

Product Portfolio: Returns Mitigation

The Smart Fit Confidence Score

Goal: To reduce e-commerce apparel returns by 10 percent using data-driven trust.

Presented by: Vishal V | Transitioning APM

Problem Statement: The Cost of Sizing Uncertainty

Sizing Uncertainty is one of the major friction points in online apparel. Our simulated apparel return rate is an unacceptable 20%, driving millions in logistics costs and eroding customer trust. We're losing money and customers on preventable size/fit issues.

Our North Star: Business Success

We defined clear, measurable goals for our A/B test:

- **NORTH STAR METRIC:** Achieve a **10% Relative Reduction** in the return rate for the Test Group vs. Control.
- **GUARDRAIL:** The Add-to-Cart Conversion Rate cannot drop more than 2%

| Metric Type | Metric Name | Definition / Target | Why We Measure This |
|------------------|--|--|---|
| Main Goal Metric | Return Rate Reduction (due to fit/size issues) | We want to see the return rate drop by at least 10% in the group that sees the feature. | This is the whole reason we built the feature - to reduce cost. |
| Guardrail Metric | Add-to-Cart Conversion Rate | This rate must not drop by more than 2% from the baseline. | We must make sure the warnings don't scare customers away from buying anything at all. |
| User Engagement | Nudge Click/Hover Rate | We want at least 15% of people who see the score to click or hover on it to read more details. | This tells us whether the customers actually care about the information we are providing. |
| Business Impact | Total Avoided Cost | We will calculate the total money saved from eliminating shipping and processing for the returns we prevented. | This converts the feature's success into a clear dollar value (ROI). |

The Product Core: A Dual-Data Confidence Model

The Smart Fit Confidence Score will be determined through the weighting of two critical data layers. We have designed this logic to be robust against generic user-reported return reasons.

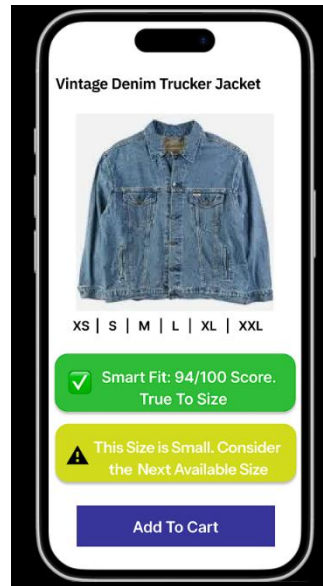
| Data Layer | Weight | What It Does | Why It Works |
|-----------------------------|--------|--|---|
| 1. Personalised Data | 70% | Predicts fit for you: Analyses your particular history of the sizes kept/returned in the past to infer your actual sizing profile | Corrects for individual body preference and purchase history bias. |
| 2. Aggregated Data | 30% | Corrects Product Flaws: Analyzes global return exchange patterns, such as M being frequently swapped for L, and review NLP to flag inaccurate sizing. | Corrects for manufacturing-labeling errors, while discounting indefinite user-reported reasons. |

Key Takeaway: This feature prioritizes **long-term customer trust** over short-term, risky conversion.

The UX Solution: Mitigation Through Transparency

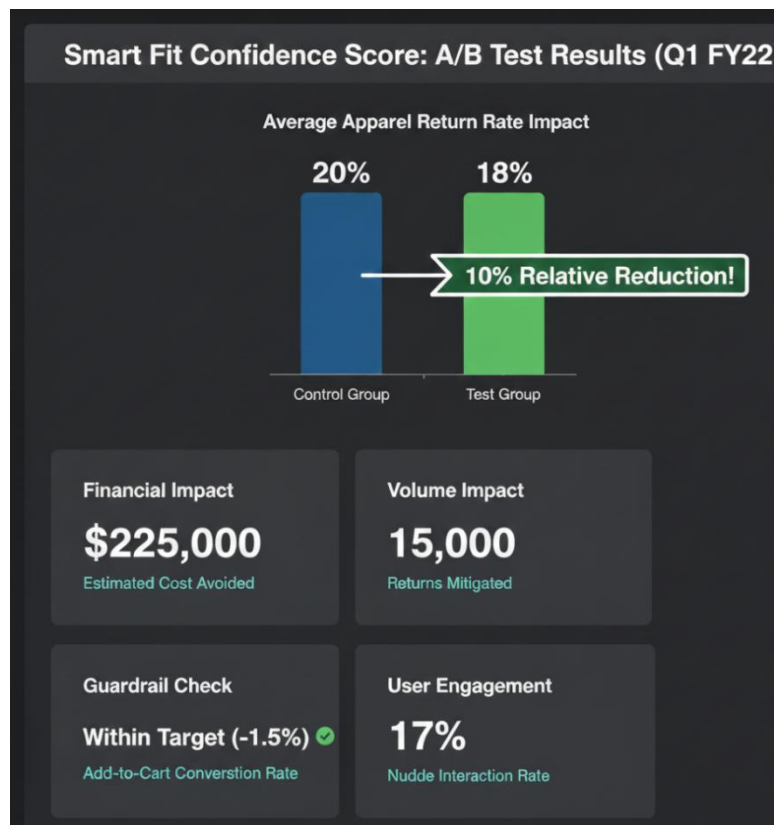
The feature we designed acts like a proactive shopping assistant and will not prevent sales. We used a clean, clear visual design, leveraging color to manage risk.

| Nudge State | Objective | Visual Impact |
|------------------------|-----------------------------|--|
| HIGH CONFIDENCE | Purchase Accelerator | Green Nudge: Reinforces buyer's choice, at minimum reducing second thoughts or doubts. |
| LOW CONFIDENCE | Return Mitigator | Yellow Nudge: This proactively prompts the user to size up to avoid a return likely and save them the headache. |



Validation: Proving the \$225,000 Impact

After running a 4-week A/B test, this feature hit its North Star Metric. In fact, the results show that Smart Fit Confidence Score delivered significant, measurable business value..



| | |
|------------------------|---|
| Key A/B Test Results | |
| Reducing Return Rate | 10% Relative Drop (from 20% to 18%) |
| Estimated Cost Avoided | \$225,000 |
| Returns Mitigated | 15,000 |
| Guardrail Check | PASSED Add-to-Cart rate decreased only 1.5% - within the 2% limit |

Project Conclusion: Execution Ready

This project demonstrates the complete product lifecycle:

- **STRATEGY:** ROI definition and stakeholder alignment (PRD).
- **DESIGN:** Translating complex data into simple UX on Figma.
- **EXECUTION:** Using data to drive measurable business outcomes using PowerBI.