



Fit Analytics

AI-enabled retail tech utility for Mark & Spencer (client)

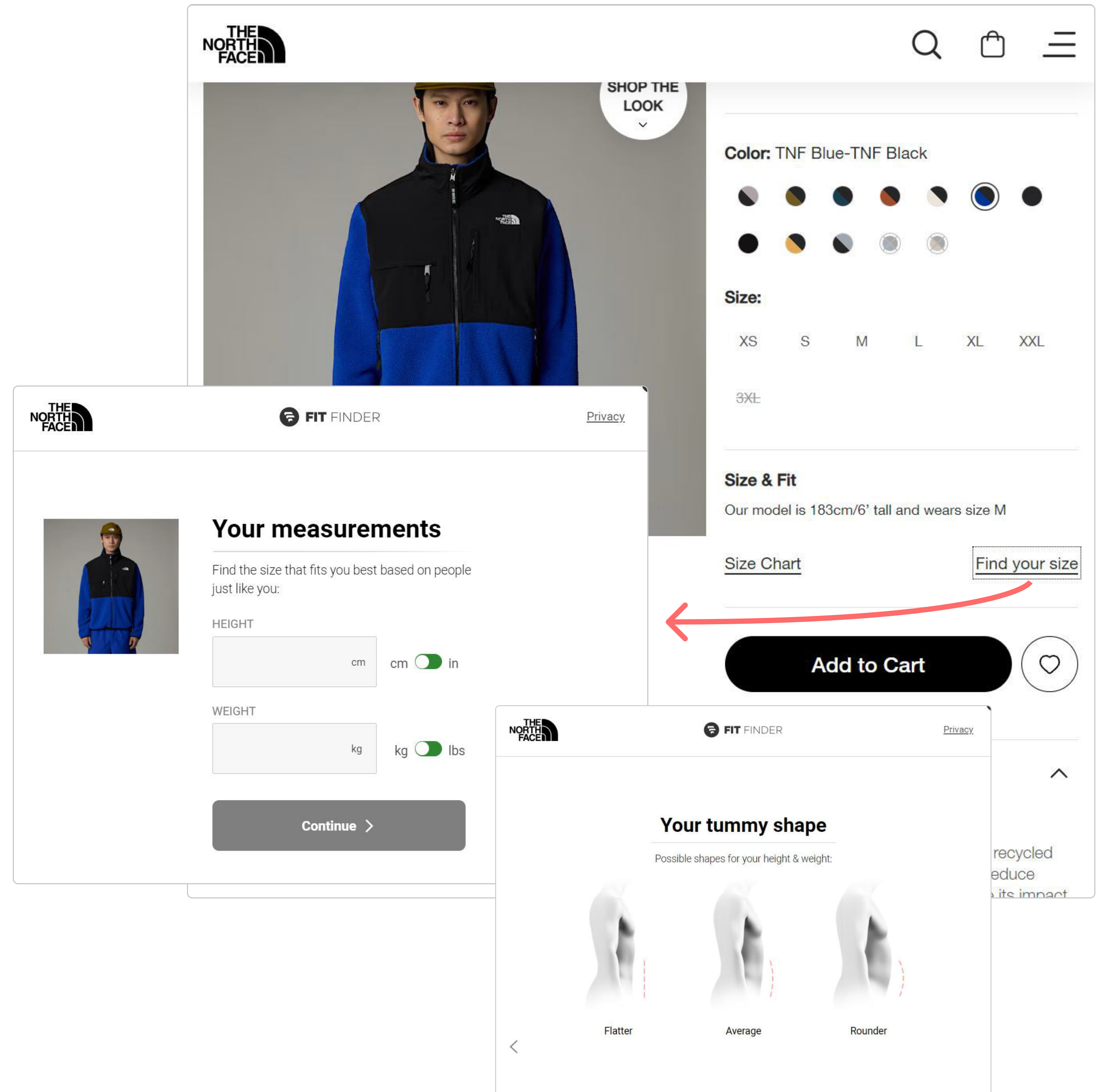
Fit Analytics (a former SNAP INC company) is an AI retail B2B e-Commerce company that provides sizing and fit recommendation technology for apparel retailers, helping reduce return rates and improve conversions, plus positive customer experience.

CONTEXT



The leading AI size advisor used by global apparel retailers.

The core product of Fit Analytics is Fit Finder, used by Uniqlo, Patagonia, The North Face, Oak + Fort, Princess Polly, Asos, Mark & Spencer and more. Retailers rely on Fit Finder to guide shoppers buy upper and lower body garments with confidence.



Challenge

Challenge

Mark & Spencer (client), leveraged **Fit Finder** to deliver personalized experiences for their buyers. In time, they sought our expertise to tackle the declining online sales for a specific garment.

Due to the nature of the garment, online buyers struggled to determine the correct size and style. This led to:

- hesitation during purchase decisions
- low online conversion
- high return rates (subject to the returns policy)

My initial assumptions framed this as a product discovery issue. However, early observations suggested that customers were not just struggling to find products - they were struggling to trust their decisions.



Impact

+23% increase in online sales

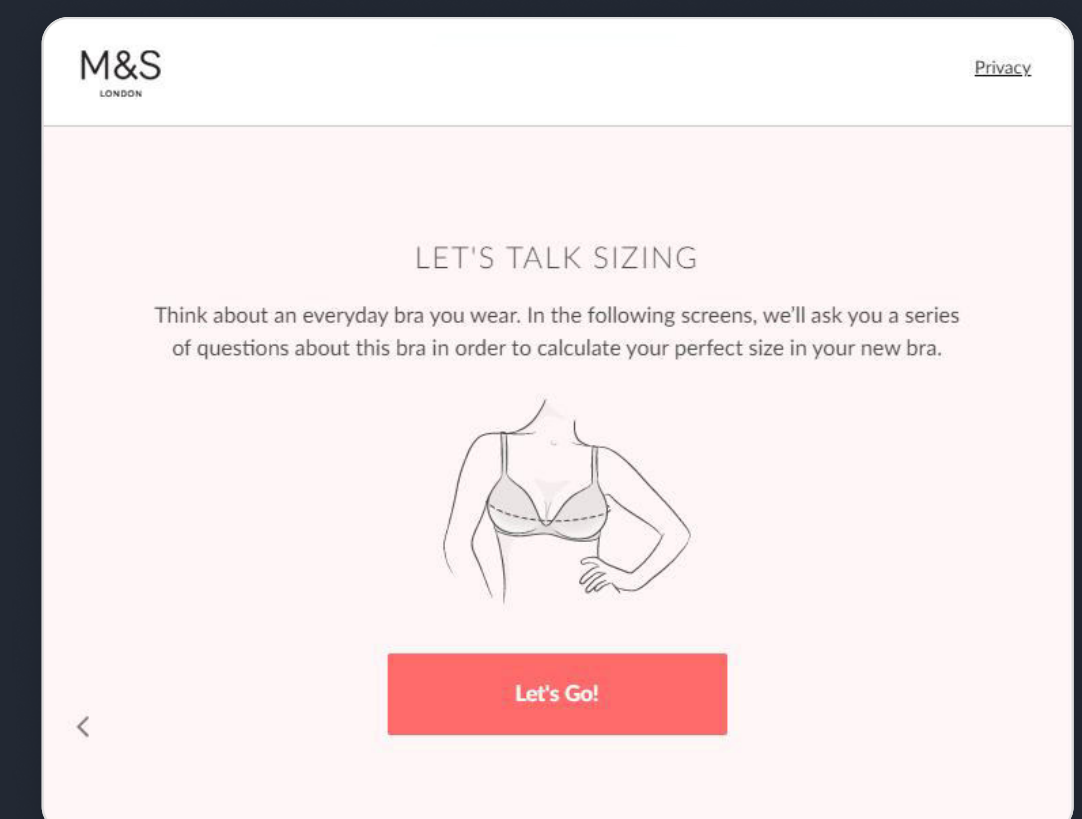
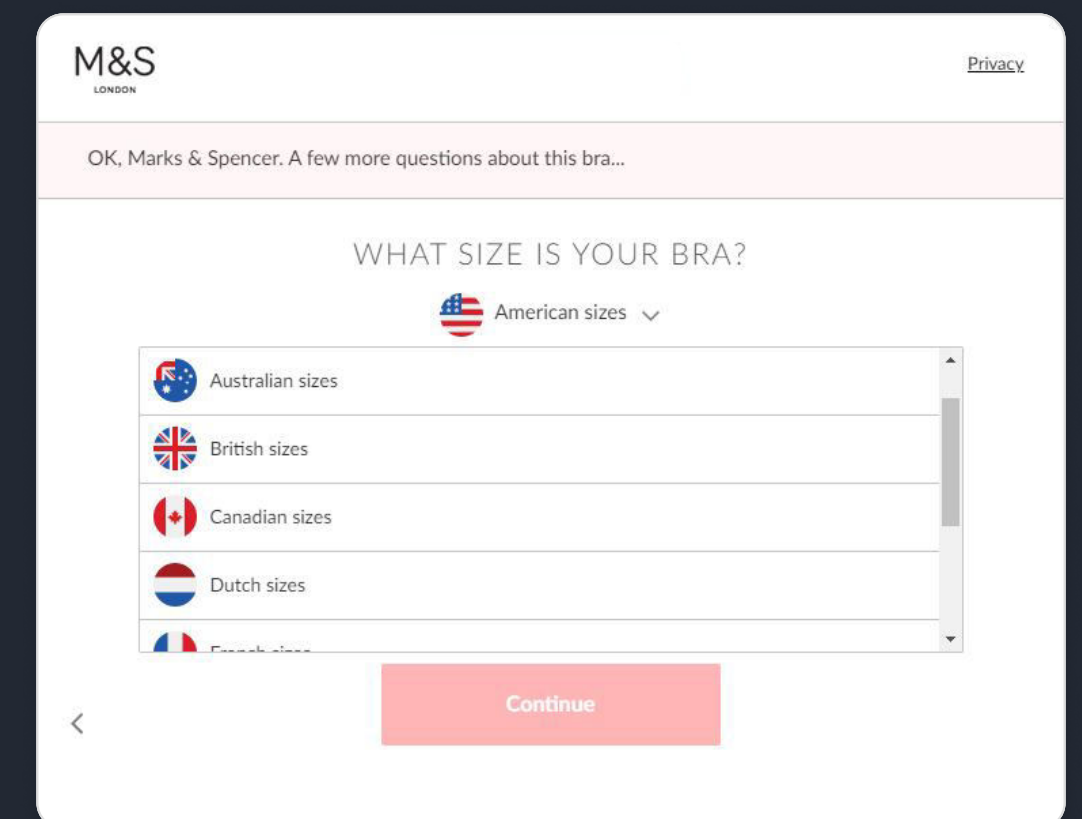
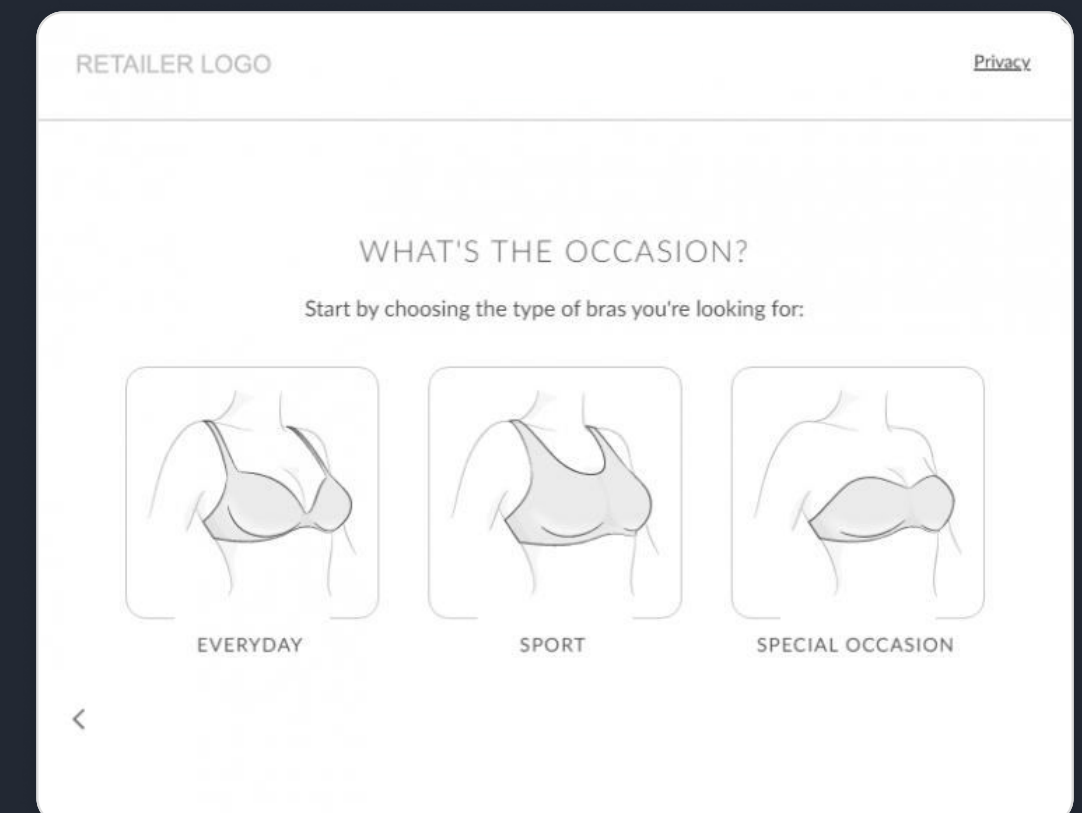
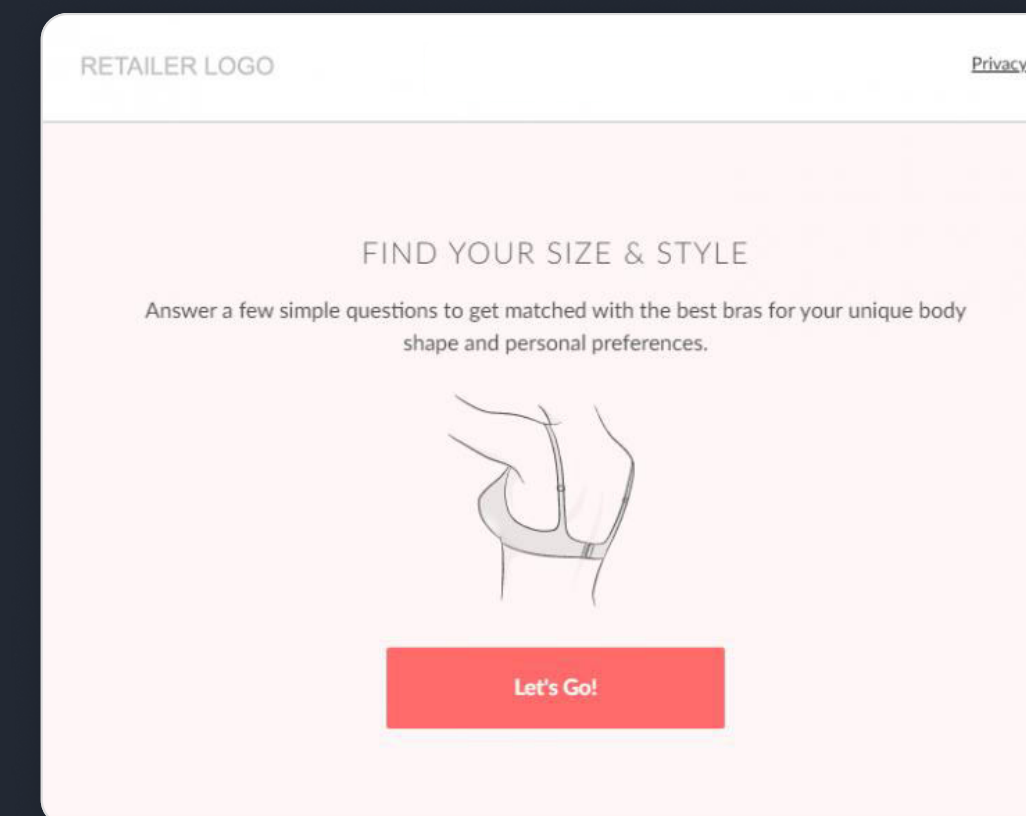
-85% decrease in returns (figure is an approximate)

Described as experts by participants post product testing

Of note

Demonstrated stakeholders the benefits of research to the value proposition

Involved a subject-matter expert, later hired for a paid role



Responsibilities

- Roadmap management
- Defined UX & research strategy,
- Hired a subject-matter expert
- Spearheaded research efforts
- Led cross-functional ideation
- Content design with stakeholders
- Design & usability validation

Collaboration

Working in an Agile / DevOps setup, I partnered with:

- CTO
- Customer Manager
- Business Intelligence
- Head of Product
- Data Scientists
- ML Engineers
- Developers & QA
- Garment Database team
- Subject-Matter Expert

Important Notes

UX research was a new discipline at Fit Analytics. Hence I took the liberty to demonstrate the impact of research on making better informed design decisions.

Due to emerging ambiguities surrounding this project, I involved a **Subject-Matter Expert (SME)**, to guide us throughout the research and design process from 0 to 1. Later, the SME got hired by the CEO for a paid consultancy role.

For **ethical reasons**, I involved a female colleague (brand designer) to handle gender-specific questions throughout the participants interviews.

Problem Framing

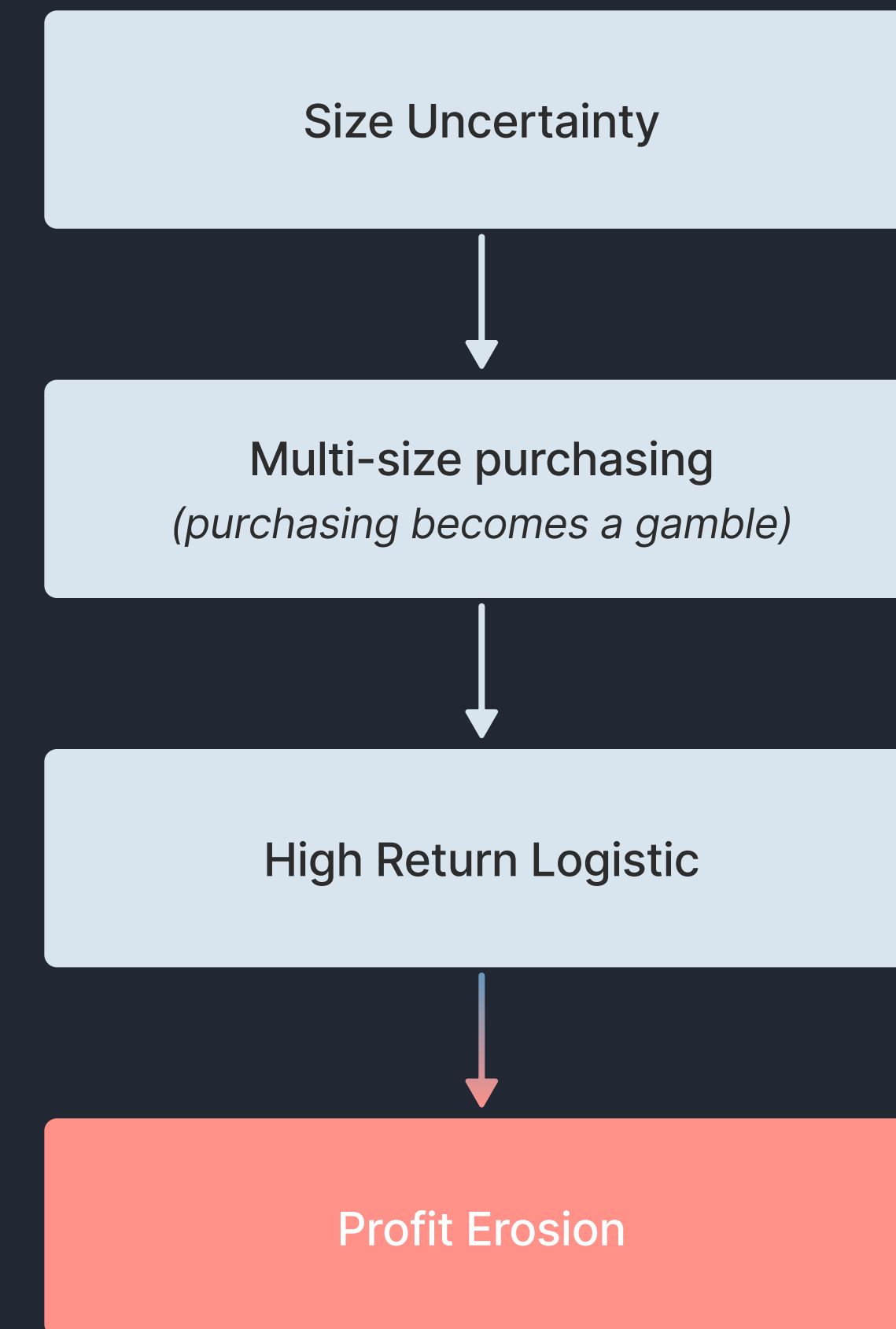
Business issue

Customers avoid purchasing this garment type (i.e. bras) due to:

- Inconsistencies between brands and sizes
- Mismatch between price and material
- The absence of guidance (e.g. garment consultant)
- Limited returns policy

Customers rely on trial-and-error, leading to massive logistical costs and brand erosion. As a result, M&S experienced:

- High return rates (~40%+)
- Low online conversions
- Low customer satisfaction



Costly return logistics and abandoned purchases limited e-commerce scalability and hurt bottom-line profitability.

Framing the challenge

RESEARCH QUESTIONS

"How can we translate the expert-led in-store garment fitting experience into a scalable, high-trust digital recommendation engine?"

"What factors influence user confidence when purchasing such garment online?"

OBJECTIVES

Identify specific 'confidence markers' buyers need to move from evaluation to purchase.

Exploratory Space

Research Goals

This task combines discovery, generative, and later, evaluative research.

Before designing solution from 0 to 1, I spearheaded research initiatives to answer the following:

- How customers make decisions when purchasing garments online
- What affects confidence in those decisions (i.e. friction, trust gaps)
- How digital experiences can support confident shopping
- How competitors tackled similar situations

Methods

Market & competitive analysis

User interviews (semi-structured)

Observations (master-apprentice approach)

Relaxed think-alouds

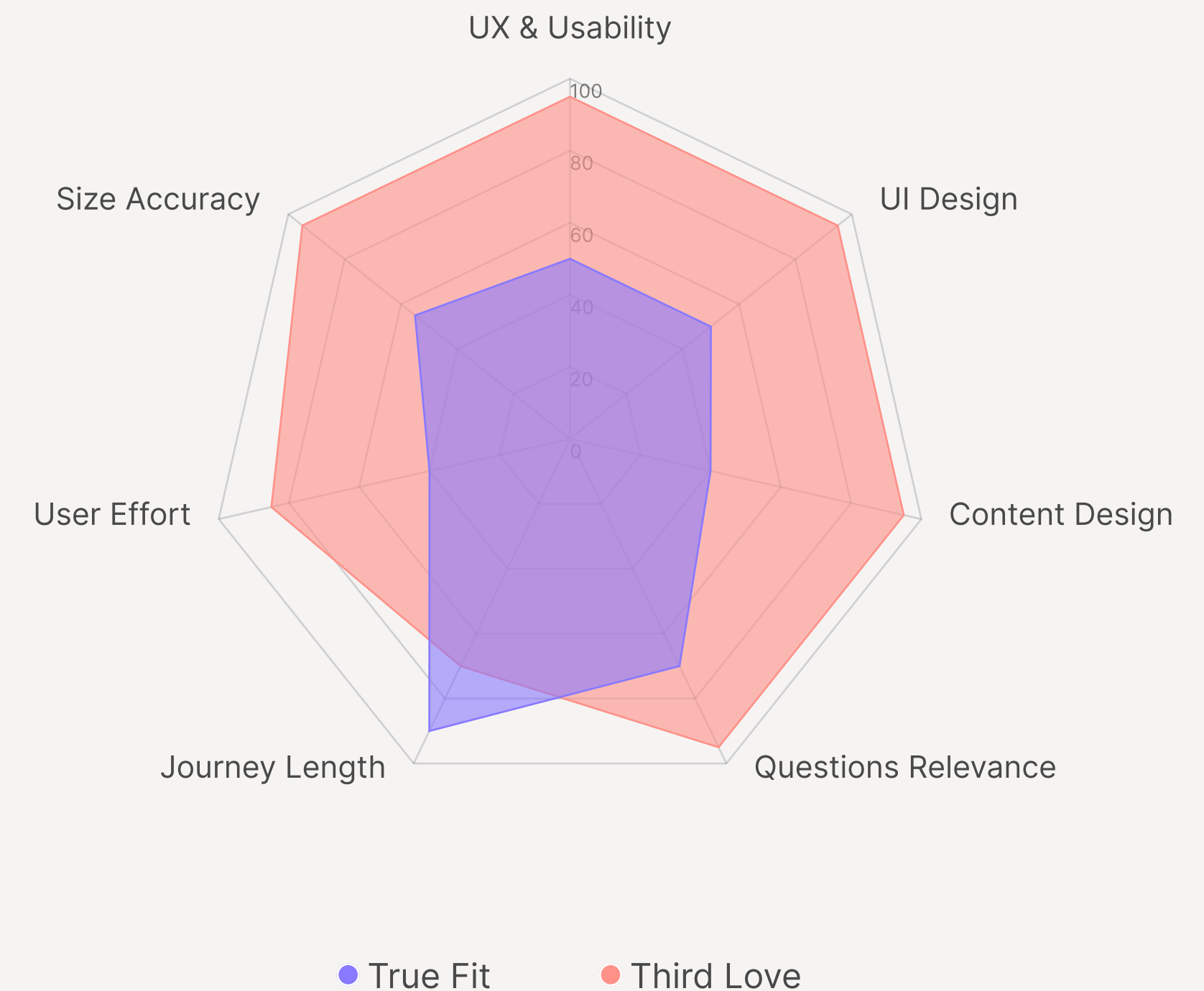
Data synthesis

Longitudinal techniques were used by re-inviting part of the participants for product testing and evaluation, so to ensure their requirements are met.

Market & competitive analysis

Two competing products by **True Fit** and **Third Love**, comprising size advisors for the bra garment were identified and reviewed against established criteria surrounding usability and content among other attributes (*ref. Radar Chart*).

Of these, the distinctive winner was Third Love's size advisor, which was used as reference to craft our model.



Competitor : True Fit

TRUE FIT

CACIQUE

TELL US A LITTLE ABOUT YOURSELF.

Select all that apply.

I'M ON MY FEET ALL DAY.

I SIT AT A DESK MOST OF THE DAY.

I CARE MORE ABOUT HOW A BRA LOOKS THAN HOW IT FEELS.

I LIKE TO BE COMFY WHEN I'M HOME RELAXING.

I OFTEN DRESS UP FOR SPECIAL OCCASIONS.

I WORK OUT OR PLAY SPORTS.

NEXT

Profile Strength 80%

Save Account

?

Third Love UI screenshots - not included

TRUE FIT (COMPETITOR 1)	
SCREEN	QUESTIONS & ANSWERS
Brand & size	Size charts by country, Band size, Cup size, Brand selection (inc. search bar)
Bra style & coverage	3 visuals given for: low, medium, and full coverage
Cups fit	3 visuals given for: Gaps, Right fit, & Overflows
Band fit	3 visuals given for: Digs in, Right fit, & Rides up
Bra age	2 options: Less than a year, One year older
Describe breast shapes	3 options: Shallow, Average, & Full
Preferences	4 options: Wire-free, Unlined (no padding), & None of the above
Tell us a bit about yourself	I am on my feet all day I sit at a desk most of the day I care more about how a bra looks than how it feels

THIRD LOVE (COMPETITOR 2)	
SCREEN	QUESTIONS & ANSWERS
Brand & size (of your everyday bra)	3 visual options for: Band size, Cup size, & Brand
How old is the bra?	Less than 6 months, 6-12 months, 1-2 years, more than 2 years
Cups fit	5 visuals given for: Gaps (a lot), Gaps (a little), Right fit, Overflow (a little), & Overflow (a lot)
Band fit	3 visuals given for: Band rides up, Band too tight, & Band is comfortable
Hook	3 visuals given for: Tight hook, Middle hook, & Loose hook
Straps fit	3 visuals given for: Digs in, Slips, & Straps fit in
Do you always wear this bra (tentative size already proposed by the utility)	Yes always, or, No sometimes different size
What other size do you sometimes wear (this shows up if user selects 'no' on previous screen)	Band size, Cup size, & Brand

Research

Interviews

Ten participants (females, random sample) were recruited and interviewed to learn about their online shopping hurdles.

Observations

To identify factors influencing online purchasing decisions, participants were given a laptop and asked to show how they would go on selecting and buying a garment. The '***master-apprentice approach***' and relaxed think-aloud protocols were used to gather insights

Core findings

Shopping this garment type online is a **risk-management activity**.

Based on interviews and observations, participants work hard to minimize risks of making wrong purchasing decisions using an array of time-consuming techniques.

Insights breakdown

Purchase by familiarity

Participants purchase this garment type from brands they already know and already use as a safe bet.

Multi-tabbing

For unfamiliar brands, participants open 5+ tabs to compare intricate details like material, price, and buyer reviews.

Review scanning

Buyer reviews and experience affects purchase decision-making.

Returns policy checking

Frequent visits to returns policy before buying a garment.

INSIGHTS

Shopping is risk management.
Trust factors drive purchase decisions.

PATTERN

Participants seek & triangulate reassurance signals.

OBSERVATIONS

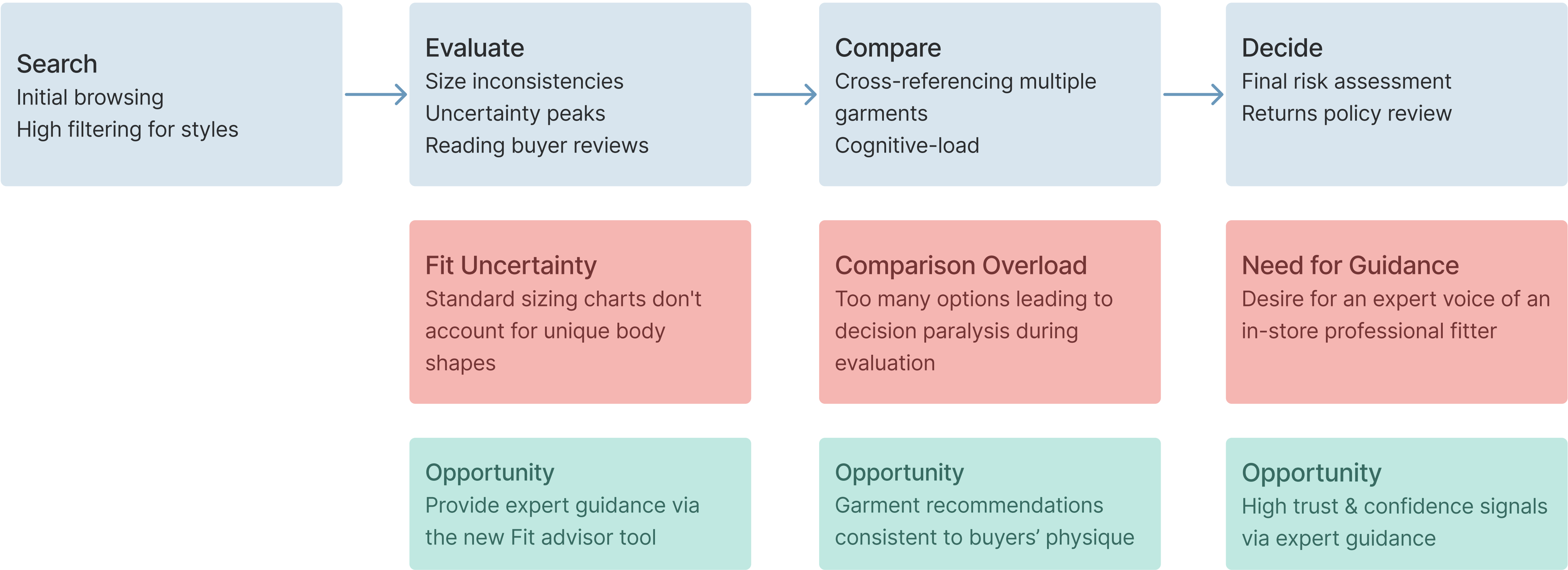
Frequent comparisons, reliance on reviews, multi-size ordering
(one to be returned), high anxiety at checkout.

*Participants were not struggling with discovery.
They struggled with confidence & reassurance.*

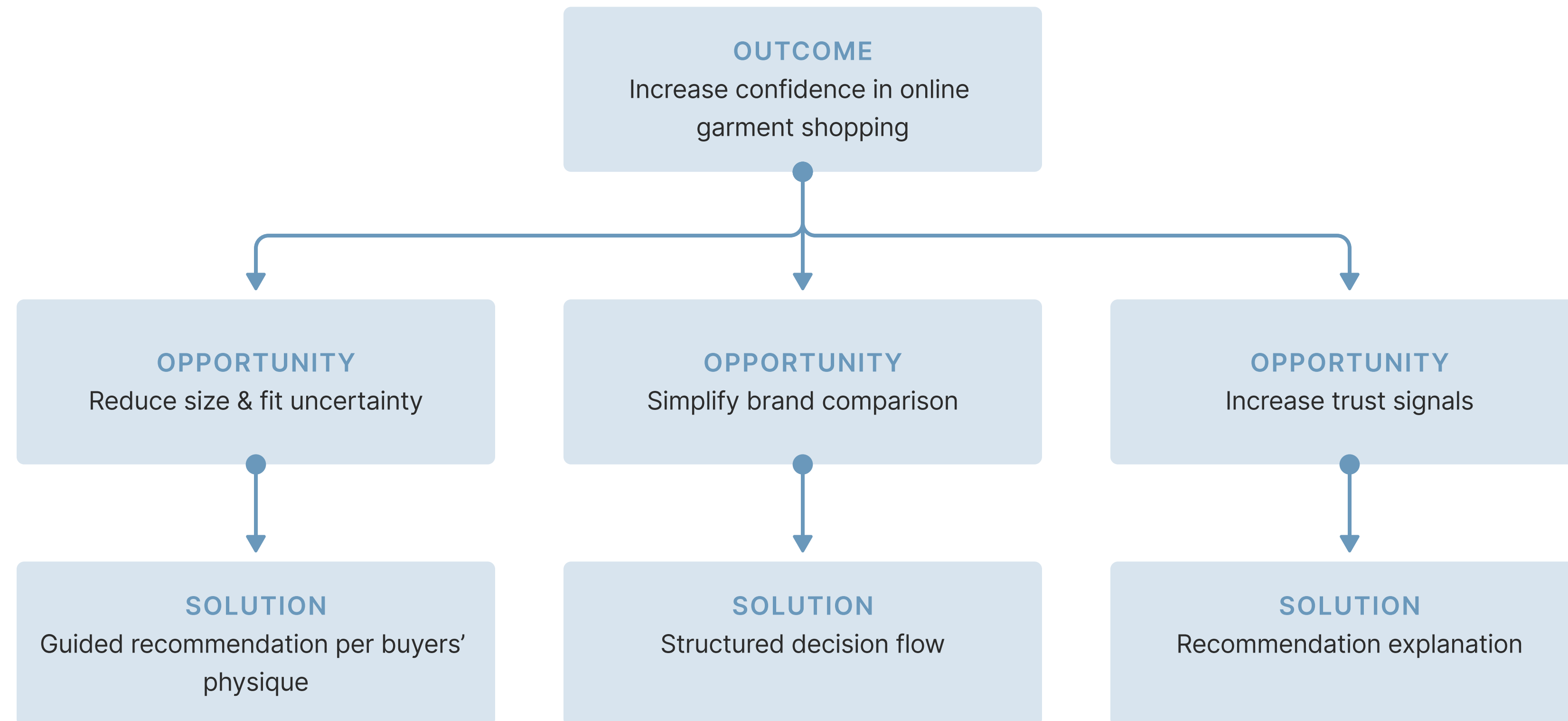
SYNTHESIS

Mapping pain points to opportunities

By mapping research insights to ROI potential, we identified that providing guidance to buyers through the following journey stages will increase online shopping while diminishing returns.



Opportunity Solution Tree



Various deliverables to aid us with decisions.

EMILY

Secondary persona

PROFILE

Emily is a researcher and currently preparing herself to undertake her PhD in Neuroscience. She got a hectic working schedule from 9-6 combined with working from home totalling 60 hours weekly. On her free time she often prefers to stay relaxing at home.

GOALS

To complete PhD

To be a good person

To be a fully functional adult

To be a happy person

MOTIVATIONS

Peace

Happiness

FRUSTRATIONS

People not recognizing own privileges

Prejudice over others

High cost for a healthy lifestyle

"The discount huntress"

AGE 30

WORK Researcher / PHD student

LOCATION Canberra, AU

ARCHETYPE The Discount Huntress

PERSONALITY

Shy

Introvert

Communicative

HOBBIES

Spending time with friends, depending on her studies.

TECHNOLOGY

Honey App
(Chrome extension for discount discovery)

BRANDS & RETAIL

MISSGUIDED

OSOS

BONDS

THE ICONIC

WITCHAMBER

ck

SHOPPING BEHAVIORS

Buys mainly online

Monthly buyer for bras and underwear

E-SHOPPING

Wide range of products

Convenience

Access to discounts

Big plus if student discounts and 'Afterpay' are supported

E-SHOPPING

Expensive shipping and returns (for Australia)

Price not equal to quality

Workman-ship cannot be seen

Wrong fit

No genuine reviews

BRA PAINPOINTS

Quality of material

Quality of straps (they stretch out)

Overall comfort

Of note: she keeps looking until the right bra is found

IMPORTANT PURCHASING CRITERIA

Fit

Reviews

Style (e.g. seamless underwear)

Material (breathability)

Durability / quality

JANE

Secondary persona

PROFILE

Jane is a student-worker currently studying Geography / Hydrology. She is an Asian-American living in Berlin (DE). As a student worker, her schedule is hectic and doesn't have much of a free time at the moment.

GOALS

To be happy

Staying healthy

Becoming rich / stable

MOTIVATIONS

Peace

Happiness

FRUSTRATIONS

People in general

Patriarchy

"Peace & happiness are key"

AGE 25

WORK Student (Geography) / Worker

LOCATION Berlin (originally US)

ARCHETYPE Peace seeker

PERSONALITY

Friendly

Outgoing

Generous

HOBBIES

Spending time with friends, and family.

TECHNOLOGY

Phone - not easy to navigate

BRANDS & RETAIL

H&M

OSOS

360

UNI QLO

PRIMARK

boohoo

SHOPPING BEHAVIORS

Buys mainly online

Monthly buyer for bras and underwear

E-SHOPPING

Owning something that makes life feeling better

Convenience

E-SHOPPING

Hard to find half sizes (as a plus size user)

Cannot try item (e.g. bra) before buying

Not finding right style in her size

Returns due to bad fit or bad quality

BRA PAINPOINTS

Bra rolls up

Wires dig in

Scars due to bad fit

Skin excess under arm left uncovered

IMPORTANT PURCHASING CRITERIA

Fit

Support

Style

Material

Durability / quality

Reviews

SAYS

Do I need the garment urgently, or not?

What other buyers say?

I only stick to natural fabrics / material

I seek a perfect garment fit

Which size is best

Do I need to consult a bra fitter?

I want a balance between style and practicality

Should I buy online or from store?

I may prefer to stick to brands I already wear

If returns are supported, should I buy 2 sizes and return one?

Is the price worthy?

Are shipping costs affordable?

THINKS

Maybe I cannot trust brands I am not familiar with

Are the specifications correct?

I want something everlasting

To buy garments of brands I already wear

Is the garment material breathable?

Does the garment fit with other garments?

Which size and style is best for me?

Which garment type is best for me?

Does garment price match with quality?

DOES

Checks buyer reviews and testimonials

Postpones purchase

Checks return policy

Garment comparison (brand vs brand)

Reads garment specifications

Checks shipping costs

Buys 2 sizes online, returning 1 later (if seller accepts returns)

More research and comparisons

FEELS

Uncertain

Excited

Overwhelmed (i.e. weighing options)

Disappointed (i.e. ordering wrong size)

NATALIA

MASTER-APPRENTICE APPROACH - Reported observations & patterns

STEPS	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Visiting a bra retail website of own choice										
Browsing product catalog extensively										
Visiting & browsing other retailers' websites										
Opening various garment detail pages in separate browser tabs										
Comparing 2+ garments next to each other (in separate tabs)										
Reading garment specifications										
Zooming garment photos										
Reading about model wearing garment (e.g. height, weight)										
Reading buyer reviews										
Matching garment price with quality										
Checking for available discounts										
Checking delivery costs										
Checking return policy										
Bookmarking 1 or more product pages										
Hesitation before adding to basket or checking out										

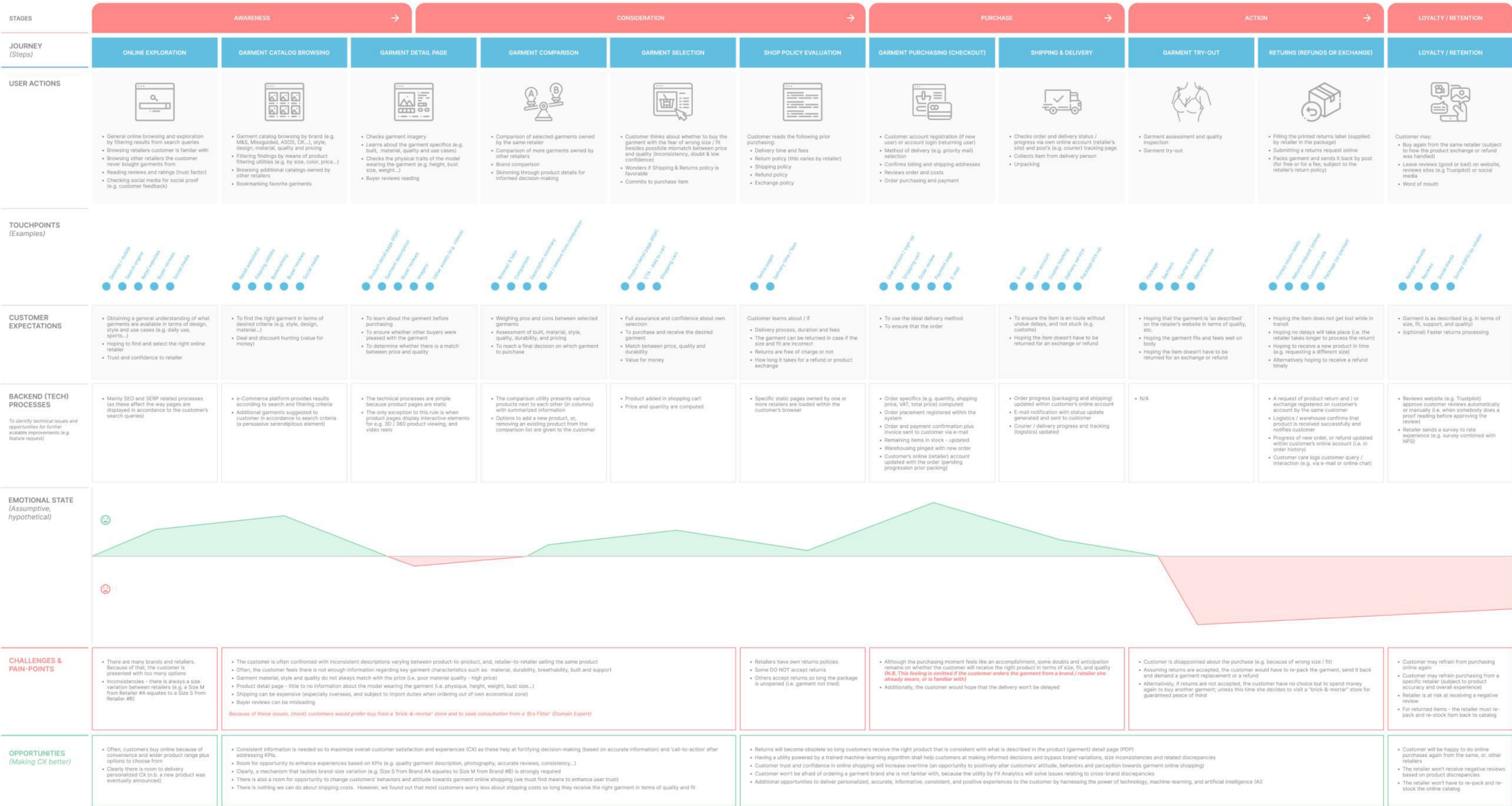
MASTER-APPRENTICE - Reported participants' hesitation towards bra online shopping

SUB-THEME	ISSUE	RANK *
DISAPPOINTMENT	Wrong size, fit or style	9
DISAPPOINTMENT	Poor quality (not worth the price)	9
DISAPPOINTMENT	Garment different from photos	7
LOGISTICS	No returns allowed / buyer must pay shipping for returns (subject to location)	5
LOGISTICS	Slow shipping (subject to participants' location)	3
ERROR	Retailer sent wrong item	3

* RANK: how many participants expressed similar concerns

CUSTOMER JOURNEY

Bra garment selection, purchasing, and returns (based on persona #8)



Research Impact on direction

Outcomes from the discovery research influenced product design strategy.

Being involved in design, I guided stakeholders to establish a cohesive omni-channel experience that supports buyers with confident decision-making.

For that, I hired a **subject-matter expert (a garment fit consultant)** to guide us throughout the design process, covering content, information architecture, and product.

This led to the concept of a guided recommendation experience.



Reframing Product Strategy

PREVIOUS FOCUS

Sizing Accuracy

Focusing purely on data-centric outcomes based on physique and tape measures.



NEW STRATEGIC DIRECTION

Confidence Engineering

Helping buyers reduce uncertainty in the decision process via guided experiences.

Solution Space

Product Experience Strategy

I partnered with data scientists, the Head of Product, and the subject-matter expert to define the experience strategy, content model, and product architecture for the size recommendation flow.

At the core of the experience was a structured sequence of questions designed to capture user inputs and translate them into accurate garment size recommendations through the underlying algorithm.

Rather than treating this as a simple questionnaire, we approached it as a decision-support system.

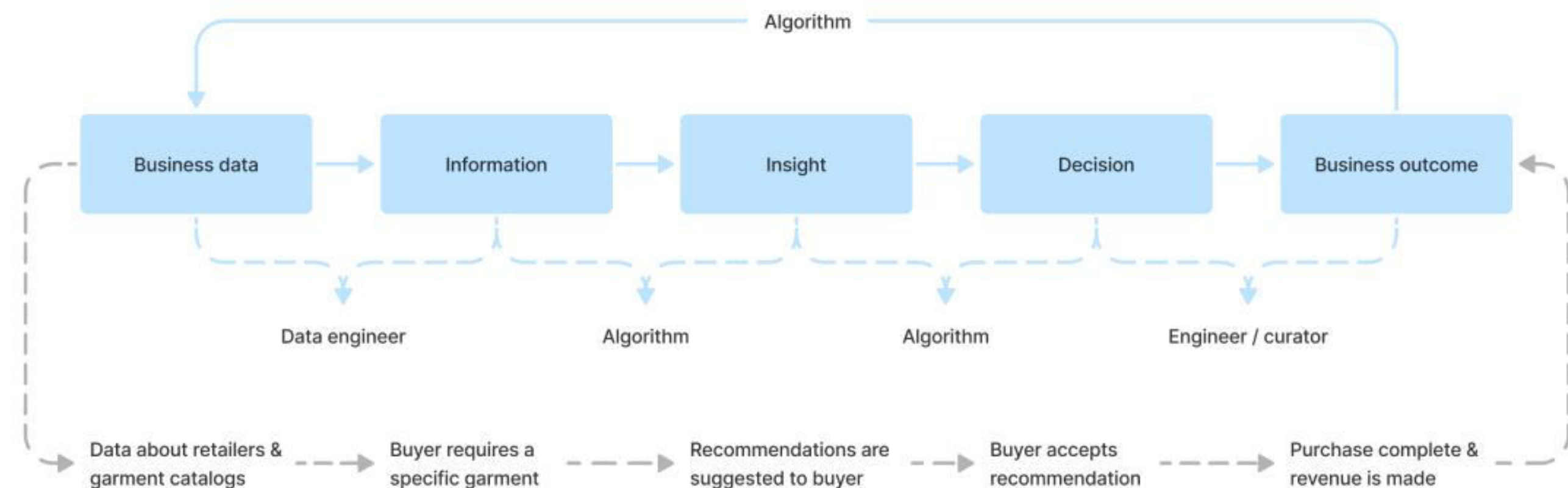
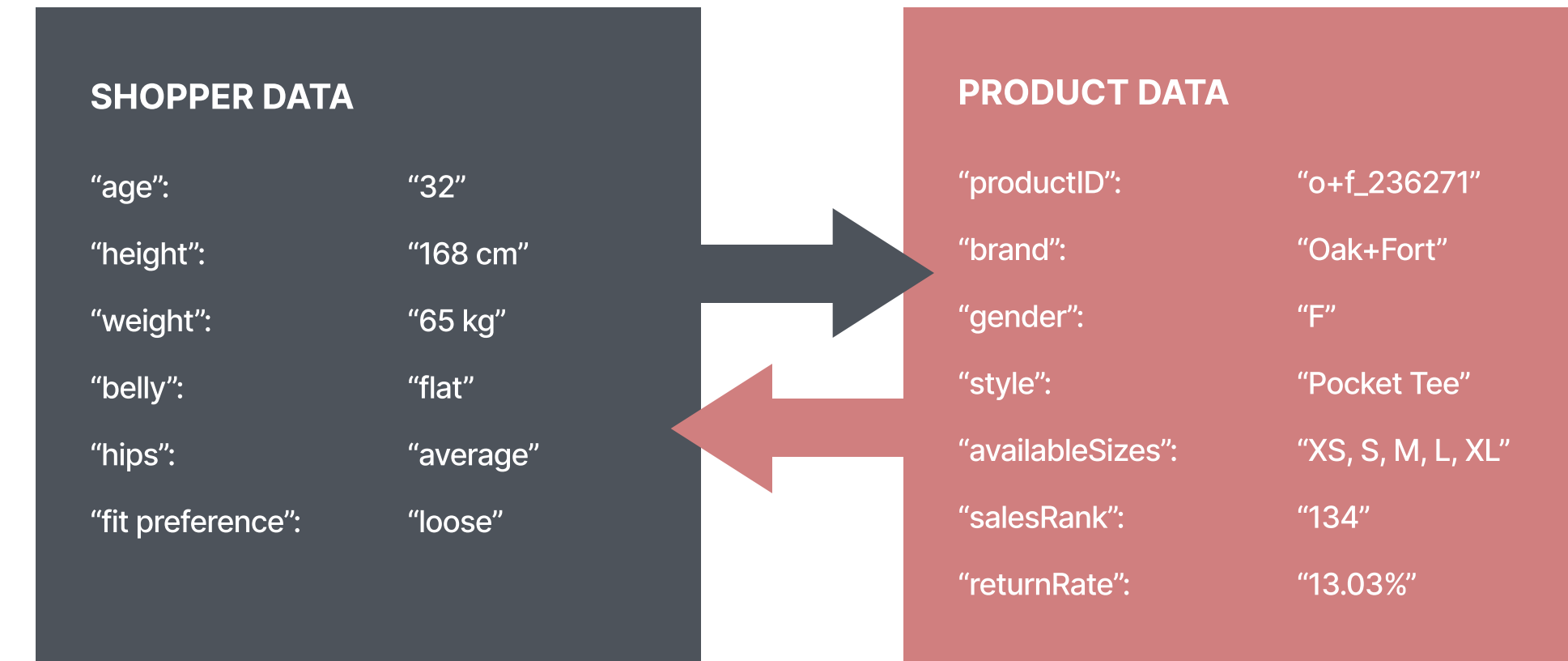


Defining the Logic

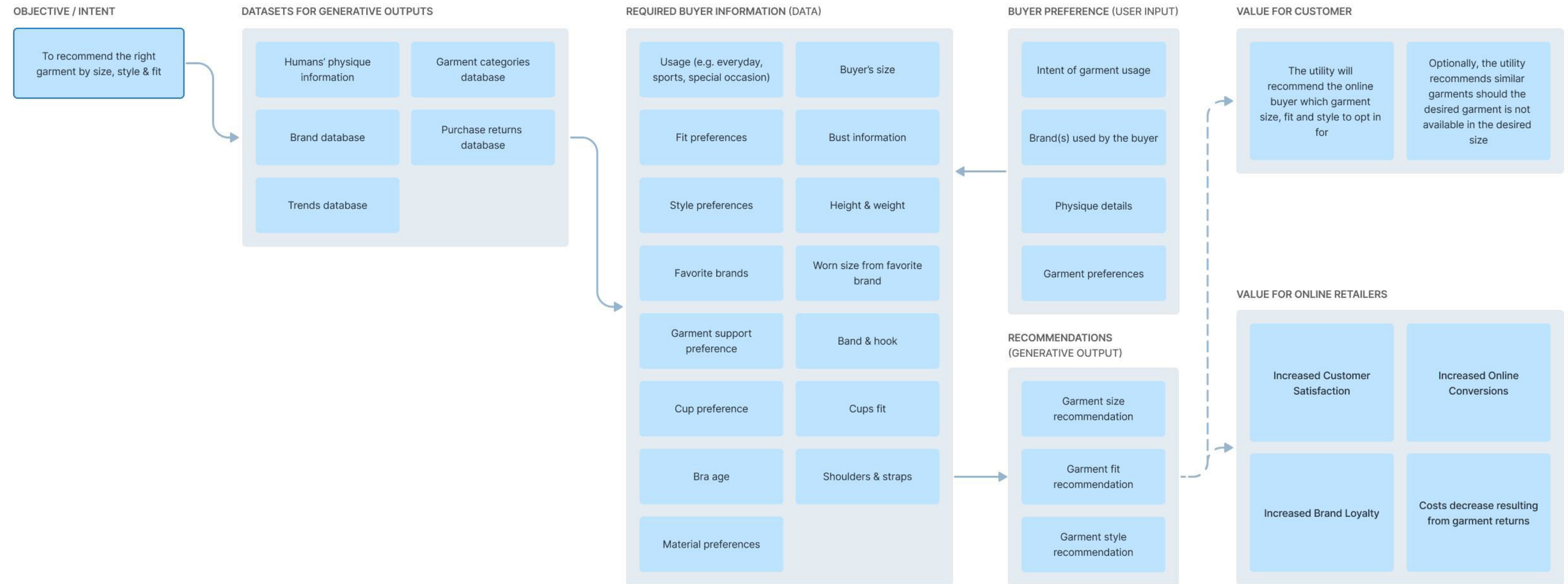
To ensure the product experience worked for both users and the machine-learning model, I facilitated **card sorting** exercises to structure the questions in a way that:

- Felt intuitive and logical to users
- Aligned with how the algorithm processes inputs
- Reduced cognitive load during decision-making

This ensured that the experience balanced human understanding with system requirements.



AI & ML recommendation system overview



Content design & arrangement for happy path # 1

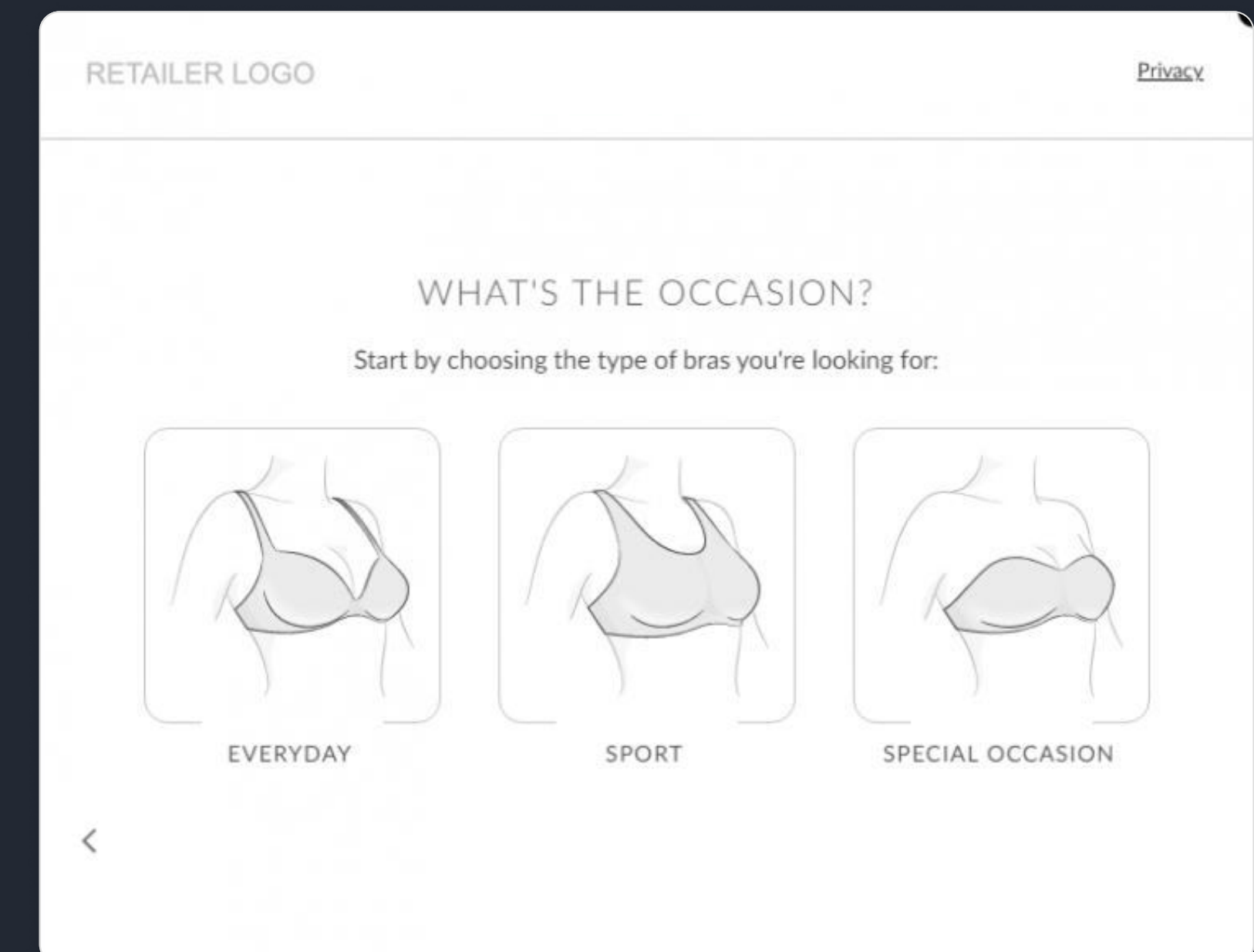
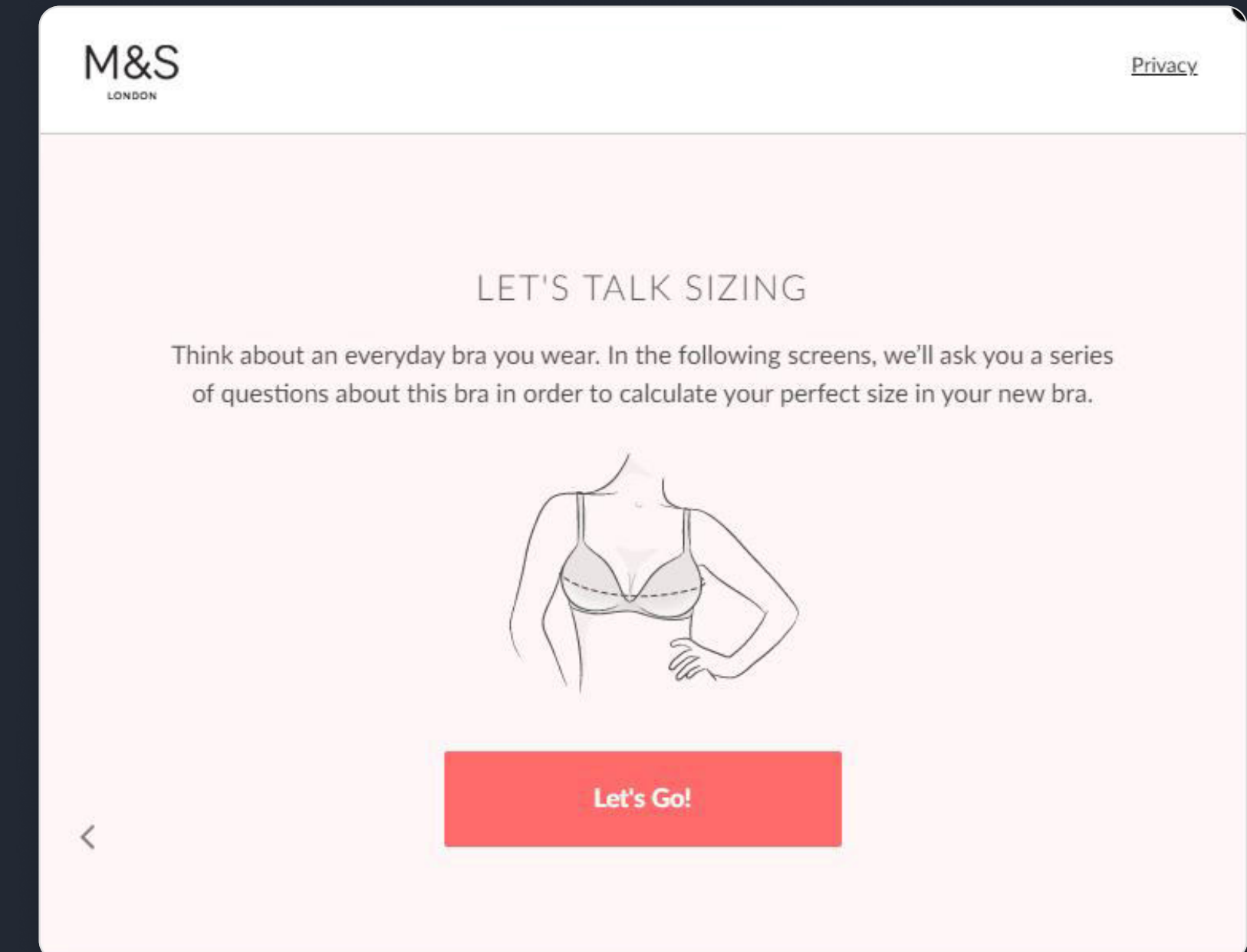
ONBOARDING #1	Purpose & occasion	Wire construction	Cup construction	Material	ONBOARDING #2	Brand selector	Size of bra brand	Bra age	Band size	Hook	Cups	ONBOARDING #3	Breast shape	Shoulders & straps	Height & weight	Generated recommendations
	Start by choosing the type of bras you are looking for	What level of wire support are you looking for?	What degree of padding are you looking for?	Select a preferred material for your bra		What do you wear? Tell us a brand of a bra you currently wear	What size is your bra? Tell us a brand of a bra you currently wear	How old is your current bra? The longer you wear the bra, the looser the band gets. I bought X brand...	How about the band? The band should lie across your back without digging in or riding up...	Which hook do you wear this bra on? I normally use...	How do the cups fit? Your breast tissue should be contained within the cups with no bulging. Cups fit as follows:		Breast shapes vary from person to person and can impact the bras we recommend you	When you wear the garment with straps, do the straps often dig in or slip from your shoulders?	Height and weight are an important factor in determining suited bra types	Based on the information you provided, we recommend...
Find your size (start)	Everyday use	Wired	Padded bras	High natural fibers	Lets talk sizing	7x popular brands displayed	Bust size selector	In the past 3 months	The band digs in	Tightest hook	Cups bulge	Body type	10x breast shape images displayed	Often dig in	Height	Size and style recommendation
	Sports	Non wired	Pushup bras	High synthetic fibers		Call-to-action to load more brands	Cup size selector	3-6 months ago	The band fits right	Middle hook	Just right			Usually fit securely	Weight	
	Special occasion	No preference	Non-padded bras	No preference				More than 6 months ago	The band arches up	Loosest hook	Cups gape			Often slip from shoulder		
			All bra types													

Experience Model

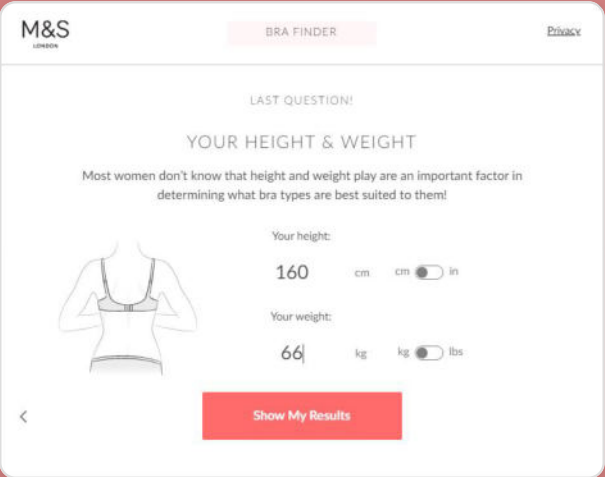
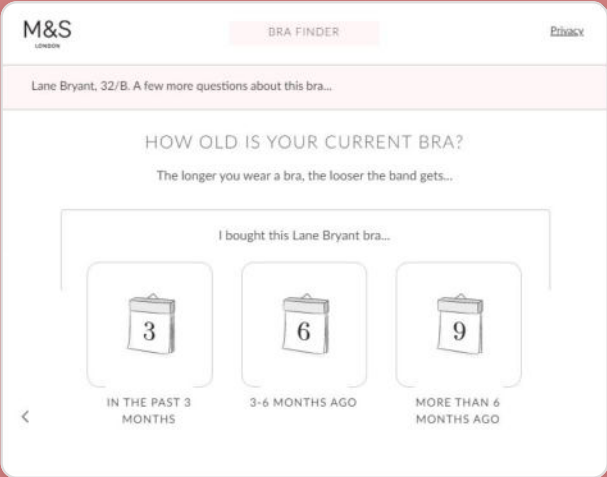
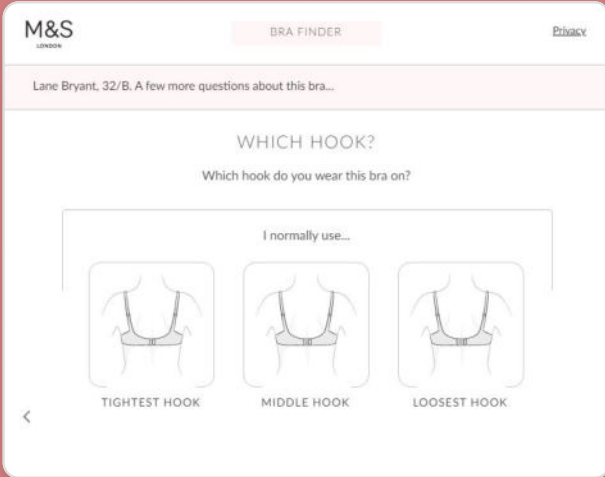
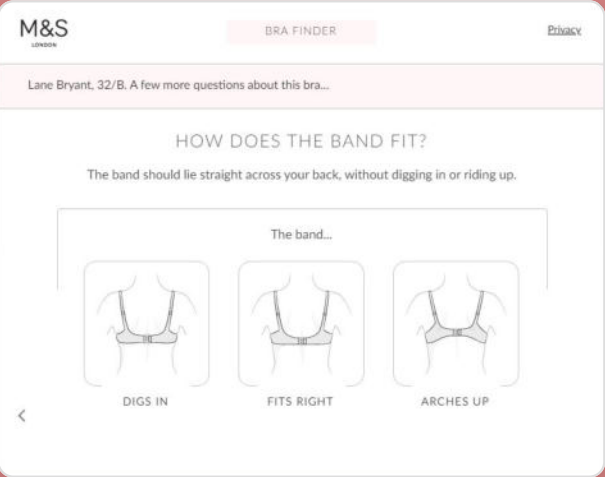
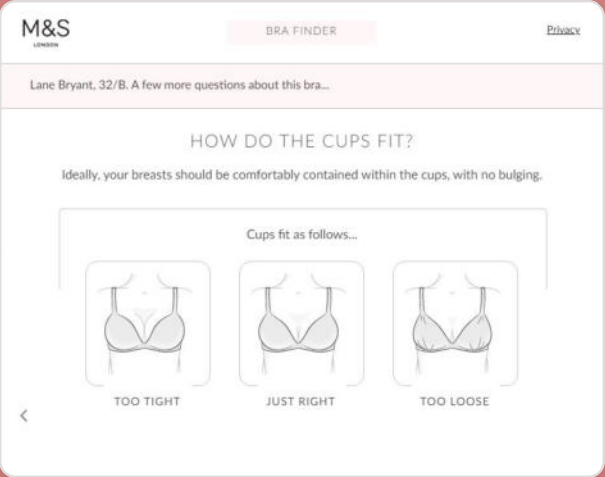
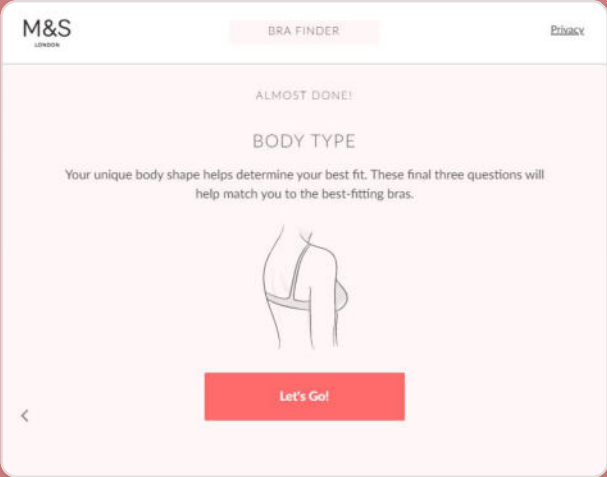
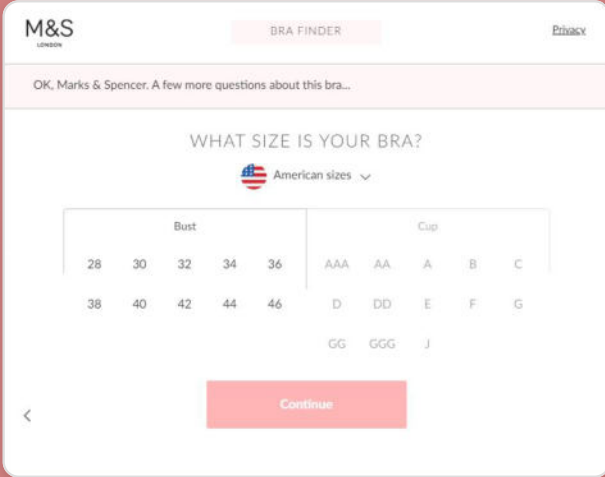
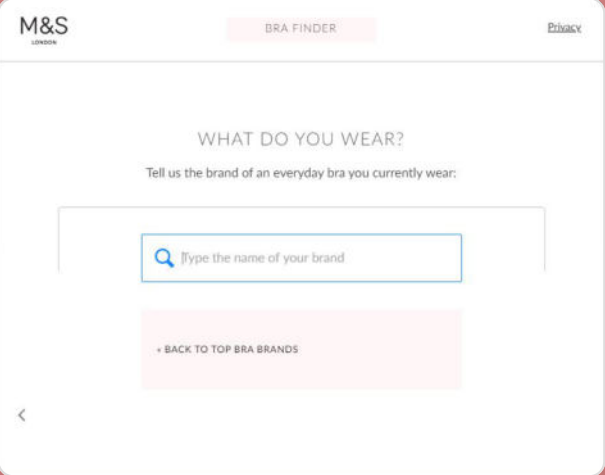
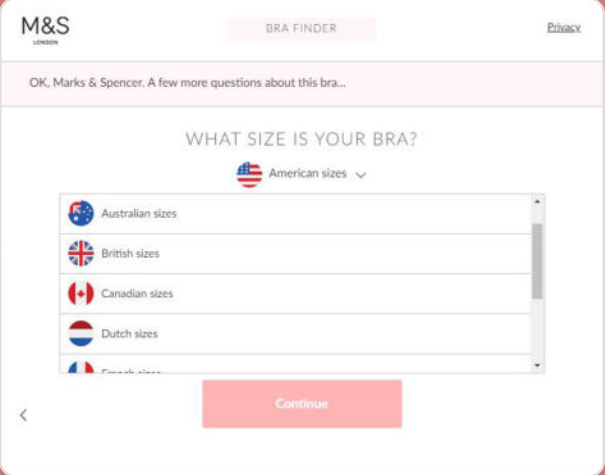
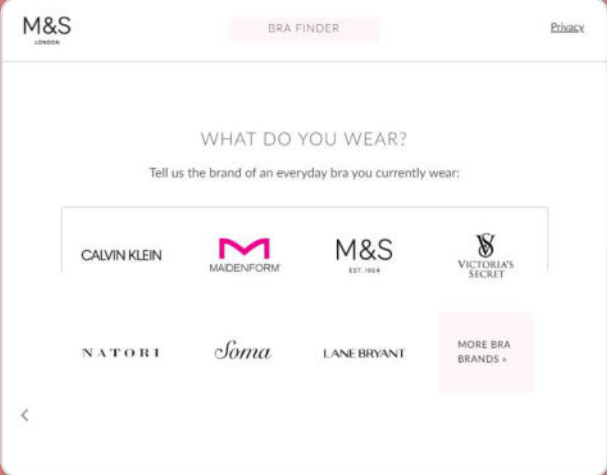
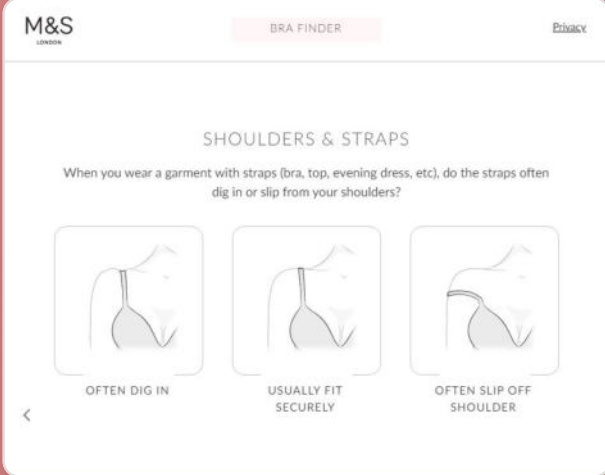
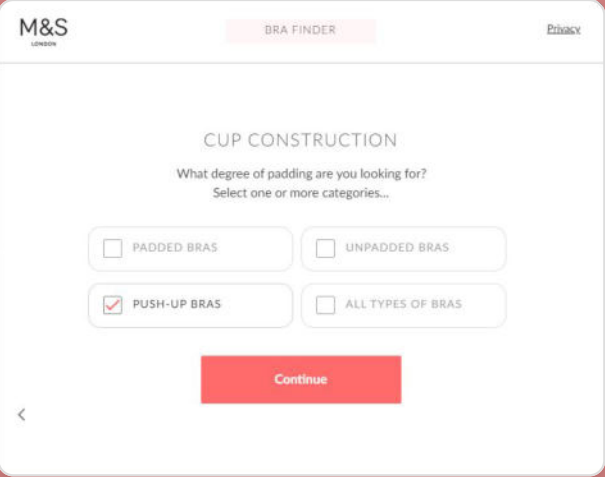
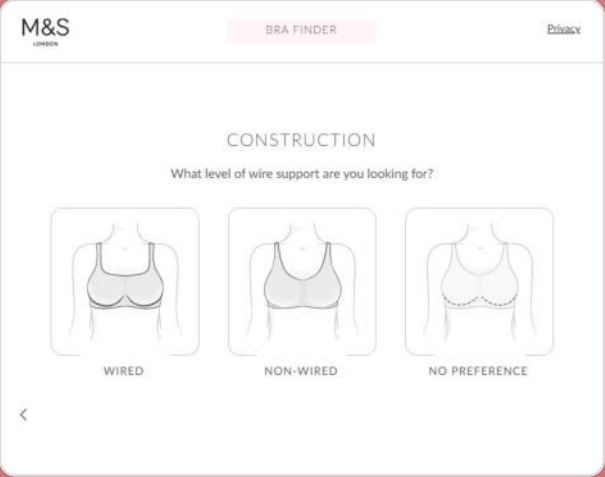
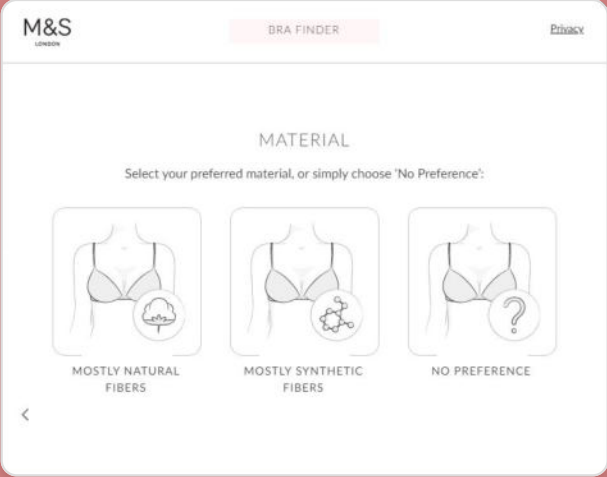
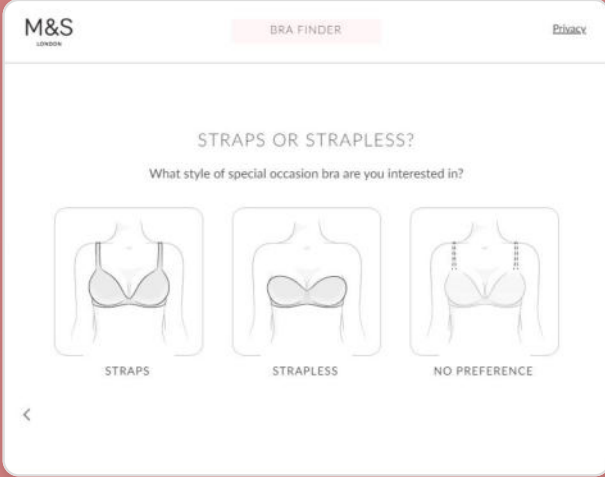
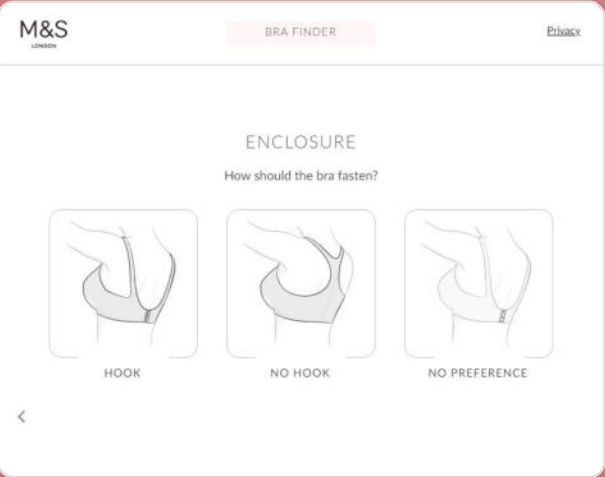
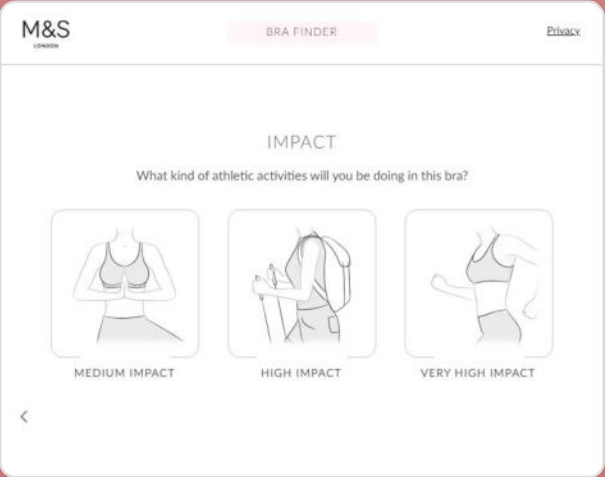
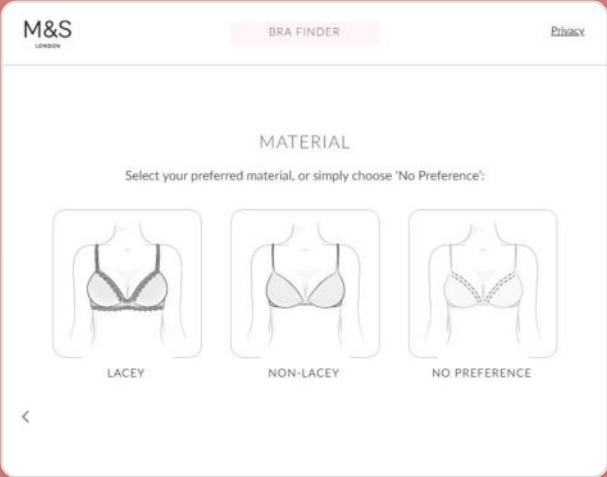
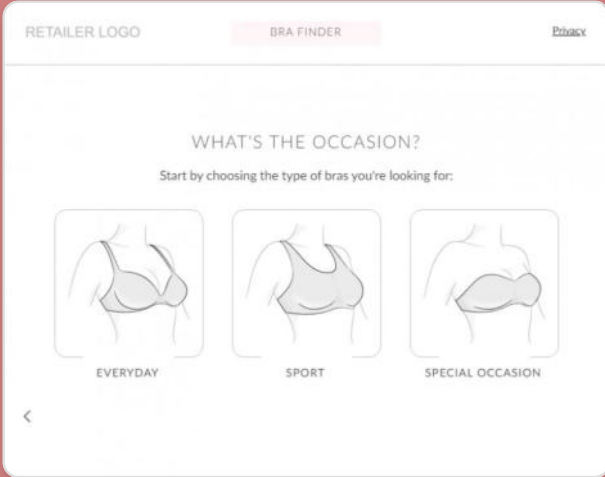
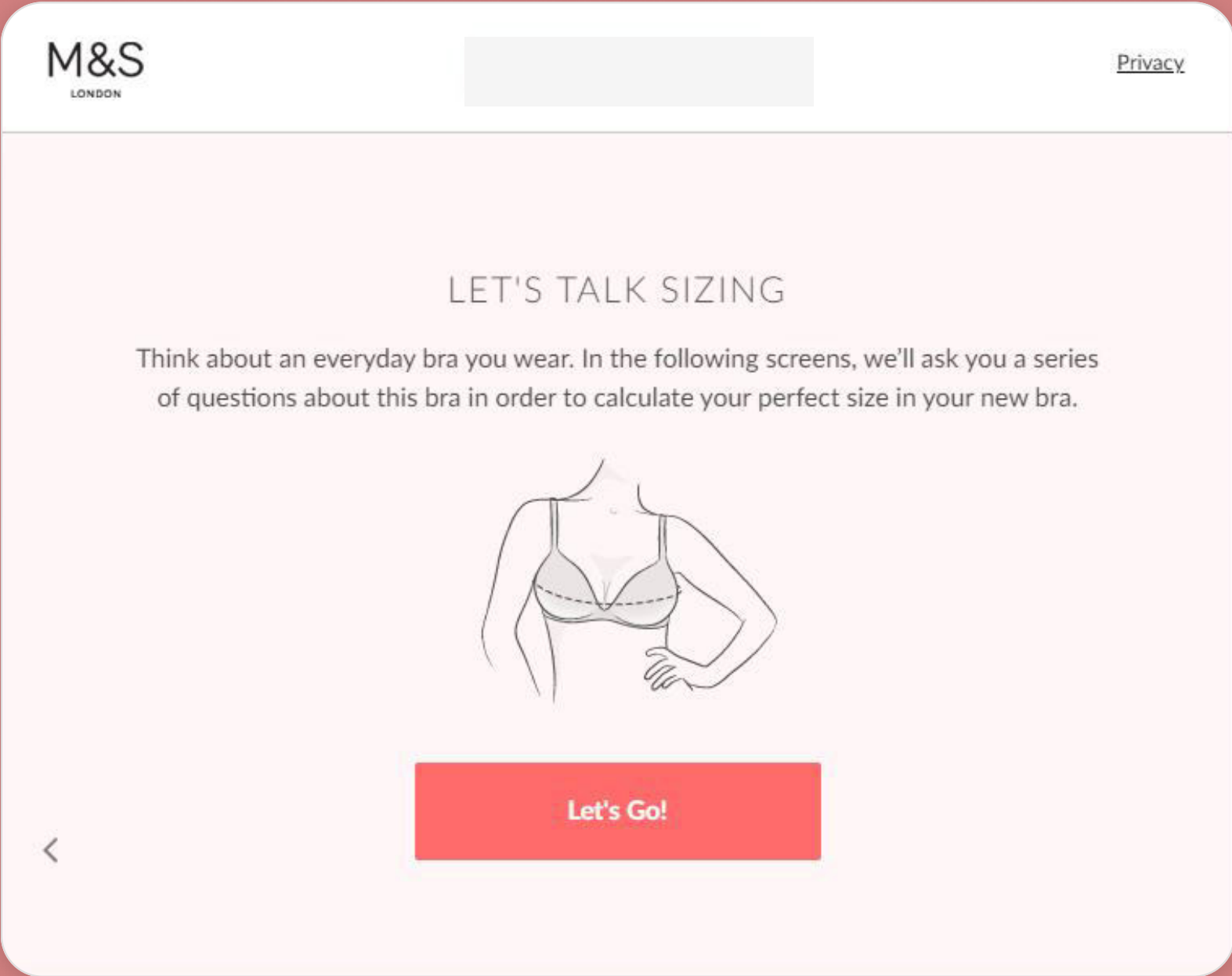
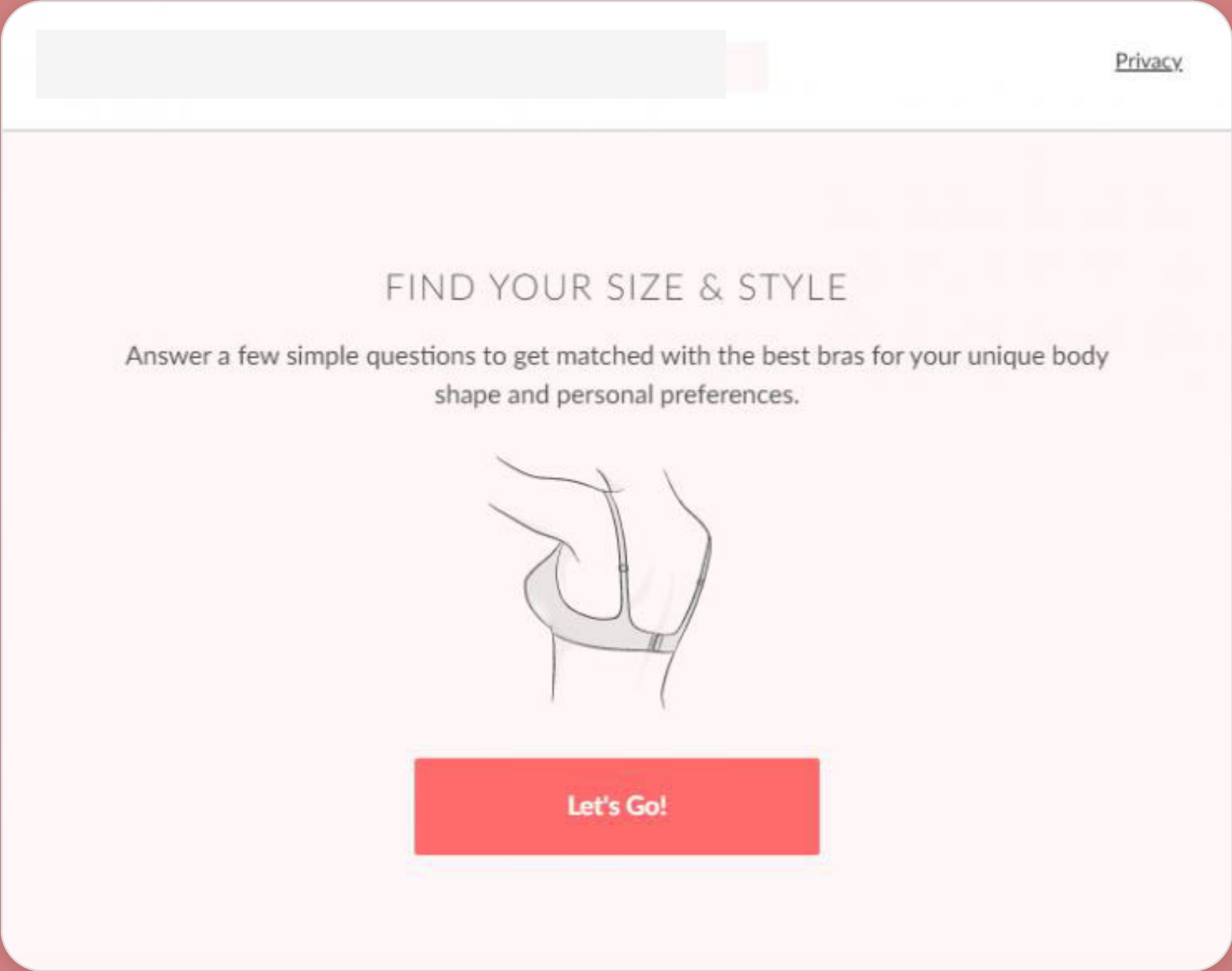
The final experience was designed as 3 guided journeys (everyday use, sports, special occasion), replacing traditional open browsing. That way, customers are progressively led through:

- Structured fit-related questions
- Material and fit preference selection
- Personalized recommendations

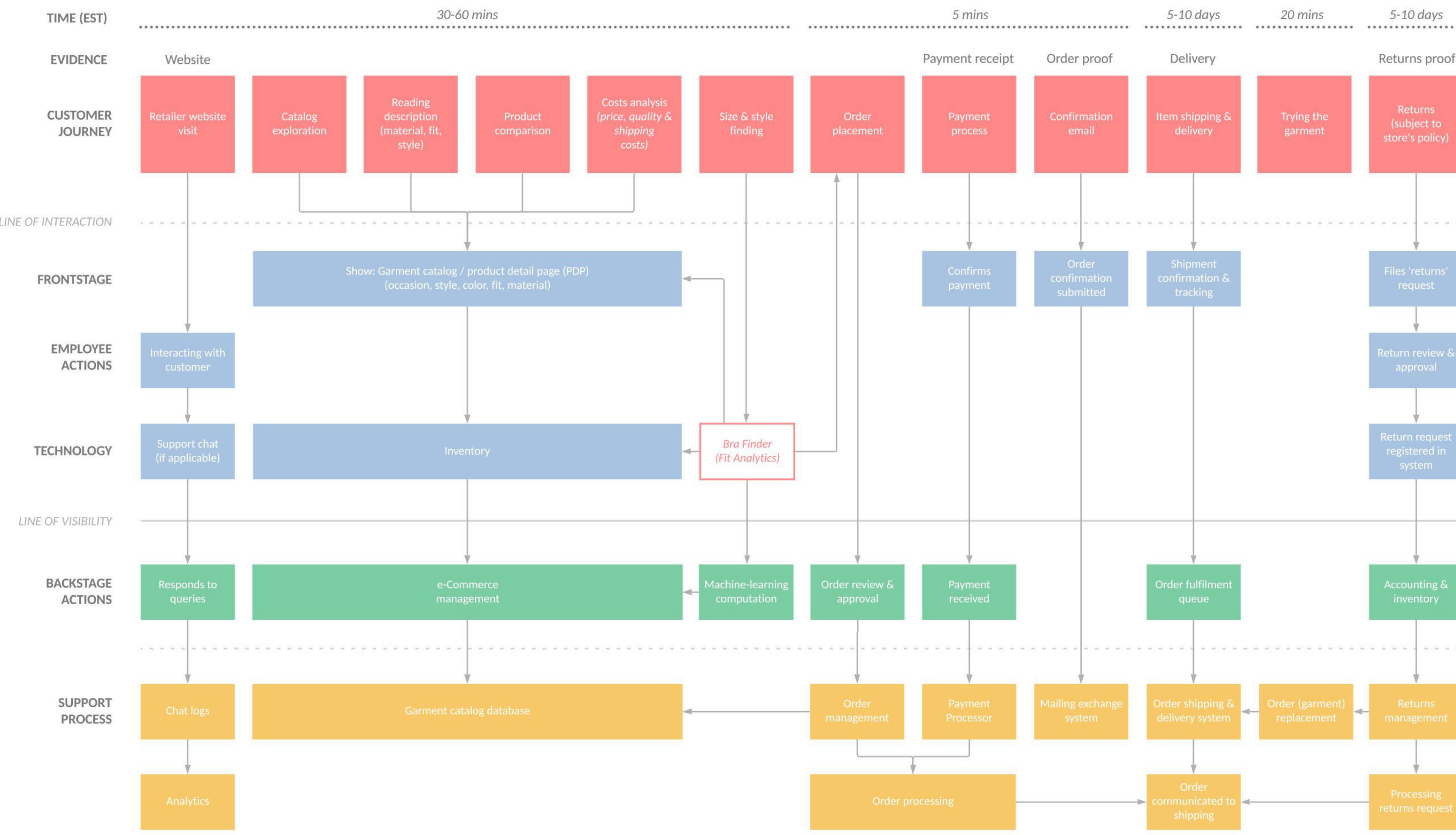
The experience intentionally mirrors the role of an in-store fitting consultant, translating a traditionally physical interaction into a scalable digital product.



A few UI samples showing the final product



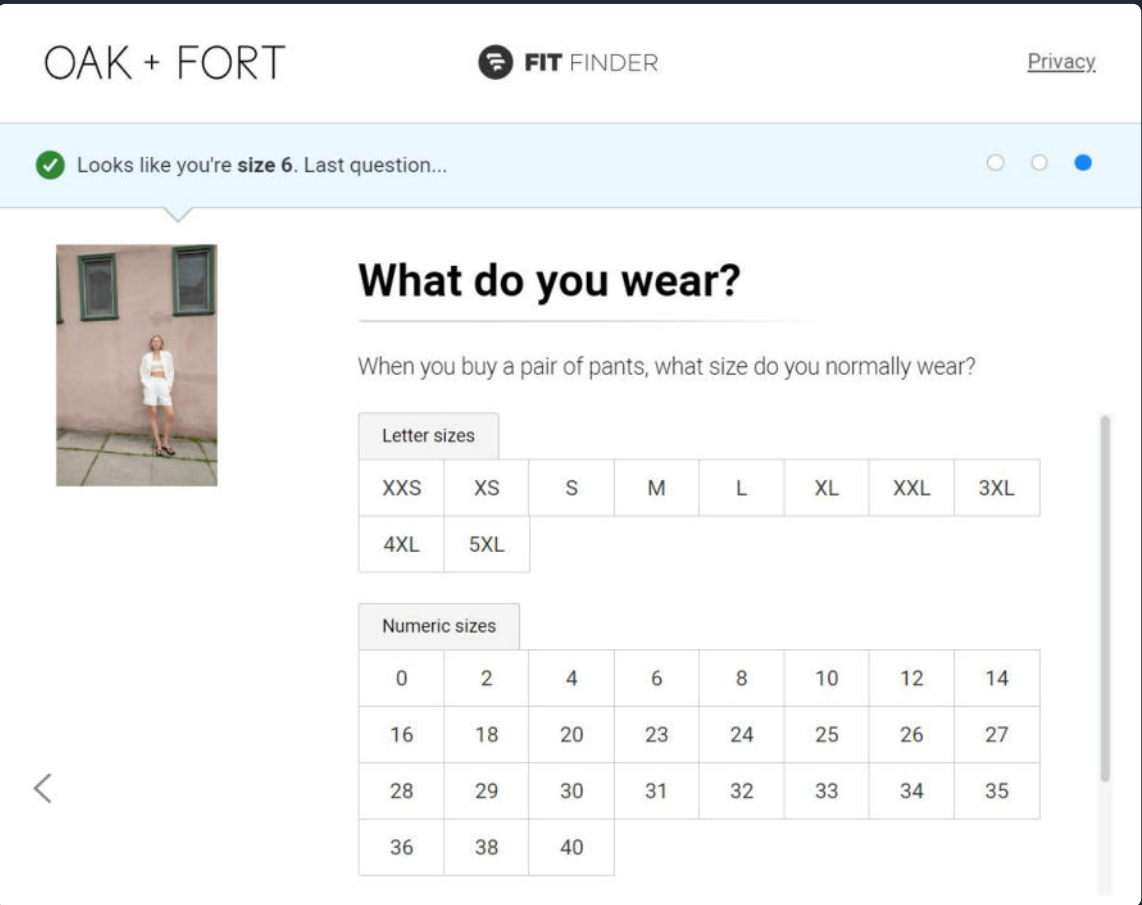
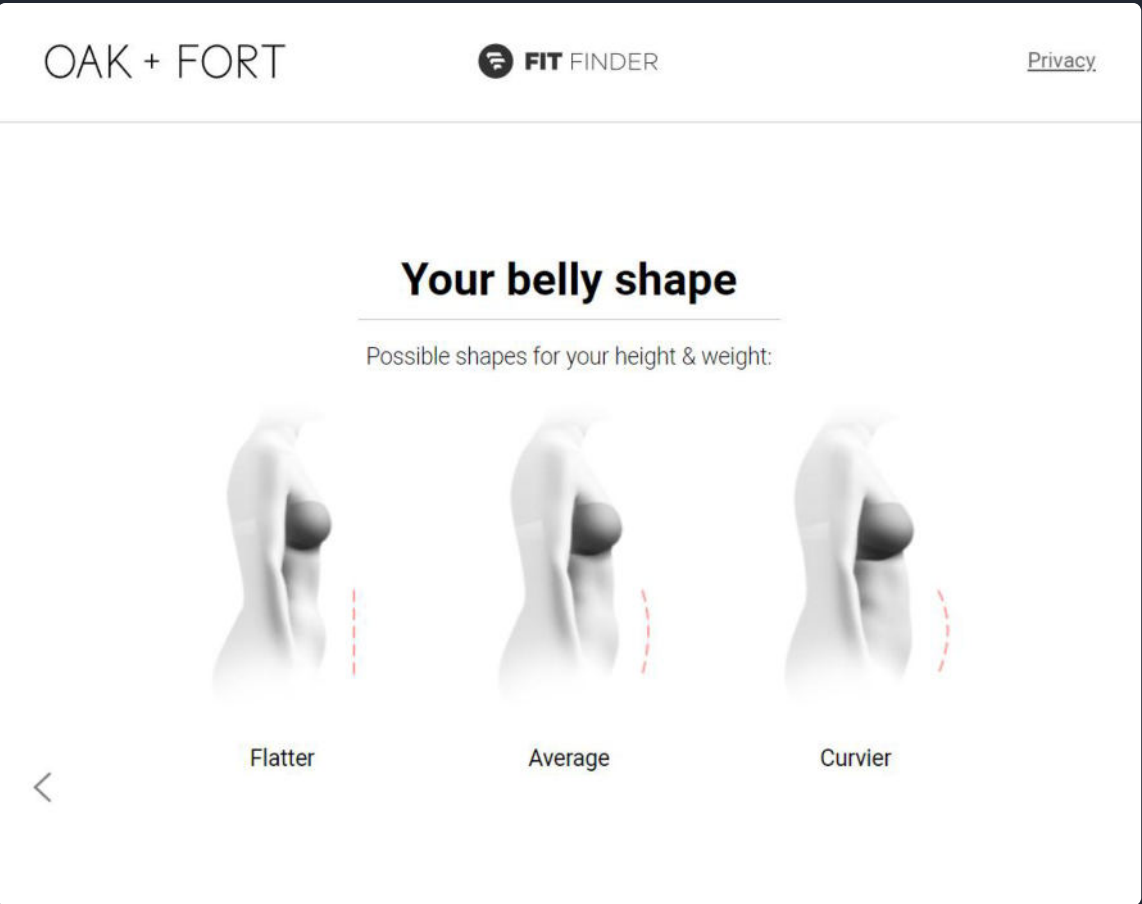
Designing the guided recommendation experience required aligning not only the user journey, but also the underlying systems, data flows, and operational processes that enable it. To achieve this, I developed a **service blueprint** to map how customer interaction connects with frontend experience, backend systems, and supporting operations within the e-Commerce ecosystem.



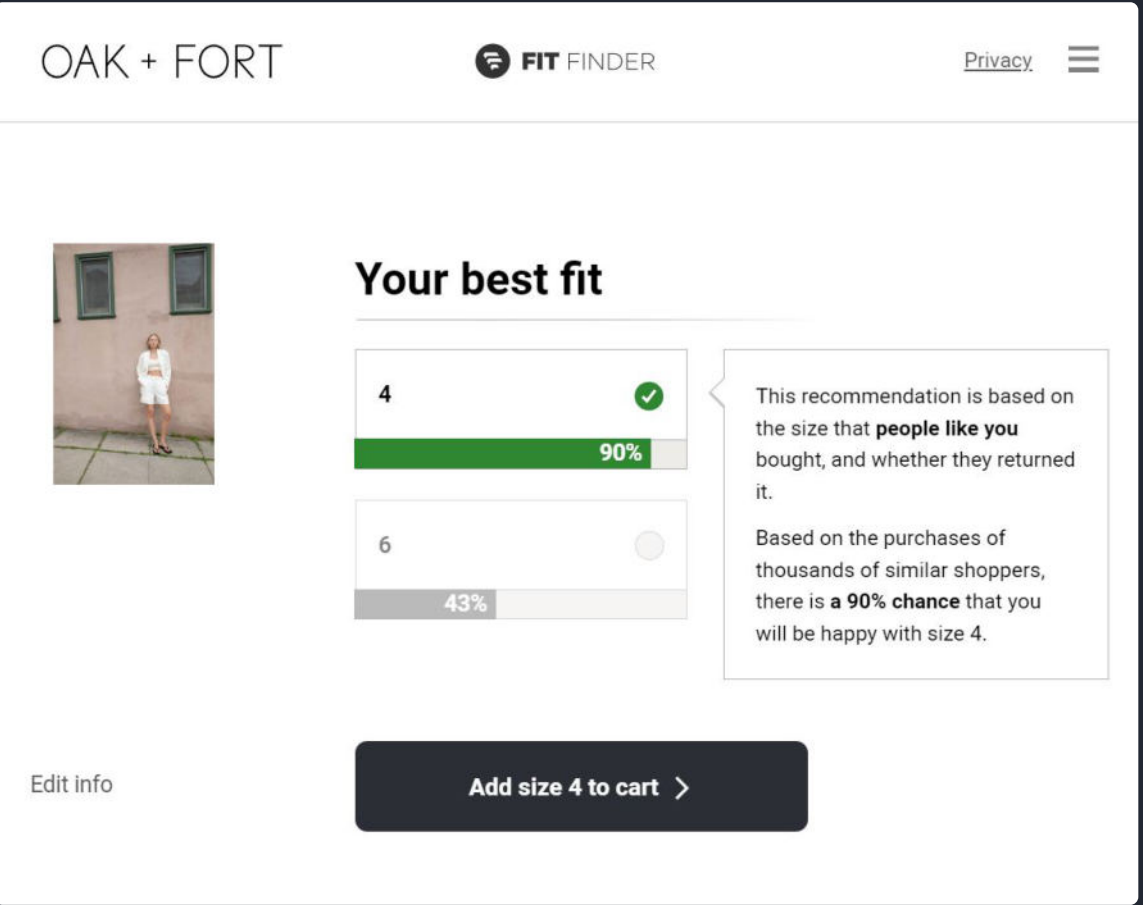
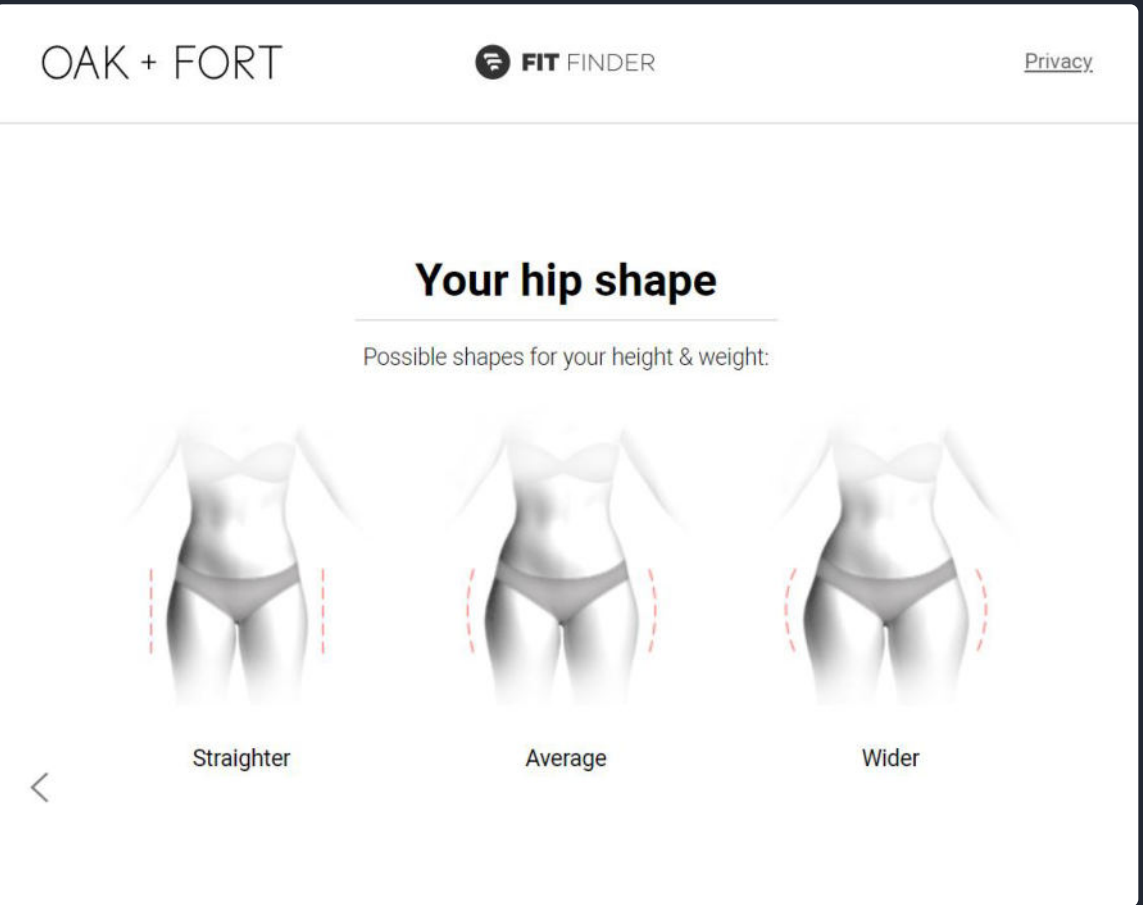
Rationale

We accelerated decision-making and reduced the risk of building misaligned features by retrofitting most of **Fit Finder** (the parent product) for the new utility, namely *Bra Finder*. Additional factors influencing our decision include:

- Branding and consistency across the product ecosystem
- Rigorous testing with participants yielded positive results
- High user acceptance rate from a prior competitive studies which I ran
- Solid Net Promoter Score (NPS) and System Usability Scale (SUS) scores



Fit Finder on the Oak + Fort (Canada) website - a few screenshots



Evaluation Space

Goal

Moving to evaluative research, the goal is to capture:

- Solution effectiveness (does it solve the users' problem?)
- Overall UX (is it intuitive for users?)
- Perceived relevance (does the content make sense to the users?)
- Understandability & learnability (is it easy to learn and understand the utility?)
- Time on task (how long does it take for users to obtain a recommendation?)

Methods

Within-subjects experiment design

User interviews (semi-structured) & onboarding

Concept testing including time on task

Retrospective think-alouds

Structured interviews post testing

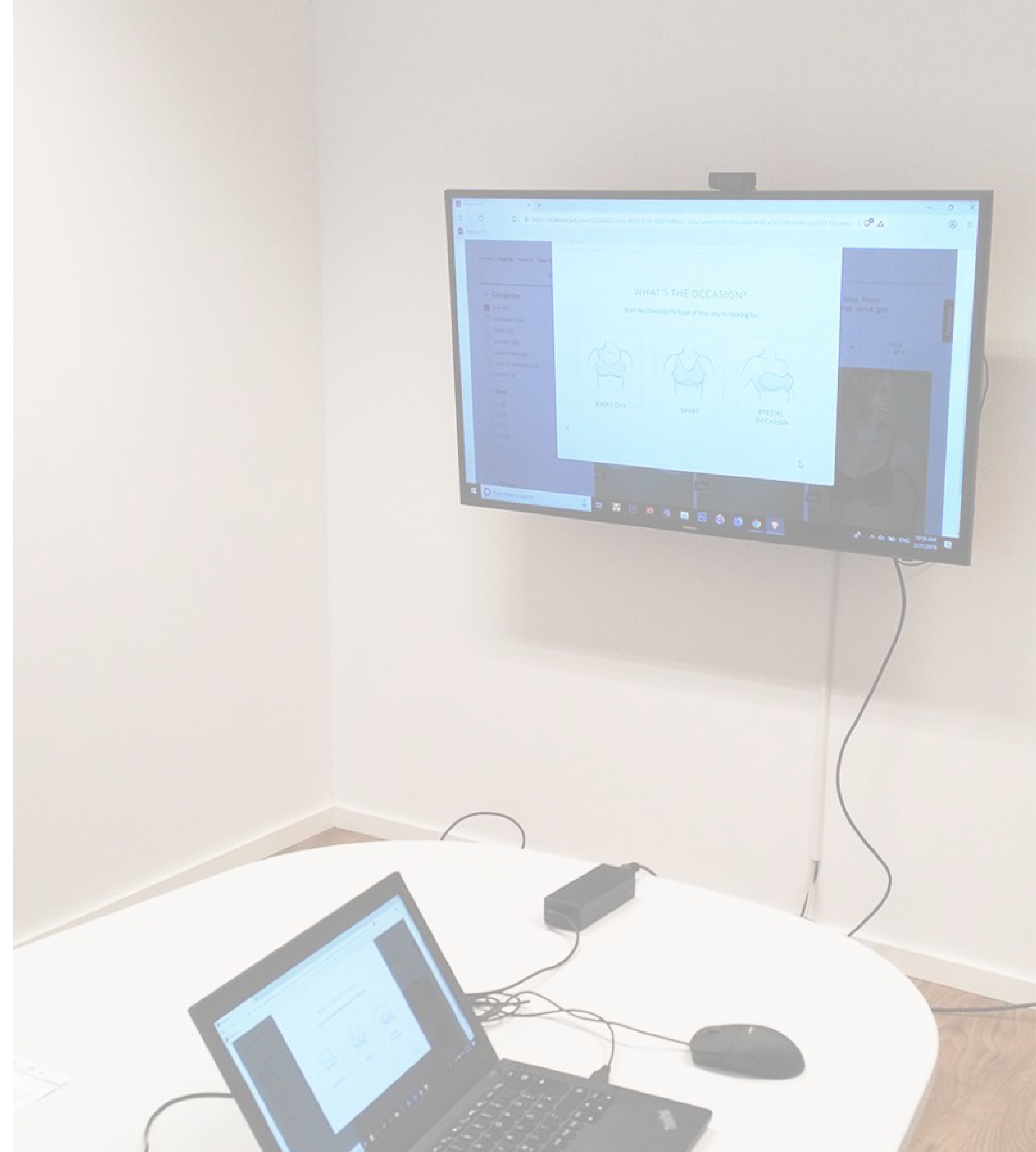
Data synthesis

Evaluation

To evaluate the effectiveness of the proposed solution, I ran a usability study by bringing 14 participants to try a functional prototype. The participants comprised:

- 7 returning participants from the discovery phase, to assess whether previously identified needs were addressed.
- 7 new participants with no prior exposure to size advisor products, to evaluate understandability and first-time user experience.

This sampling approach allowed us to compare how the experience performs for both informed users and new users.



Experiment Design

I applied a within-subjects design, enabling participants to interact with the prototype and allowing for consistent evaluation across user types.

This approach helped identify whether differences in prior familiarity influenced:

- Task performance
- Perceived usability
- Trust in recommendations

Experiment design to evaluate to observe 2 sample groups using the 'within-subjects' experiment method.

GROUP 1											
(n=7)											
Participants exposed to competing solutions (<i>True Fit, Third Love</i>) during the discovery phase											
Participants	<table><tr><th>n</th><th>Test sequence</th></tr><tr><td>2</td><td><i>Everyday, Sport, Special Occasion</i></td></tr><tr><td>2</td><td><i>Special Occasion, Sport, Everyday</i></td></tr><tr><td>2</td><td><i>Sport, Special Occasion, Everyday</i></td></tr><tr><td>1</td><td><i>Special Occasion, Everyday, Sport</i></td></tr></table>	n	Test sequence	2	<i>Everyday, Sport, Special Occasion</i>	2	<i>Special Occasion, Sport, Everyday</i>	2	<i>Sport, Special Occasion, Everyday</i>	1	<i>Special Occasion, Everyday, Sport</i>
n	Test sequence										
2	<i>Everyday, Sport, Special Occasion</i>										
2	<i>Special Occasion, Sport, Everyday</i>										
2	<i>Sport, Special Occasion, Everyday</i>										
1	<i>Special Occasion, Everyday, Sport</i>										

GROUP 2											
(n=7)											
Participants who never tried garment size recommendation tools											
Participants	<table><tr><th>n</th><th>Test sequence</th></tr><tr><td>2</td><td><i>Everyday, Sport, Special Occasion</i></td></tr><tr><td>2</td><td><i>Special Occasion, Sport, Everyday</i></td></tr><tr><td>2</td><td><i>Sport, Special Occasion, Everyday</i></td></tr><tr><td>1</td><td><i>Special Occasion, Everyday, Sport</i></td></tr></table>	n	Test sequence	2	<i>Everyday, Sport, Special Occasion</i>	2	<i>Special Occasion, Sport, Everyday</i>	2	<i>Sport, Special Occasion, Everyday</i>	1	<i>Special Occasion, Everyday, Sport</i>
n	Test sequence										
2	<i>Everyday, Sport, Special Occasion</i>										
2	<i>Special Occasion, Sport, Everyday</i>										
2	<i>Sport, Special Occasion, Everyday</i>										
1	<i>Special Occasion, Everyday, Sport</i>										

Results

Participants praising the solution for its thoughtful consideration of gender-related needs, a success achieved through collaboration with the subject matter expert.

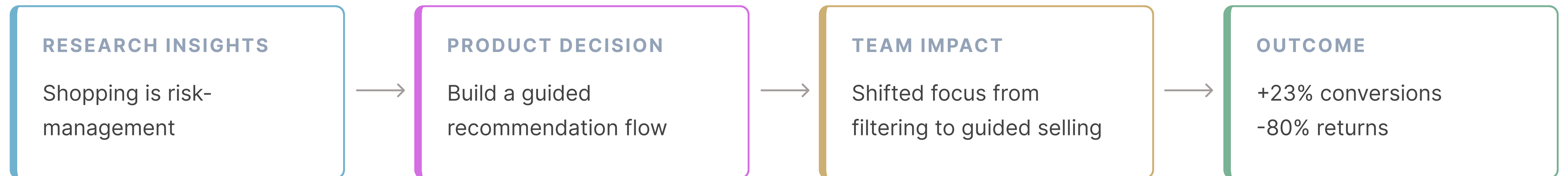
- Ease of use — 4.5 / 5
- Trust perception — 4.6 / 5
- Recommendation relevance — 4.4 / 5

Users reported:

- Increased confidence in decisions
- Reduced need to compare multiple products
- Improved clarity in garment selection
- Expertise - participants described us as experts for demonstrating a meticulous understanding on requirements.

Research Influence

This research helped Fit Analytics shifting product development strategy from a plain size advisor into a recommendation system.



End of deck