



Magnolia: Clarity For The Conscious Online Shopper

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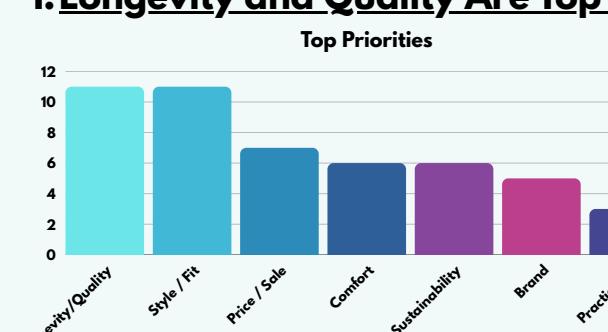
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User Research

15 User Interviews → 4 Core Themes

Goal: Understand how people incorporate sustainability into everyday decision-making and what factors influence their clothing-purchase choices.
Outcome: Identified a diverse range of needs and behaviors, shaped by participants' varying sustainability knowledge, shopping habits, and financial resources.

1. Longevity and Quality Are Top Decision Factors



Regardless of differing lifestyle attitudes toward sustainability, **73%** of users desire high-quality, durable clothing items. This preference spans all three personas, though some may compromise on durability when presented with significant discounts or low prices.

2. Lack of Clarity & Transparency

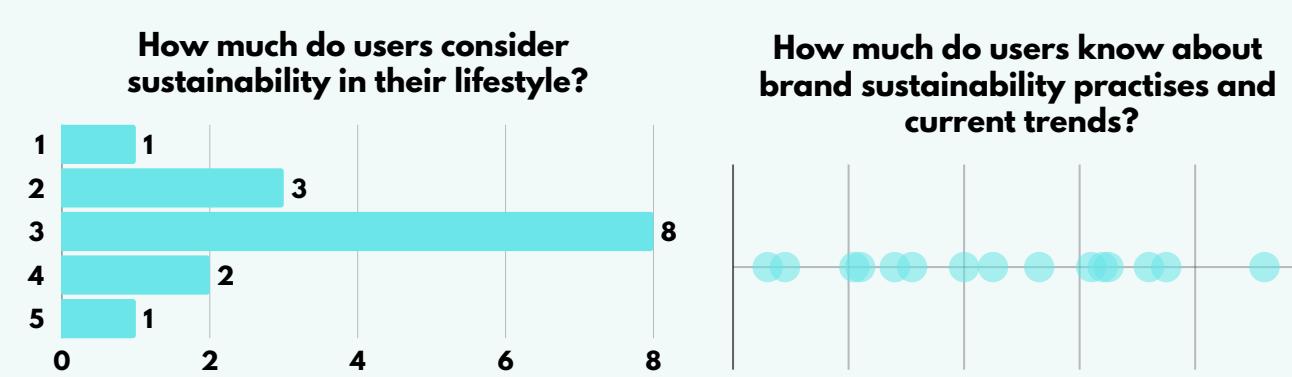
Especially around sustainability claims and quality. "It's always greenwashing. I don't really believe most clothes are sustainable, unless you're thrifting it."
 "Usually sustainability claims are vague or misleading."
 "If it feels heavier and stiffer, then I assume it's better quality."

💡 Magnifies Brand Loyalty as a Risk-Reduction Strategy

3. Convenience Overrides Sustainable Intent

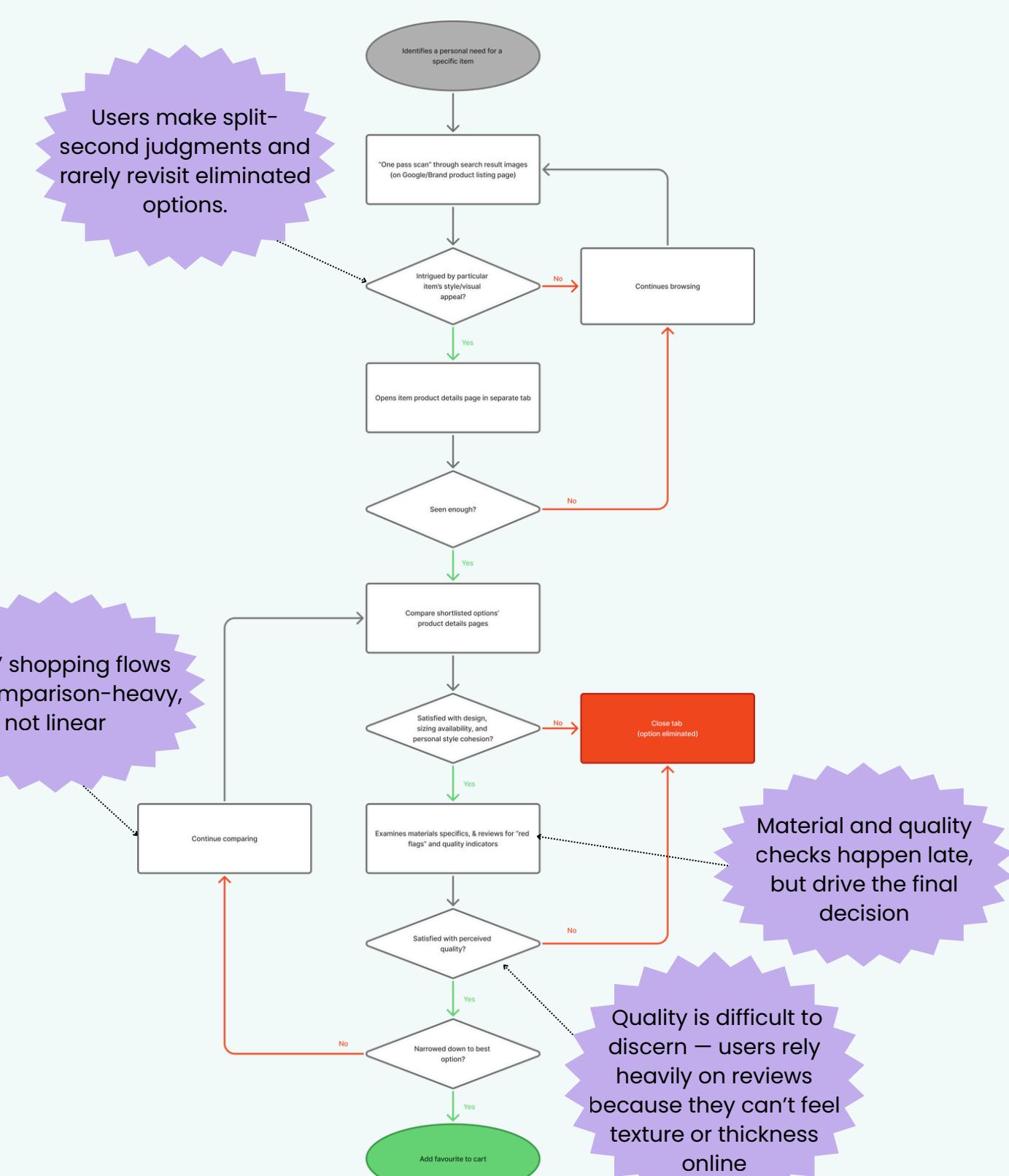
⌚ "I just don't have the time as a college student. I still use Amazon because it's so convenient."
 "I want to shop sustainably, but it takes too long to find reliable information."

4. Wide Variation in Sustainability Consciousness & Knowledge



5 Think-aloud Studies → Friction Points

Goal: Reveal how people actually behave during online shopping.
Outcome: Validated our 4 core themes and exposed where the friction points are and exactly when Magnolia must intervene to be useful.



System Overview and Approach

Magnolia is a **light-weight shopping extension** that assists users in the online shopping process by accessibly providing users information on garment longevity that is otherwise difficult to find. It works by scraping the webpage for information on materials and reviews, and displaying simple and intuitive graphics on **fiber composition, durability, and care** instructions. It also provides users with **review summaries, insights** to keep in mind before buying, and information on the **brand's commitment to sustainability**. Users are **empowered to shop sustainably** by being equipped with the necessary knowledge to shop durably.

Fibre Database: Coded with information about fabric composition, environmental impact, pros and cons.

Fibre Notes: Digestible descriptions of the environmental impact a fiber in the garment may have.

Fibre Composition: Visualizes fibre composition and highlights key features of each material.

Durability Score: Weighted average of the main fibres in the garment.

Care Guide: Quick, scannable way for users to see optimal washing instructions for product durability.

Recommend/Discouraged: A quick note on whether or not we recommend the garment, based on the materials.

Scenarios and Design Goals

Key User Group & Scenario

18 - 30 Year Olds who shop online, and want to find **long-lasting, durable clothing**, and shop smarter **without the hassle of research and replacements**



Pain Points

Limited time and care to research materials, care and longevity; Large learning curve
 Confusing "sustainability" claims and hard to judge durability before purchase

Goals

Reduce effort spent comparing options and quickly grasp details about clothing
 Buy smarter with items that last, while avoiding waste and misleading marketing

Solution

Simple at a glance product summaries, metrics and visualizations.
 Additional detail about fibre durability, production and wash care.
 Summarizes customer reviews, and clear material quality indicators
 Displays brand sustainability pledges

Design Goals

1 Instant and Low Effort: Convenient, and surface clarity at the skim stage



2 Reduce Cognitive Load: Translate fiber compositions and user reviews to intuitive indicators



3 Comparison - Friendly: Integrate seamlessly into users' shopping flow when comparing items, reducing friction



4 Decision Supporting: Provide most impactful guidance at the final moment right before purchase



Evaluation and Future Direction

Pilot → Iteration → Usability Testing → Iteration → Validate Improvements
 (7 sessions overall)

What Went Well

From our usability testing, we were excited to see the following ratings for outcomes we were looking for:

Outcome	Score 1-5
Quick to learn	4.7
Confidence in use	4.3
Convenience in use	4.8
Future use	4.6
Value	4.1
Efficiency	4.4
Clarity	4.7

Clear Alignment with Design Goals

When asking users about how well the system satisfied different parts of our design goals, all users responded positively (Goals 1,2).

Directly Addresses 4 Core Themes

All users' user journeys suggested vast improvement in the 4 core themes. We were able to see users who did not consider environmental impact as a factor when shopping begin to evaluate the sustainability of a article of clothing using our system.

Integrates well into shopping flow

Users found it easy to navigate between our system and the clothing listing. They required little to no instructions and quickly adopted Magnolia into of their existing shopping process.

Moving Forward



Enable Customization

Users differed in which features they found most impactful, and engaged with different parts of the experience. Offering customization options, like rearranging modules, turning features on or off, would allow users to shape the experience around their priorities.



Sharpen visual language

By refining visual indicators, we can make key information easier to spot and strengthen overall skimmability, especially in when users are comparing multiple options.



Increase scraping extensibility

Refine scraping pipelines to support a wider range of e-commerce sites and handle variations in page formats, making data ingestion more resilient.

Expand fiber database

Users benefit from deeper, more accurate fiber insights. Expanding the database will increase coverage across niche fibers, blends, and alternative materials.