

Developing a strong ideation engine



OPTIMIZATION

is a

JOURNEY

not a

DESTINATION

Before we get started...

- Feel free to ask questions at any time!
- Engage in discussions.
- We will be using laptops for certain sections.
- We are recording this session and will email a link to the recording.
- We will follow up with an email containing resources.
- Please give us feedback in the survey at the end of this session.

During this session, you'll learn how to...

1. Connect testing to your business goals
2. Use data to drive experiment ideation
3. Design hypotheses that impact goals
4. Leverage an effective testing process

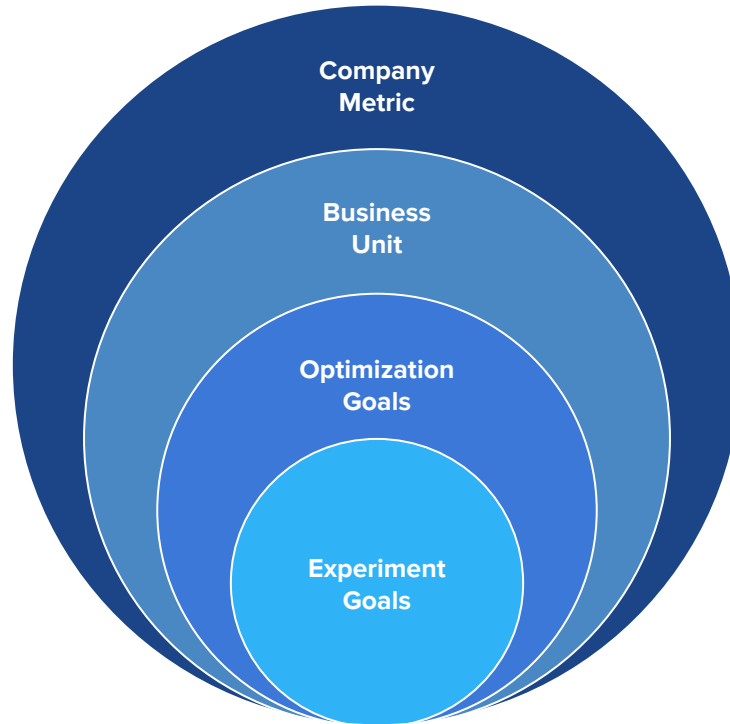
Utilize the Testing Cycle



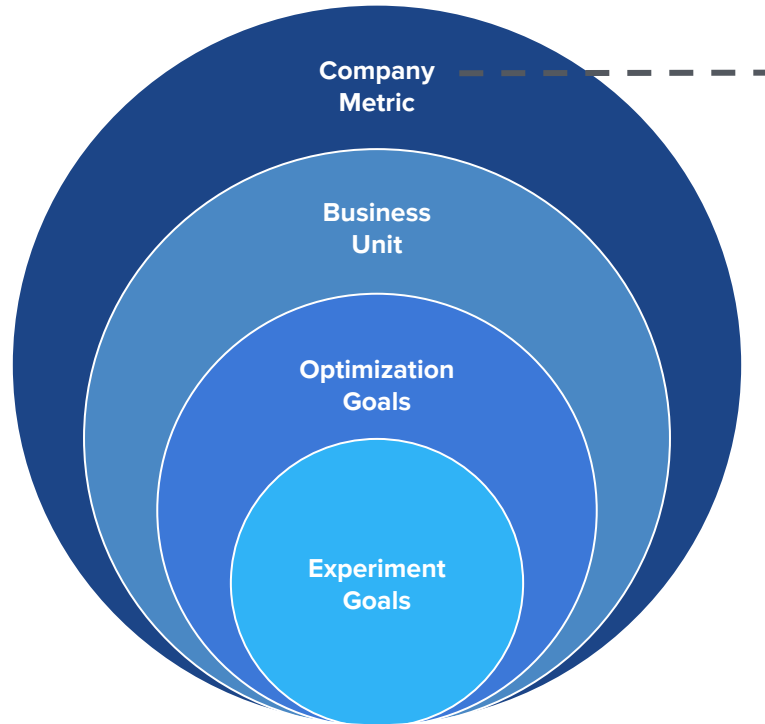
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Connect testing to your business goals

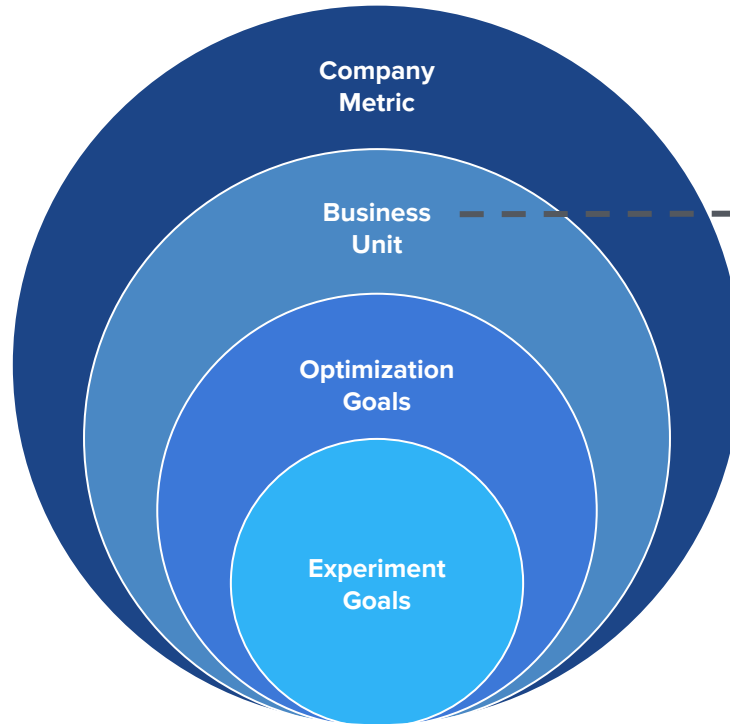


Connect testing to your business goals



Your **company metric** measures a high-level goal: an increase in **revenue** for example.

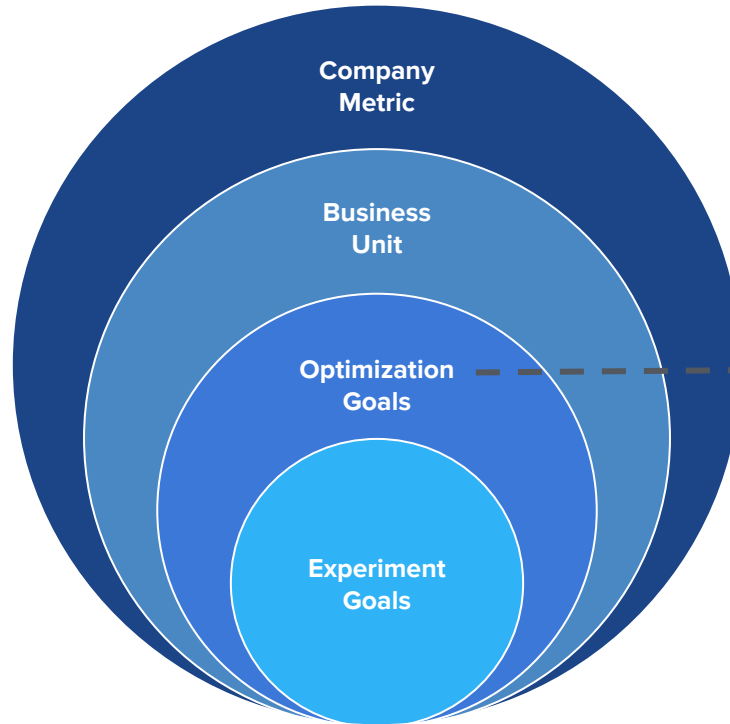
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Each **business unit** takes a different approach to that metric. For example, each category/department (lips, face, etc) is focused on increasing the **revenue per visitor (RPV)**.

Connect testing to your business goals

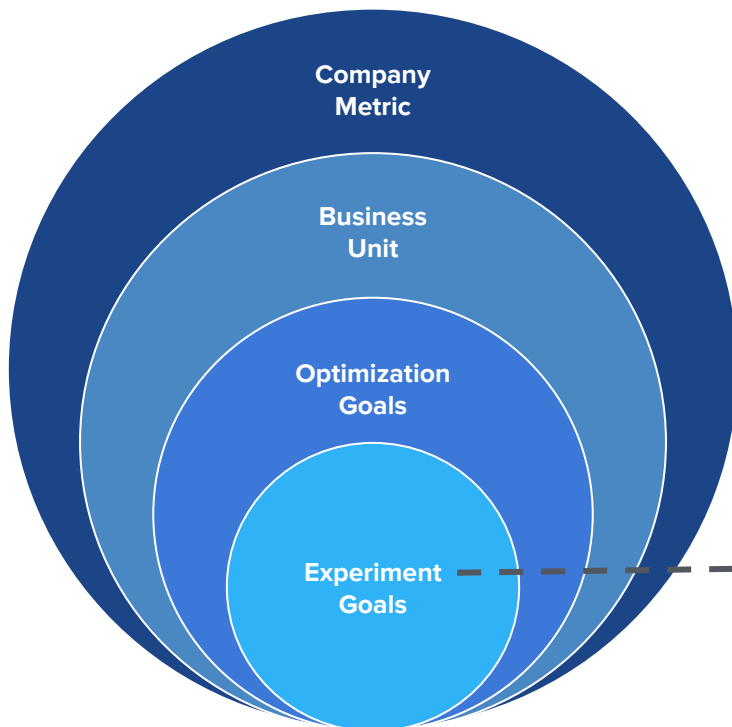


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Connect testing to your business goals



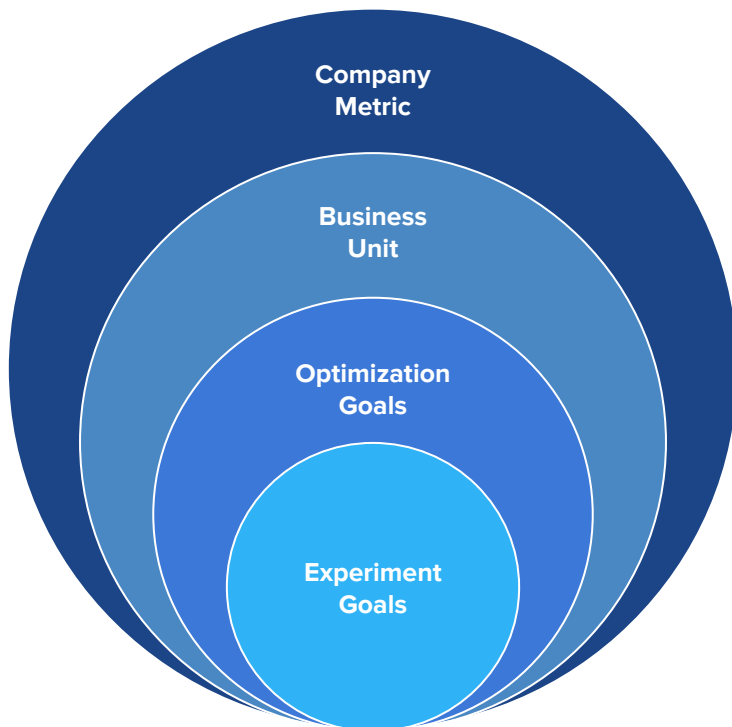
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Individual **experiments** test ways to create lift in the metrics that matter to the program. One might improve the AOV by optimizing the **average order quantity**, for example. Or **increasing product views**, or **scroll depth on an PDP**.

Connect testing to your business goals



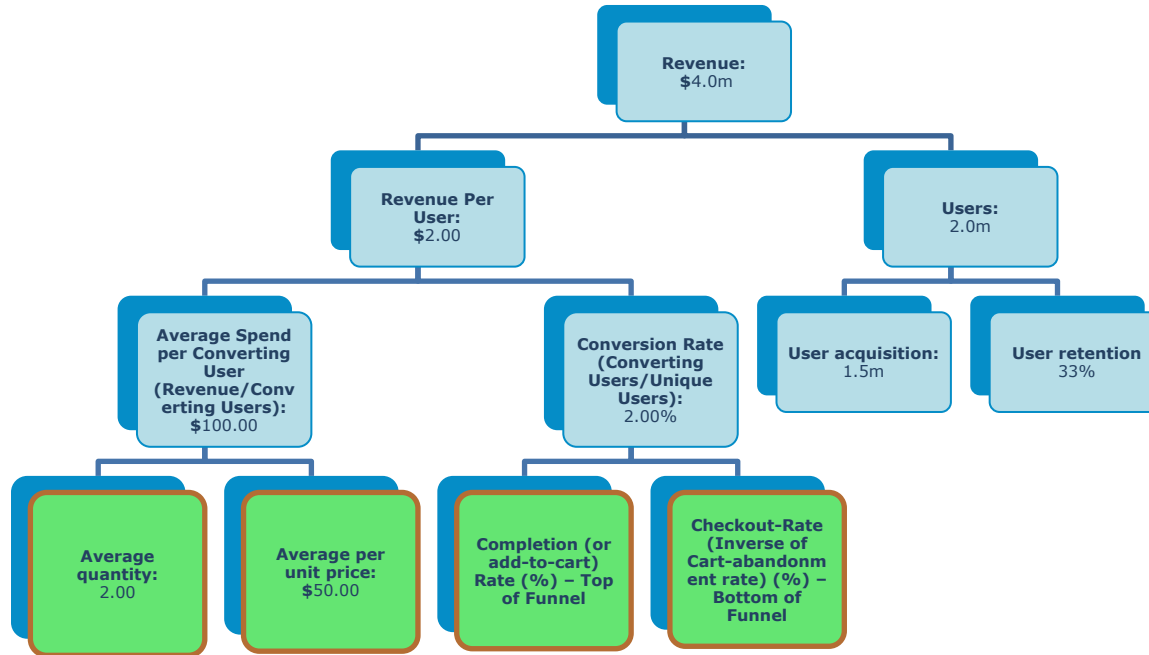
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Goal Orientation - eCommerce



Reasons for Goal Tree:

Comprehensive:

- Visually analyzes the entire site's opportunity, and help avoid opportunity cost

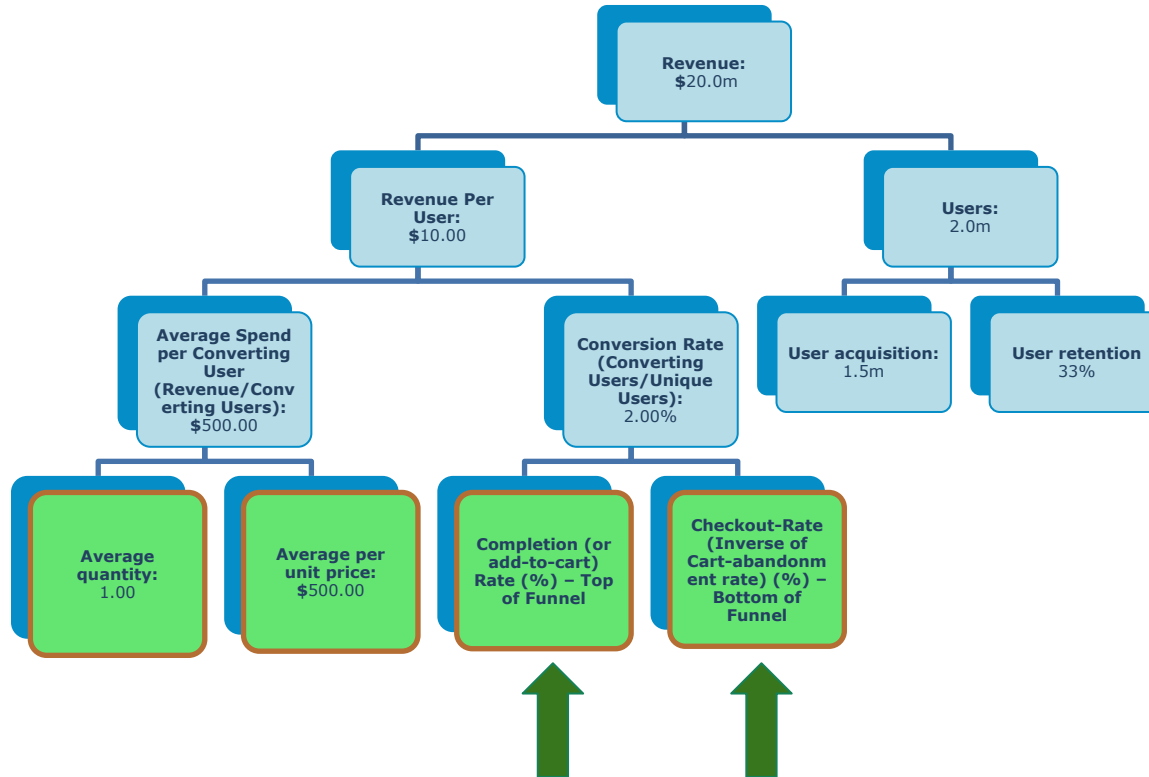
Alignment:

- Allows teams to explicitly align testing goals to business goals; keeps ideas tightly focused

Productive Brainstorming:

- Strategic foundation for creative brainstorming, helping to garner a volume of ideas for prioritization

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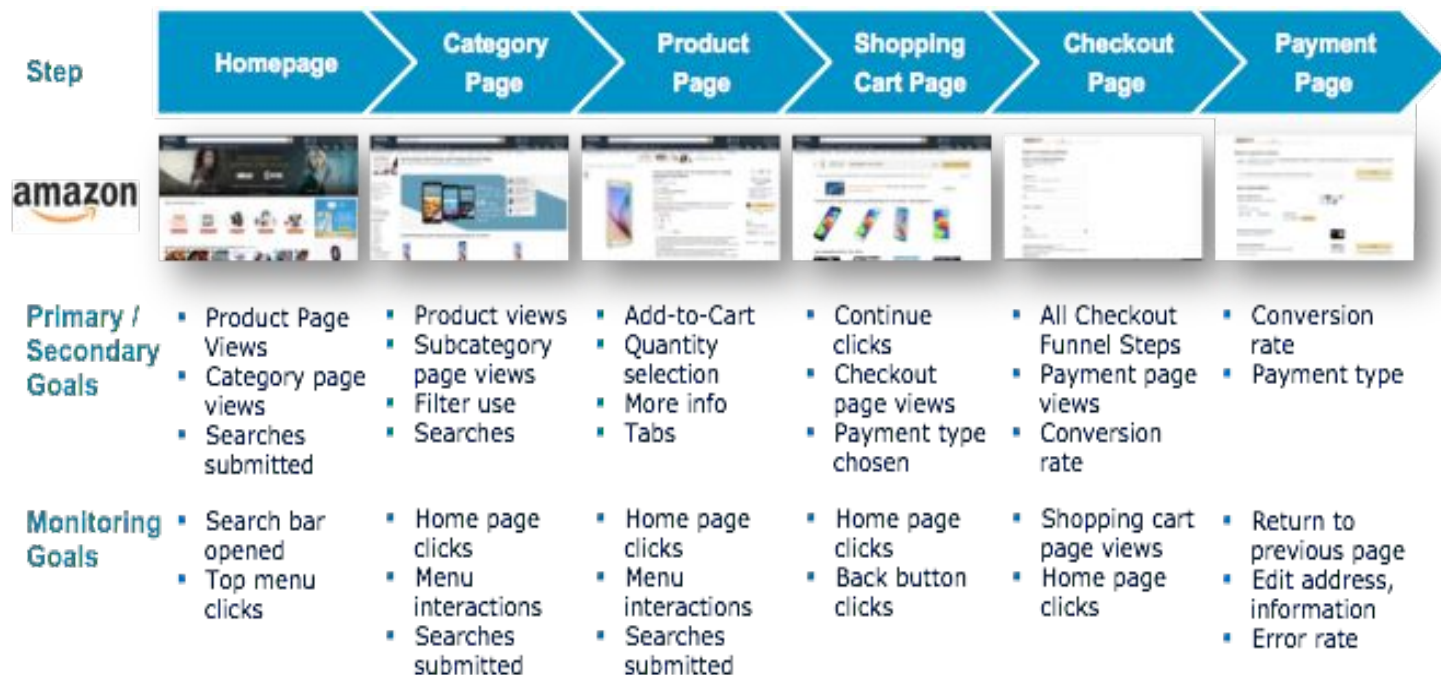
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Primary/Secondary & Monitoring Goals



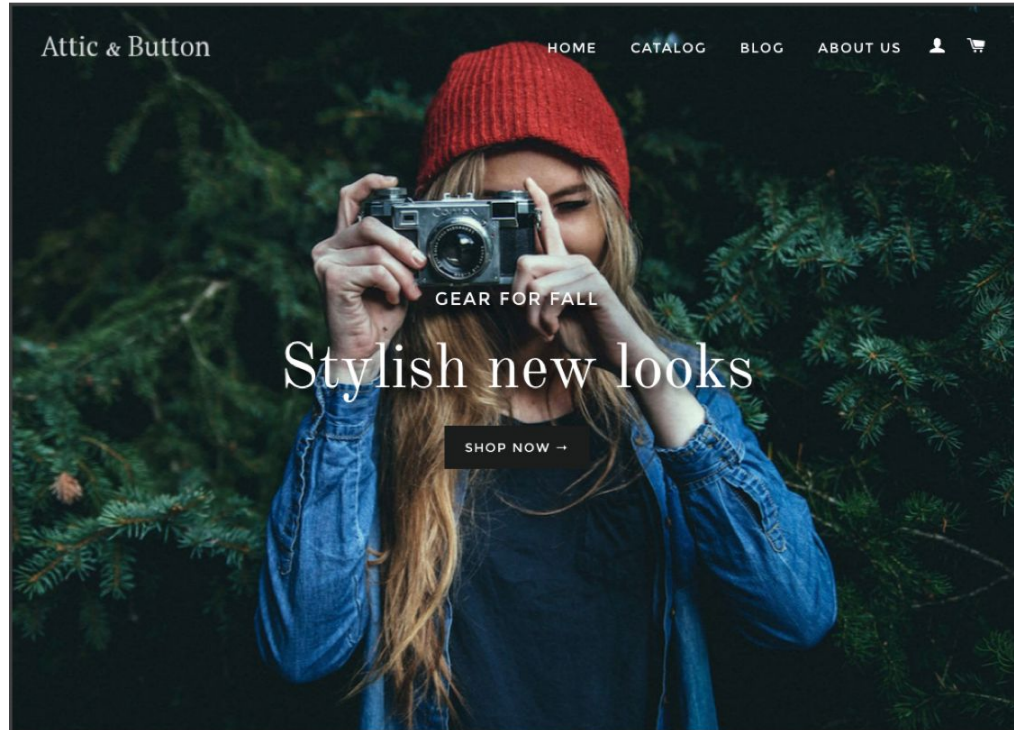
Define Primary, Secondary, and Monitoring Goals:

https://help.optimizely.com/Track_Conversion_Goals/Define_primary_secondary_and_monitoring_goals

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Use data to drive experiment ideation

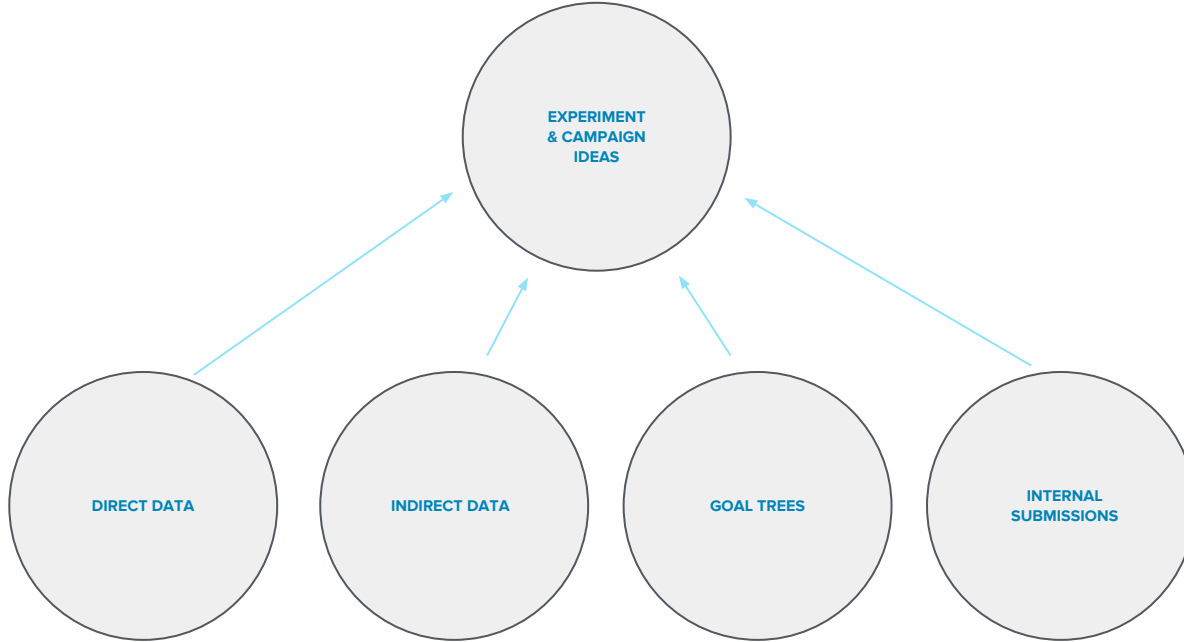


Identify the problem you will address

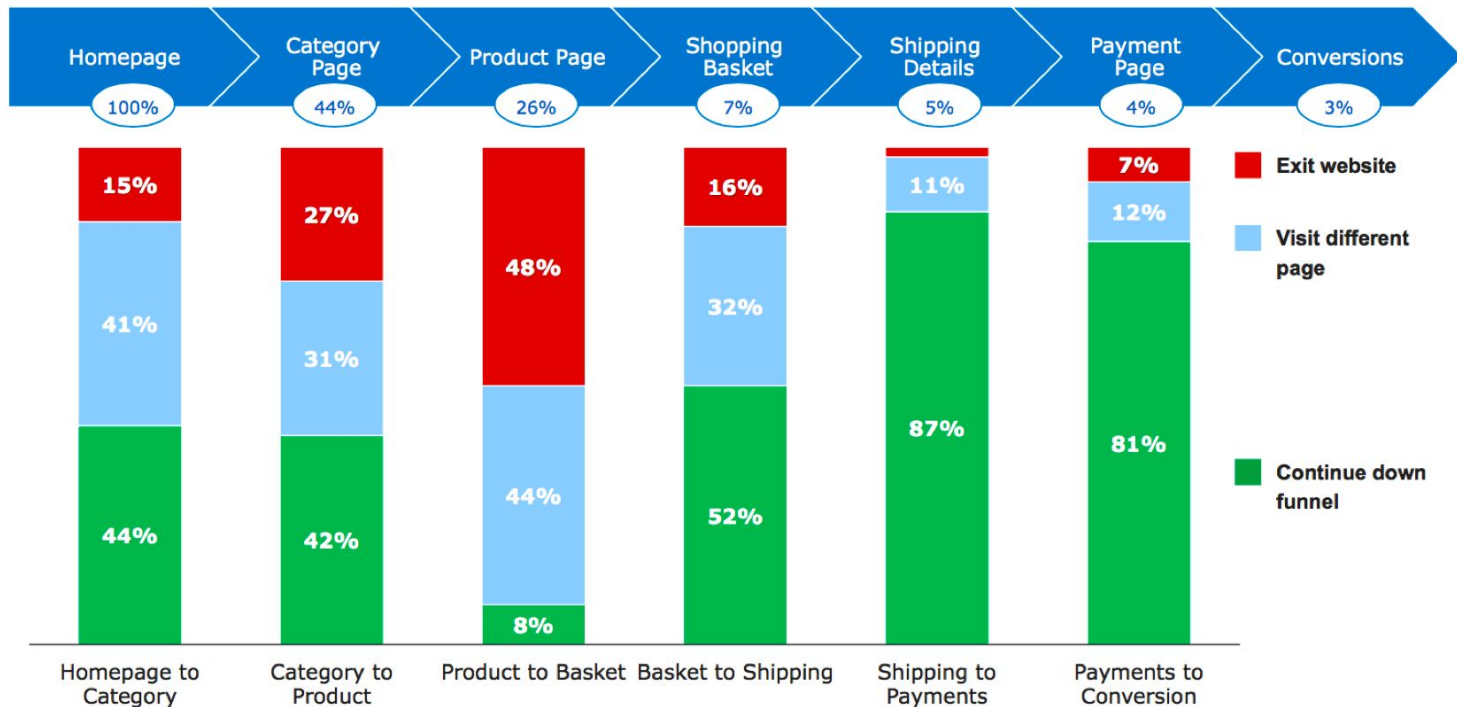
1. Conduct research using both direct and indirect data

- Results from prior experiments
- Web analytics
- Heat maps
- User testing
- Competitive reviews
- Industry trends

Consider multiple sources



Use data to drive experiment ideation



Identify the problem you will address

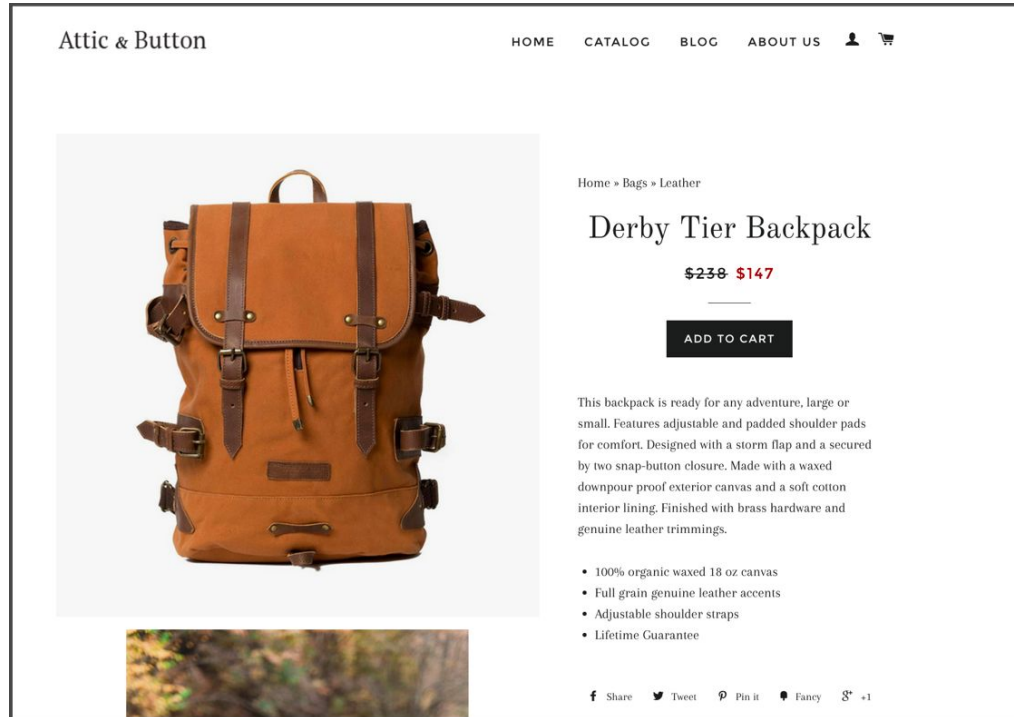
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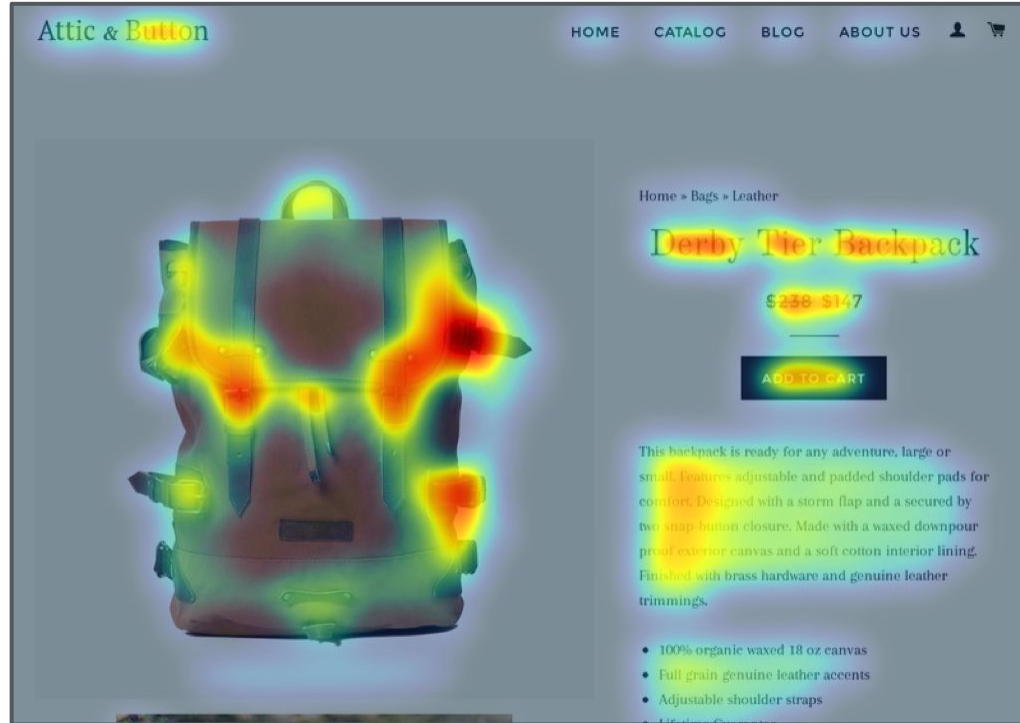
2. Identify the goal

- For example: “increase Add to Cart clicks on the product detail page.”

Use data to drive experiment ideation



Use data to drive experiment ideation



Identify the problem you will address

1. Conduct research using both direct and indirect data

- Results from prior experiments
- Web analytics
- Heat maps
- User testing
- Competitive reviews
- Industry trends

2. Identify the goal

- For example: “increase Add to Cart clicks on the product detail page.”


3. Formulate a problem statement

- For example: “The Add to Cart CTA doesn’t stand out.”

Problem: The Add to Cart CTA doesn't stand out

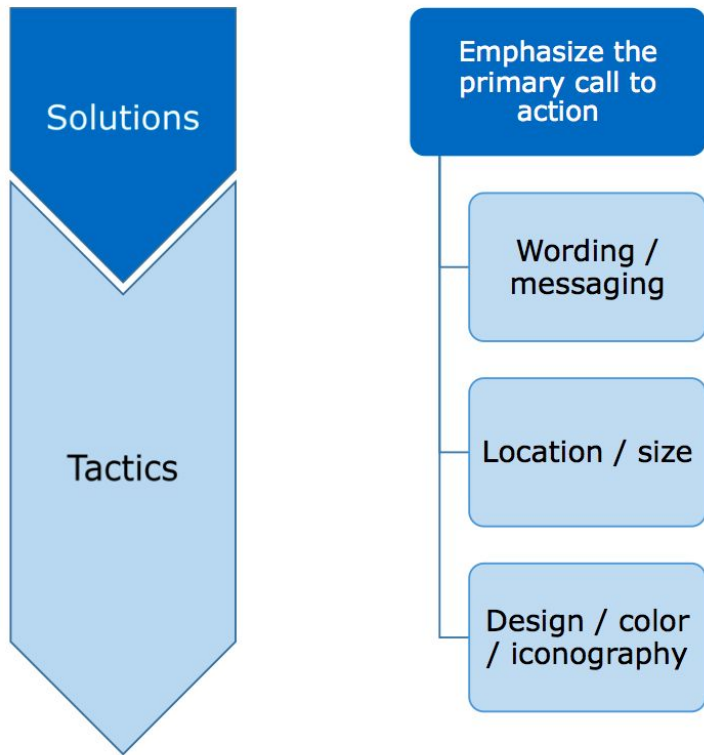


Solutions

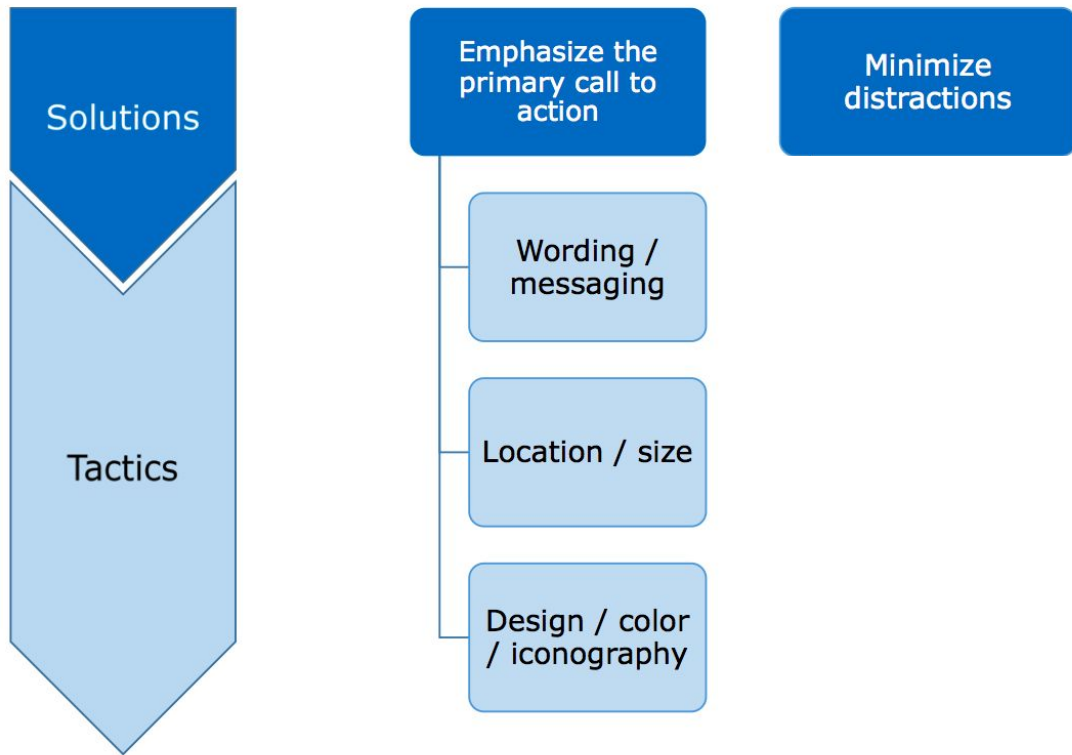


Emphasize the
primary call to
action

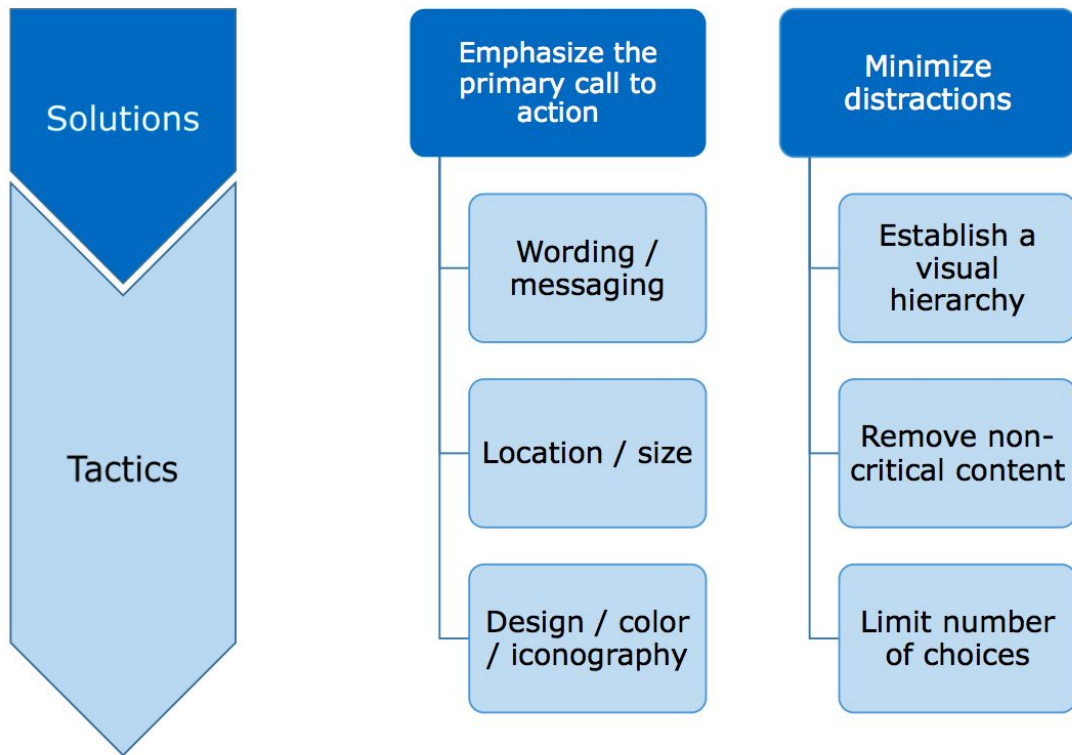
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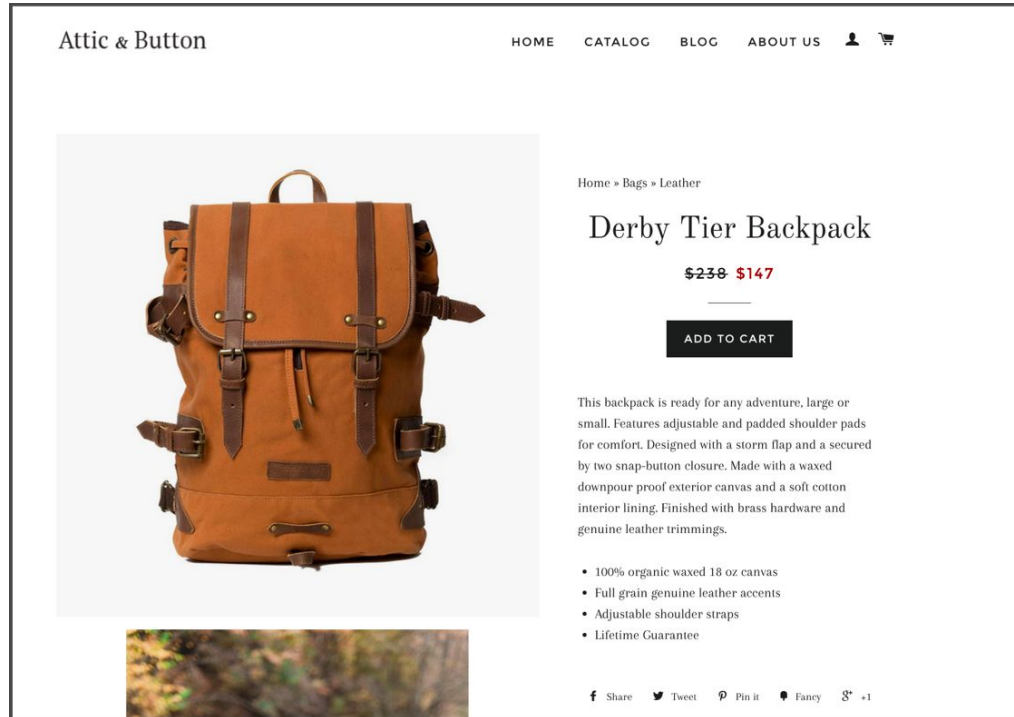
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Use data to drive experiment ideation



Questions:

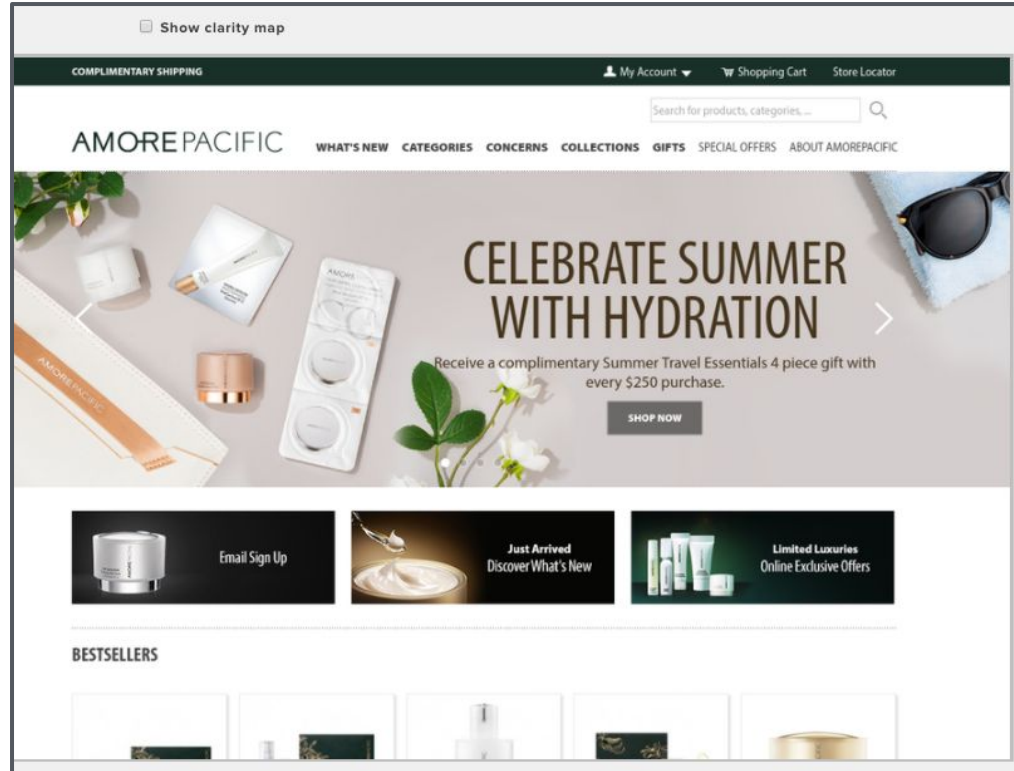
What are other sources we could use to identify problems on this page?

Eyequant:

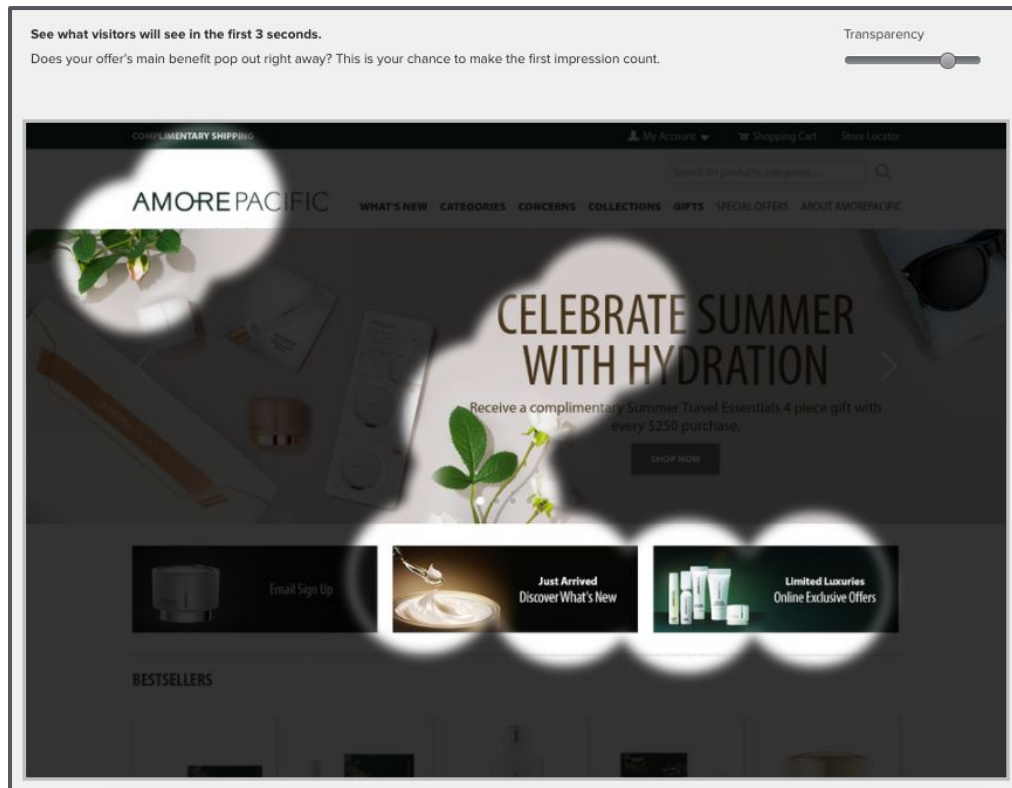
Heat Mapping Exercise

us.amorepacific.com

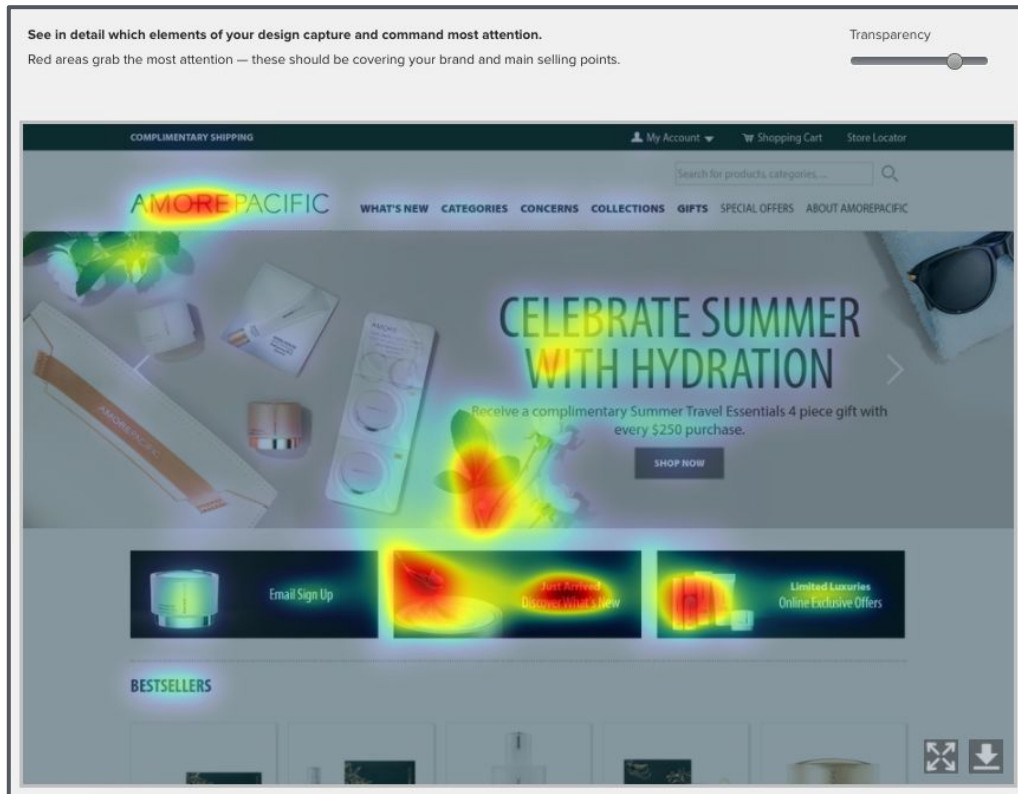
us.amorepacific.com



Eyequant - Perception Map



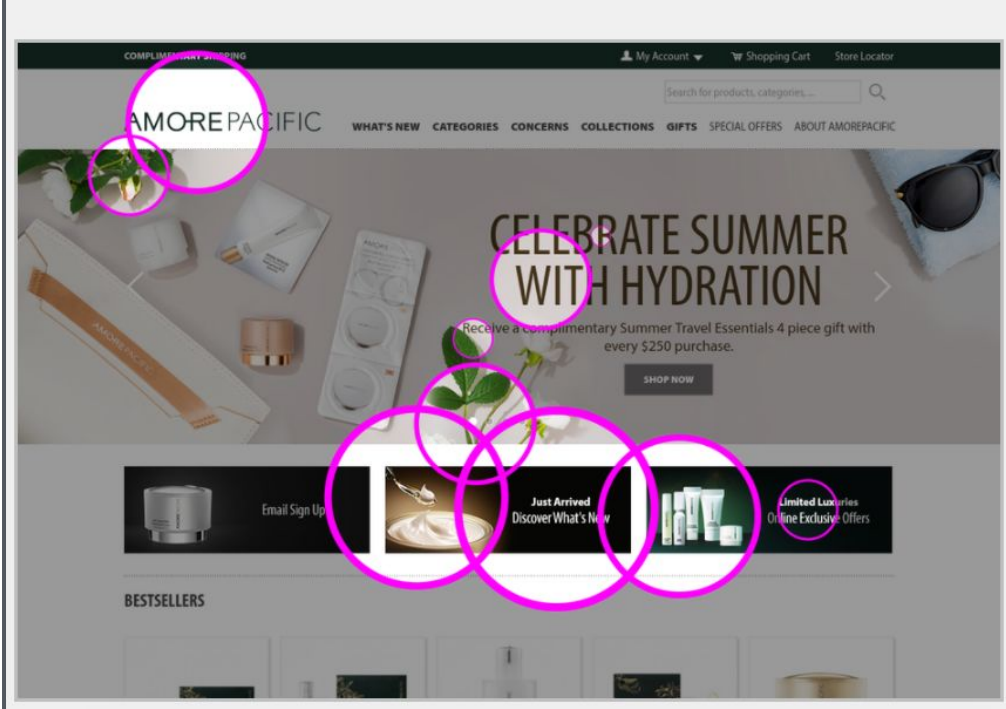
Eyequant - Attention Map



Eyequant - Hot Spots

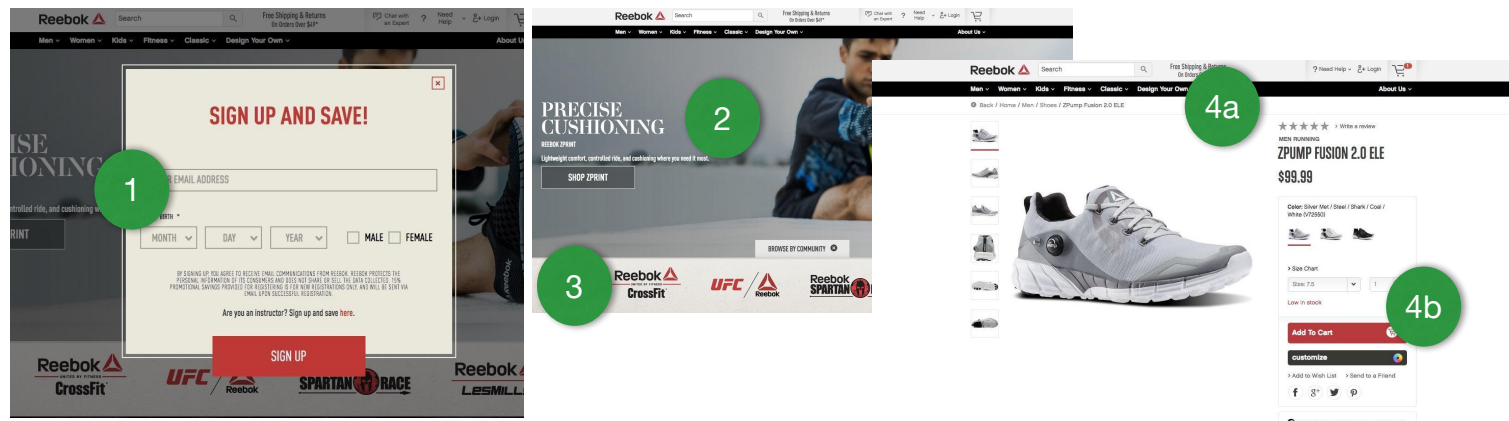
See the 10 most attention-grabbing spots of your design.

Large circles indicate great visibility, smaller ones will still be easy to find. Are your key messages covered?



Competitive Reviews

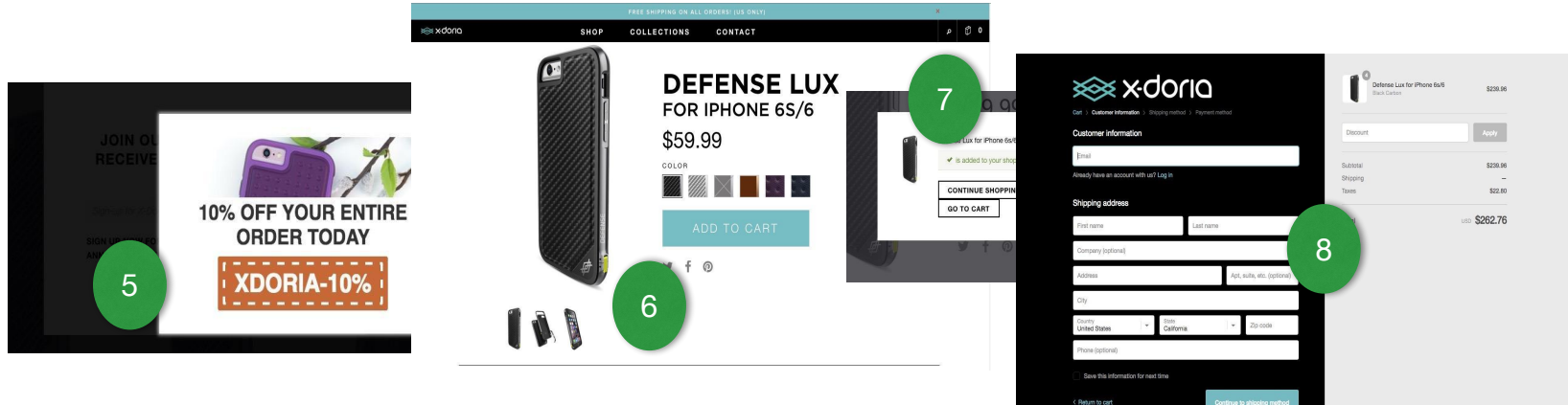
Competitive Reviews - eCommerce winners



Reebok:

1. Sign-Up action encouraged by CTA to save & pop-up
2. Newest or highest-ROI product displayed prominently above the fold
3. Corporate logos help encourage customers to particular sections: UFC, Crossfit, etc.
4. Red add-to-cart button with option to customize & minimized exits

Competitive Reviews - eCommerce winners



X-Doria (iPhone cases):

- 5. Offers coupon to entrants for all future purchases
- 6. Clean design, emphasis on selecting a color, minimized exits, one call-to-action 'Add'
- 7. Timed pop-up after 'add-to-cart' click that allows user to 'continue shopping' or 'go to cart' (disappears 5s)
- 8. All shipping information above the fold & in one area

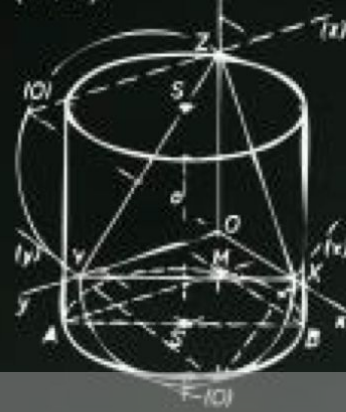


**Always consider multiple *problems*,
and multiple *solutions* to each problem**

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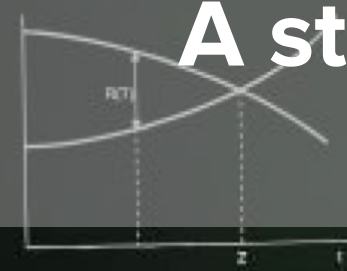
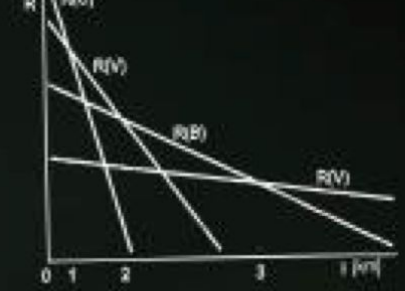
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$$(x-2)^2 \cdot (x+2)^2$$



$$\sqrt[3]{x^2} + (x+4) \cdot \frac{2}{3} \cdot \frac{1}{\sqrt[3]{x}}$$

$$\frac{1}{x + \sqrt{x^2 + 1}} \cdot \left(1 + \frac{2x}{\sqrt{4x^2 + 4}}\right)$$



A strong hypothesis is the heart of data-driven optimization.

$$\frac{(3x^2 + 6x)(x+1)^3 - 3(x^3 + 3x^2)(x+1)^2}{(x+1)^6}$$



$$\frac{3x^2(x+1)^2 - 2x^3(x+1)}{(x+1)^4}$$



$$\frac{\sqrt{x}}{\sqrt{x} + 2} + \frac{\sqrt{x} - 2}{\sqrt{x}}$$

$$5\pi$$

Construct a *good* hypothesis



- Clearly define your problem
- Validate it using quantitative and qualitative data

- Describe the proposed solution
- Propose a rationale as to why it will solve the problem

- Suggest metrics to measure for this experiment
- Set a criteria for success and failure

Construct a *good* hypothesis

Problem

Definition

Validation

Solution

Description

Rationale

Result

Metrics

Construct a *good* hypothesis

Problem

Definition

Users are distracted by unnecessary content on the product detail page

Validation

Heat mapping shows hot zones in less important areas like social share buttons and description bullets

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Construct a *good* hypothesis

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Definition

Users are distracted by unnecessary content on the product detail page

Validation

Heat mapping shows hot zones in less important areas like social share buttons and description bullets

Solution

Description

Remove social share options, shorten lengthy product description

Rationale

Having less content on the page will cause users to focus on the product title, image, price, and Add to Bag CTA

Result

Metrics

Construct a *good* hypothesis

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Result

Metrics

Primary: Add to Cart Clicks
Secondary: Purchases, Revenue

Exercise:

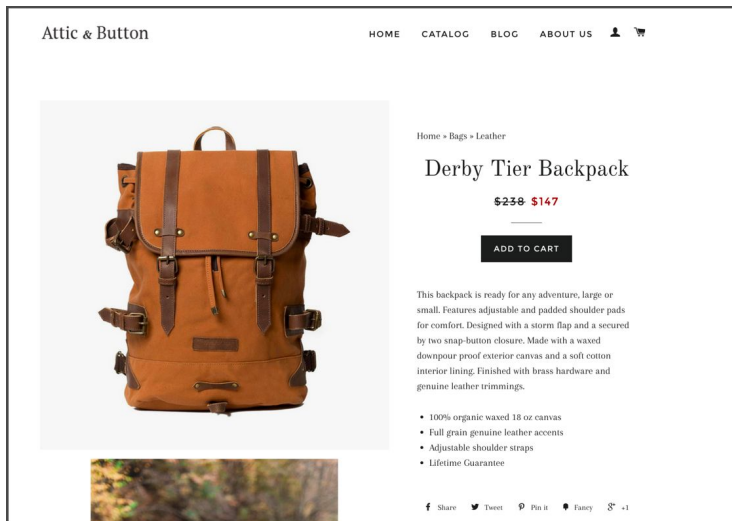
How can we improve this hypothesis

How can we improve this hypothesis?

Problem: People aren't adding products to the cart.

Solution: Remove unnecessary content on the product detail page.

Result: Increase in purchases



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- **There's no validation. How do we know this?**

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Problem: People aren't adding products to the cart.

Solution: Remove unnecessary content on the product detail page.

- There's no validation. How do we know this?
- **The solution is too vague. What content are we removing?
What's our rationale for removing it?**

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Solution: Remove unnecessary content on the product detail page.

Result: Increase in purchases

- There's no validation. How do we know this?
- The solution is too vague. What content are we removing?
What's our rationale for removing it?
- **Purchases is too far down the funnel for a primary goal.**

How can we improve this hypothesis?

Problem: Visitors are currently distracted by unnecessary content on the product detail page. Heat mapping shows hot spots around the lengthy product description.

Solution: Remove the product description bullets and social share icons. Minimizing these distractions will shift attention to the Add to Cart CTA

Result: Increase in % of users that add products to cart

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Teams that don't establish a clear testing process dramatically increase their risk of failure.

Establish a clear testing process

1. **Conduct monthly or bimonthly meetings**

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Establish a clear testing process

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3. **Construct a roadmap that is accessible to all team members**
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Use a roadmap to stay organized



- **What are you testing?**
- **When are you testing?**
- **How are your experiments prioritized?**
- **What were the results from past experiments?**

Utilize the Testing Cycle



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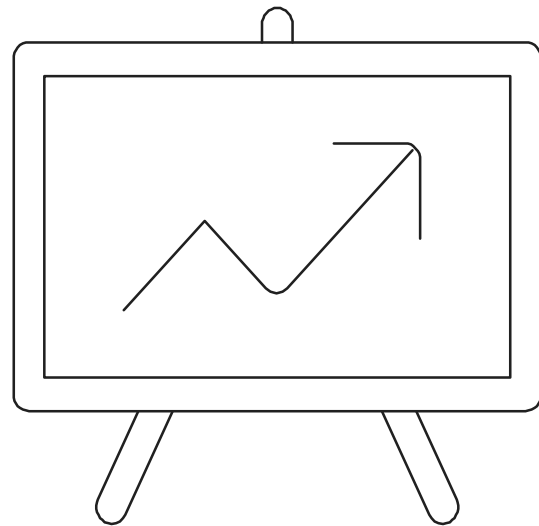
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Q&A

Data-Driven Ideation

Simple formulas to help you start prioritizing your pages:

- **Opportunity = [# of Visitors] X [Bounce Rate]**
 - Ex 1: Selection (Category-Grid) Page — 15,000 visitors X 40% Bounce Rate = 6,000 visitors (opportunity)
 - Ex 2: Credit-card details page— 7,000 visitors X 90% Bounce Rate = 6,300 visitors (opportunity)
 - **Takeaway: It is important to look at your visitors & bounce rates for all of your pages to properly assess where you can have the greatest impact with your testing**



Data-Driven Ideation: Tools

Revenue Tree:

- Use the revenue tree template to help illustrate to your stakeholders where the highest opportunities for testing are. Specifically, when trying to convey how a conversion uplift at a particular stage in the funnel translates to incremental \$\$ in revenue.
 - ex. Is a 10% increase in CVR on the homepage more valuable than a 5% increase in CVR on the cart-checkout page?

Homepage	Search/Browse Items	Item detail page	Add to cart	Cart checkout
	From previous: 111,571 58.1%	From previous: 100,080 36.7%		
	From external: 80,429 41.9%	From external: 183,920 63.3%		
Total: 298,000	Total: 192,000	Total: 289,000	Total: 48,408	Total: 22,626 CVR: 4.93%
	Checkout rate: 37.44%	Checkout rate: 55.25%	Checkout rate: 16.75%	Checkout rate: 46.74%

Revenue (over Year/Month/etc.)	
\$1,206,153.89	
Revenue per visitor \$0.50	Visitors 1,990,000
Average order value \$15.0	Conversion rate 4.03%
	User acquisition 1,500,000
	User retention 33%

Funnel Report:

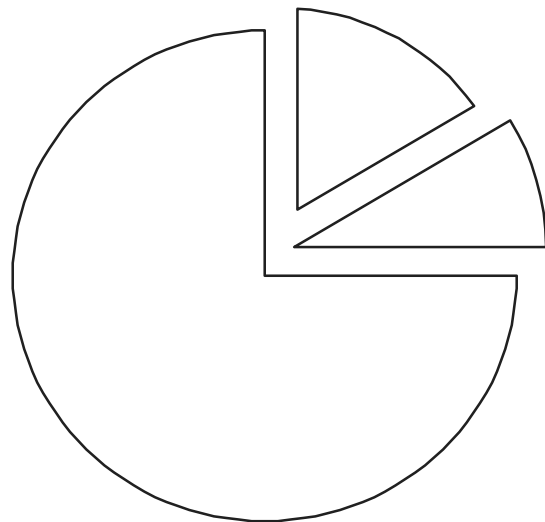
- Use the funnel report to also slice your traffic into: mobile vs. desktop; new vs. returning; & direct vs. paid traffic - just as a starting point for seeing your highest opportunity areas.

Month View - All Users	Homepage	Search/Browse Page	Item Detail Page	Cart Page	Checkout	Purchase Confirmation	Key:
# users	700,000	400,000	300,000	200,000	100,000	50,000	Inputs
Retention (from LP)		57.14%	42.86%	28.57%	14.29%	7.14%	Auto Calculates
Retention rate to next step	57.14%	75.00%	66.67%	50.00%	50.00%		
Drop-off	42.86%	25.00%	33.33%	50.00%	50.00%		
CVR from STEP to PURCHASE	7.14%	12.50%	16.67%	25.00%	50.00%		
# users dropped off (Traffic x Drop-off)	300,000	100,000	100,000	100,000	50,000		Output
# users opportunity to convert	37,500	16,667	25,000	50,000	50,000		
Normalized Opportunity score	63%	0%	25%	100%	100%		

Data-Driven Ideation

Simple formulas to help you start prioritizing your pages:

- **Net Impact = Reach (% of total visitors) X Expected Lift (% lift)**
 - Ex 1: Home-screen button color change – 70% of visitors X 5% increase in completions = +3.5% Net Impact
 - Ex 2: Removing fields/steps in check-out flow – 40% of visitors X 20% increase in completions = +8% Net Impact
- **Takeaway: Lift & Reach are equally important!**



Who are our customers?

- Where are they from?
- How did they find us?
- What is their age and gender?
- What devices do they use?
- When do they visit us?
- What do they buy?
- How long do they decide?
- How often do they return?