DESIGNING WHAT LASTS

SUSTAINABILITY, TECHNOLOGY, AND CONSUMER BEHAVIOR IN THE FUTURE OF FASHION MANUFACTURING

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Advanced Practicum in Fashion Business • December 2025

The Problem

Linear, fragmented supply chains → produce, sell, discard

Consumers want sustainability, personalization, and speed simultaneously

Manufacturing systems were never designed to handle all three

Quantified Impact

~10%
emissions

85%
discarded

<1%
recycled

The "take–make–dispose" model is structurally embedded in fashion manufacturing.

Source: Ellen MacArthur Foundation

The New Rules of Fashion Manufacturing

THE OLD SYSTEM WAS BUILT FOR	THE NEW SYSTEM IS BEING BUILT FOR
• Speed over visibility • Volume over precision • Materials treated as disposable • Forecasts, not real demand • Sustainability as branding	• Traceability built into the product • Circular production instead of linear waste • Materials designed for reuse and resale • On-demand and data-guided manufacturing • Sustainability as infrastructure

Fashion is no longer focused solely on speed. It is now forced to address accountability, efficiency, and endurance simultaneously.

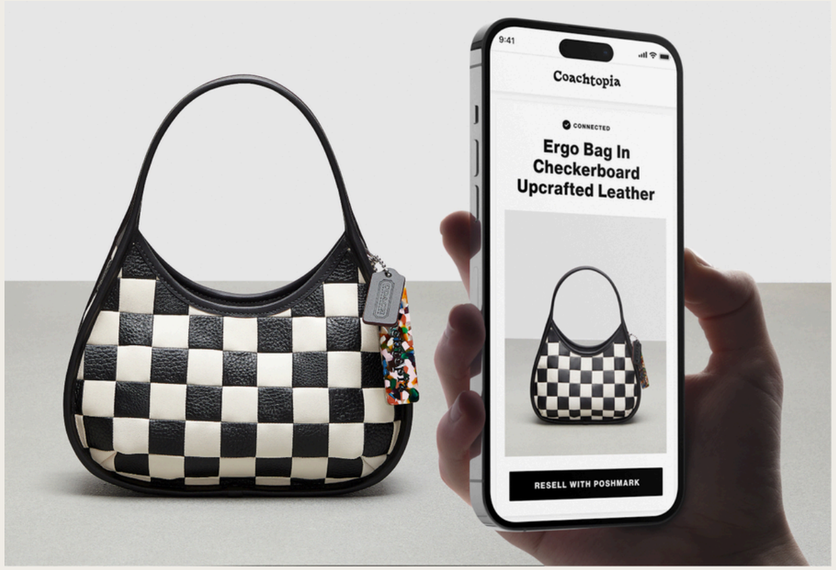
Current Approaches to Sustainability...

Coachtopia	STILL HERE NEW YORK

SUSTAINABILITY AS
INFRASTRUCTURE

COACHTOPIA

How digital systems turn sustainability
from intention into execution



1. DIGITAL TRACEABILITY

- Transparency becomes embedded into the product itself
- Each product contains a Digital Product Passport (DPP) via NFC chip
- Tracks origin, materials, environmental impact, and resale/repair history

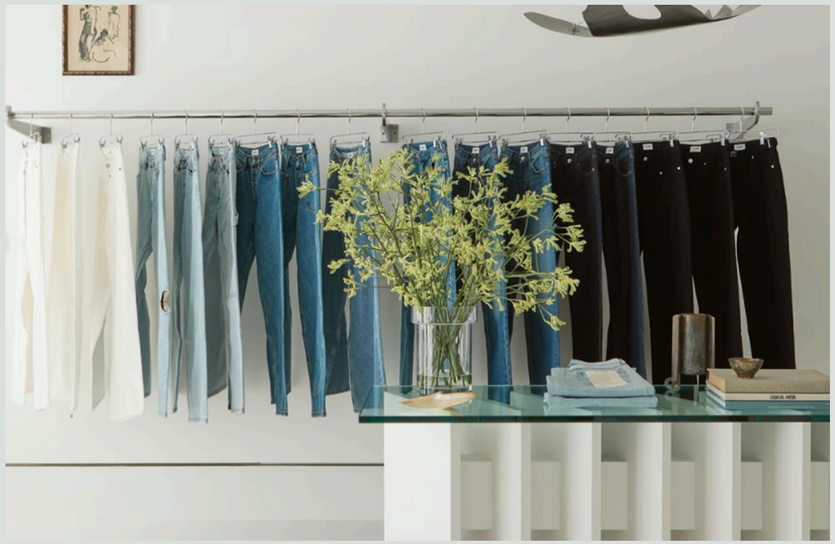
2. CIRCULAR PRODUCTION AT SCALE

- Designed from leather scraps, deadstock fabrics, and offcuts
- Built for disassembly, resale, repair, and reconstruction
- Sustainability can be embedded in larger manufacturing systems, not just niche brands

Coachtopia shows what happens when sustainability becomes operational infrastructure — not just branding.

STILL HERE

How restraint and relationships turn sustainability into a reality



1. SUPPLY CHAIN VISIBILITY

- Direct partnership with a small, family-run denim farm
- Long-term relationship instead of rotating suppliers
- No fragmented multi-tier system
- Ethical oversight through proximity, not platforms

2. CIRCULARITY/SUSTAINABILITY THROUGH RESTRAINT

- Bone-dye fiber waste reused as fertilizer
- Production tied directly to waitlist demand
- Intentional scarcity prevents overproduction
- Longevity prioritized over trend cycles

Still Here proves that sustainability can be enforced through limitation, not scale.

SUSTAINABILITY AS INFRASTRUCTURE

Industry Tech Shift...

Manufacturing Without a Forecast

CHANGE AT THE FACTORY LEVEL	CORE TECHNOLOGIES ENABLING THIS	WHAT THIS UNLOCKS
• Production shifting from seasonal forecasting → real-time demand • Printing, cutting, and sewing becoming file-driven instead of tool-driven • Physical labor increasingly coordinated through software + sensors	• Digital textile printing (DTG / DTF) • Automated cutting & smart sewing • Internet of things (IoT) and AI for real-time tracking & quality control	• Faster cycles without bulk inventory • Product variation without retooling • Precision replacing overproduction

Manufacturing is no longer organized by seasons — it's organized by code

Resonance

Sell First. Make Second.

RESONANCE: A CASE STUDY OF HOW SOFTWARE HAS TAKEN OVER THE ROLE FORECASTING USED TO PLAY

WHAT RESONANCE REBUILDS	HOW IT WORKS	WHAT THIS PROVES
• No bulk inventory • No forecast-led production • No long offshore timelines	• One software platform links: Design → Website → Factory • Orders become machine instructions • Printing + cutting + sewing triggered only after purchase	• One-at-a-time production is now economically viable • Speed comes from coordination, not scale • Variety becomes low-cost instead of risky

Consumer Trends...

Consumer Pressure

CONSUMER EXPECTATIONS

- “Sustainability” & ethical production
- Trend responsiveness through curation and targeted marketing
- Personalized style and discovery

WHAT FAILED: LES MISS

- Blindly scaling inventory
- Expanding choice without predictive intelligence
- Treating volume as a proxy for demand

THE RESPONSE TO THESE EXPECTATIONS

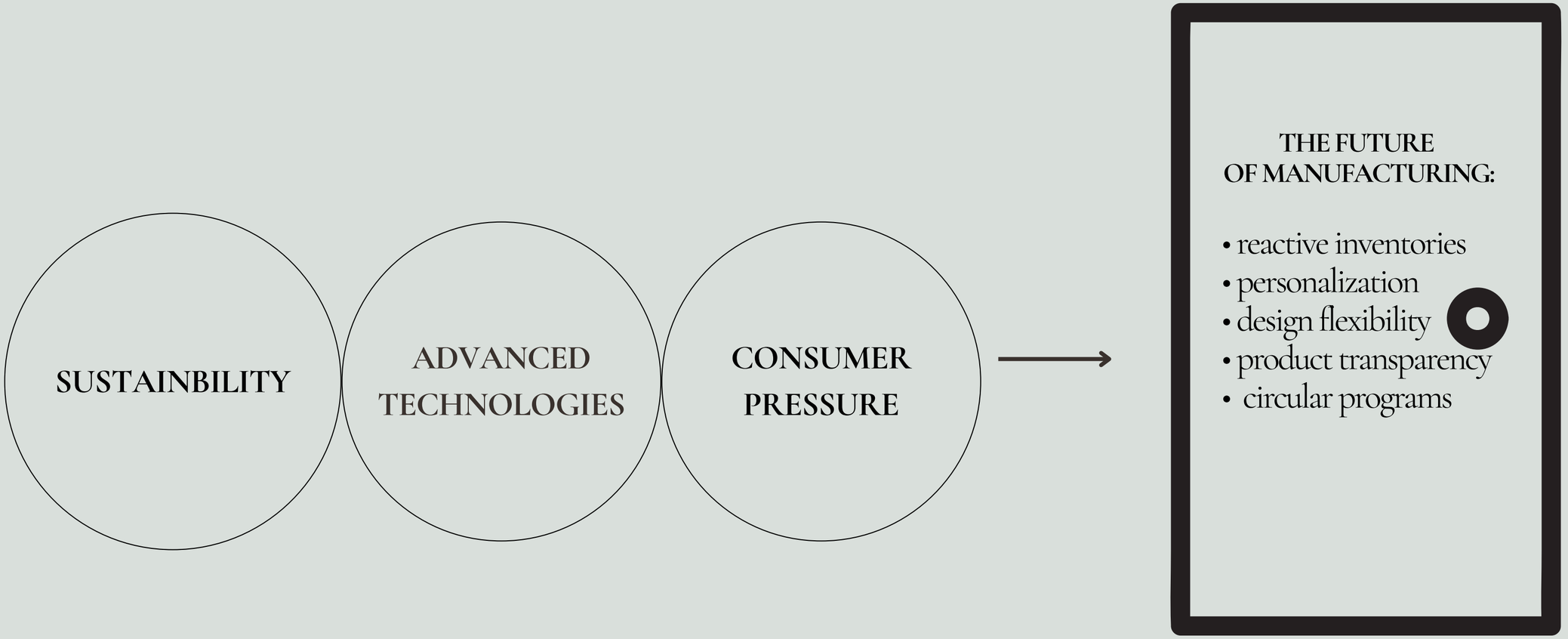
- Personalization and curation
- On-demand, resale, and one-of-one models > bulk output

WHAT SUCCEEDED: PHIA

- Performance increased when personalization and relevance replaced choice overload and inventory depth

Consumer demand is no longer activated by choice density — it’s activated by precision

The Path to the Future of Manufacturing



After the Machine Age: When Factories Learn to Think ...

Garments With Memory

- Blockchain-enabled traceability
- Digital Product Passports
- Verified history
- Consistent identity

Clothing enters the data layer.

The End of Guessing

- Real-time demand sensing
- AI-based forecasting
- Sell first, then manufacture

Production becomes anticipatory.

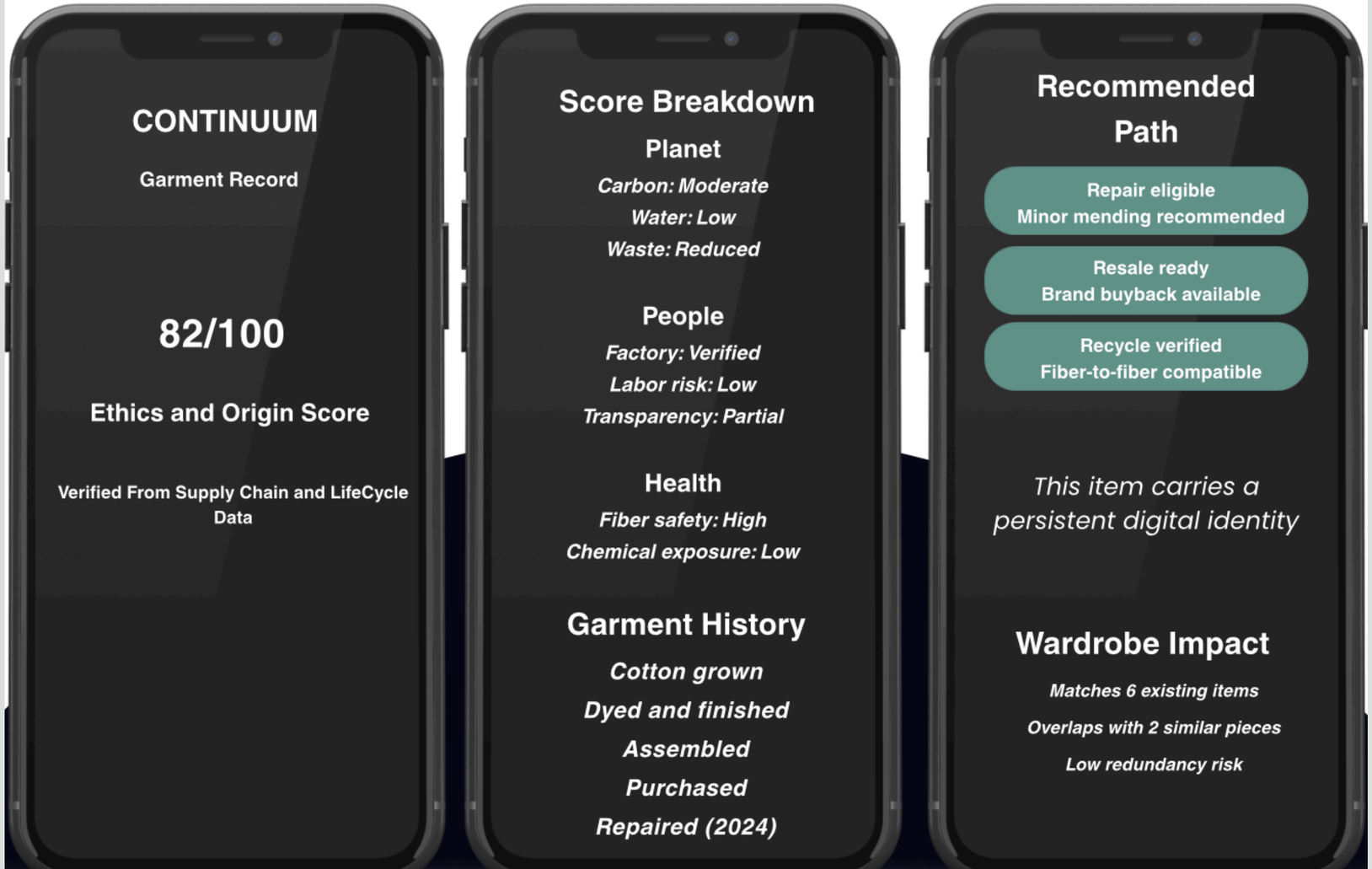
CONTINUUM

Garments that Remember

SCAN SCORE → INPUT

MEMORY→RECORD

ACTION → FUTURE→SYSTEM RESPONSE



Post Fast-Fashion Age

- Not faster
- Not slower
- Predictive
- Verified
- Intentional

Manufacturing learns how to listen.

Thank you!