses** to try on at home to **increase purchase conversion** rate

Purchases reflect style survey preferences

Most purchased men's style

Dawes, Driftwood Eagle, $150

Most purchased women's style

Eugene Narrow, Rosewood Tortoise, $95

Use survey responses as an indicator for stocking popular eyewear

Final recommendations

Funnel analysis reveals insights from A/B test and provides direction for Warby Parker to increase revenue

Summary of recommendations

- Consider changing style survey questions and format to increase completion rate
  - Combine Q2 and Q3
  - Remove Q5
  - Use photos rather than cartoon graphics
- Conduct additional A/B tests using recommendations above to improve survey completion
- Give users 5 pairs of glasses to try on at home to increase purchase rate
- Purchases reflect style survey preferences, making the survey a good forecasting tool for stocking popular products

Appendix

Survey queries

```sql
SELECT question,
   COUNT(DISTINCT user_id) AS num_responses
FROM survey
GROUP BY 1;

SELECT question,
 response,
 COUNT(*) AS num_responses
FROM survey
GROUP BY 1,2
ORDER BY 1, 3 DESC;
```

question	num_responses
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

question	response	num_responses
1. What are you looking for?	Men's Styles	242
1. What are you looking for?	Women's Styles	209
1. What are you looking for?	I'm not sure. Let's skip it.	49
2. What's your fit?	Narrow	208
2. What's your fit?	Medium	132
2. What's your fit?	Wide	88
2. What's your fit?	I'm not sure. Let's skip it.	47
3. Which shapes do you like?	Rectangular	141
3. Which shapes do you like?	Square	119
3. Which shapes do you like?	Round	91
3. Which shapes do you like?	No Preference	29
4. Which colors do you like?	Tortoise	117
4. Which colors do you like?	Black	112
4. Which colors do you like?	Crystal	69
4. Which colors do you like?	Neutral	36
4. Which colors do you like?	Two-Tone	27
5. When was your last eye exam?	<1 Year	141
5. When was your last eye exam?	1-3 Years	56
5. When was your last eye exam?	3+ Years	37
5. When was your last eye exam?	Not Sure. Let's Skip It	36

Survey queries cont.

```
WITH question_responses AS(
 SELECT question,
   COUNT(DISTINCT user_id) AS num_responses
   FROM survey
   GROUP BY 1),
total_responses AS(
  SELECT MAX(num_responses) AS total
  FROM question_responses),
combined AS(
  SELECT *
  FROM question_responses
  CROSS JOIN total_responses)
SELECT question,
  (1.0 * num_responses / total) * 100 AS percent_answered
FROM combined;
```

question	percent_answered
1. What are you looking for?	100.0
2. What's your fit?	95.0
3. Which shapes do you like?	76.0
4. Which colors do you like?	72.2
5. When was your last eye exam?	54.0

Total conversion rate queries

```
WITH funnel AS (
  SELECT DISTINCT q.user_id,
  h.user_id IS NOT NULL AS is_home_try_on,
  h.number_of_pairs,
  p.user_id IS NOT NULL AS is_purchased
FROM quiz q
LEFT JOIN home_try_on h
  ON q.user_id = h.user_id
LEFT JOIN purchase p
  ON p.user_id = q.user_id)
SELECT 1.0 * SUM(is_purchased)/ COUNT(user_id) *  100 AS
total_conversion,
  1.0 * SUM(is_home_try_on) / COUNT(user_id) * 100 AS
quiz_to_home,
  1.0 * SUM(is_purchased) / SUM(is_home_try_on) *   100 AS
home_to_purchase
FROM funnel;
```

total_conversion	quiz_to_home	home_to_purchase
49.5	75.0	66.0

A/B test conversion rates

```
WITH funnel AS (
  SELECT DISTINCT q.user_id,
    h.user_id IS NOT NULL AS is_home_try_on,
    h.number_of_pairs,
    p.user_id IS NOT NULL AS is_purchased
  FROM quiz q
  LEFT JOIN home_try_on h
    ON q.user_id = h.user_id
  LEFT JOIN purchase p
    ON p.user_id = q.user_id),
three_pairs AS (
  SELECT *
  FROM funnel
  WHERE number_of_pairs = '3 pairs'),
five_pairs AS (
  SELECT *
  FROM funnel
  WHERE number_of_pairs = '5 pairs'),
five_conversion AS (
  SELECT number_of_pairs,
    1.0 * SUM(is_purchased) /SUM(is_home_try_on) * 100 AS
home_to_purchase
  FROM five_pairs),
three_conversion AS (
  SELECT number_of_pairs,
    1.0 * SUM(is_purchased) /SUM(is_home_try_on) * 100 AS
home_to_purchase
  FROM three_pairs),
three_five_conversion AS (
  SELECT *
  FROM five_conversion
  UNION
  SELECT *
  FROM three_conversion)
SELECT number_of_pairs,
  ROUND(home_to_purchase,2) AS home_to_purchase
FROM three_five_conversion;
```

number_of_pairs	home_to_purchase
3 pairs	53.03
5 pairs	79.25

Purchase queries

```
SELECT style, model_name, color, COUNT(*) AS
num_purchases, price
FROM purchase
GROUP BY 1,2,3
ORDER BY 4 DESC;
```

style	model_name	color	num_purchases	price
Men's Styles	Dawes	Driftwood Fade	63	150
Women's Styles	Eugene Narrow	Rosewood Tortoise	62	95
Women's Styles	Eugene Narrow	Rose Crystal	54	95
Men's Styles	Brady	Layered Tortoise Matte	52	95
Women's Styles	Olive	Pearled Tortoise	50	95
Men's Styles	Dawes	Jet Black	44	150
Women's Styles	Lucy	Elderflower Crystal	44	150
Men's Styles	Brady	Sea Glass Gray	43	95
Women's Styles	Lucy	Jet Black	42	150
Men's Styles	Monocle	Endangered Tortoise	41	50