GOOD PRACTICE

CASE STUDY COLLECTION

August 2025
Good Practice
Case Study Collection

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INTRODUCTION

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About FAIR FASHION

FAIR FASHION recognises that **sustainability, digitalisation, and inclusive entrepreneurship** are no longer optional but vital for the future of the fashion and textile industry. The project's mission is to bridge the educational gap, bringing synergies between sustainable and digital education, namely the twin transition, and fostering inclusive entrepreneurship in the fashion and textile industry by equipping educators with the skills and mindsets to mentor, inspire, and foster the industry's transformation towards a more inclusive, circular, and digitally empowered future.

Purpose of the Case Study Collection:

The FAIR FASHION Case Study Collection showcases real-world examples, from several European countries, of how the twin transition (green and digital) is transforming the fashion and textiles sector. Showcasing sustainable design practices and innovative digital tools, these cases illustrate how entrepreneurs are creating a greener, fairer, and more innovative textile and fashion future.

THE CASE STUDIES

The Case Studies, together with the FAIR FASHION Toolkit, serve as a direct resource for educators seeking actionable strategies, up-to-date teaching materials, and tested digital pedagogical tools.

This resource is designed to:

- **Empower** teaching staff to integrate green and digital transitions, inclusive entrepreneurship and sustainable business practices confidently into their courses, enhancing students' skills and employability.
- **Provide practical guidance** for entrepreneurs on incorporating the twin transition in their practice through real-world examples.

Ultimately, this collection aims to empower educators to confidently incorporate sustainability, digital transformation, and inclusive values into their teaching, ensuring that future professionals are equipped to lead the fashion and textiles industry towards a greener, fairer, and more innovative future.

INTRODUCTION TO CASE STUDIES

Overview of Case Studies Collection

The FAIR FASHION Case Study Collection is a key resource within the project, designed to accelerate the integration of the twin transitions (green & digital) into fashion and textiles education. It presents a diverse range of case studies from across Europe, highlighting innovative approaches that combine sustainability, digitalisation, inclusivity, and ethical entrepreneurship.

Each case study illustrates how female entrepreneurs are applying sustainable and digital solutions to address real-world challenges in the fashion sector. Together, they offer practical examples, inspiration, and actionable strategies to modernise curricula, bridge the gap between theory and practice, preparing the textile and fashion industry to thrive in a rapidly evolving industry.

Objectives and Scope

The primary goal of this collection is to inspire and equip fashion and textiles educators by showcasing how the twin transitions can be effectively integrated into teaching and industry practice. It aims to motivate educators to modernise curricula, embrace inclusive and sustainable approaches, and prepare students for leadership in a transforming sector.

This document serves to:

- **Showcase Innovative Practices:** Present real-world examples of sustainability, digital innovation, and inclusive entrepreneurship in the fashion and textiles industry.
- **Facilitate Knowledge Exchange:** Share proven strategies and methodologies that bridge theory and practice, fostering collaboration between education and industry.
- **Support Curriculum Development and Policy**: Offer insights to inform educational programme design, influence policy discussions, and strengthen sustainable and inclusive fashion practices.

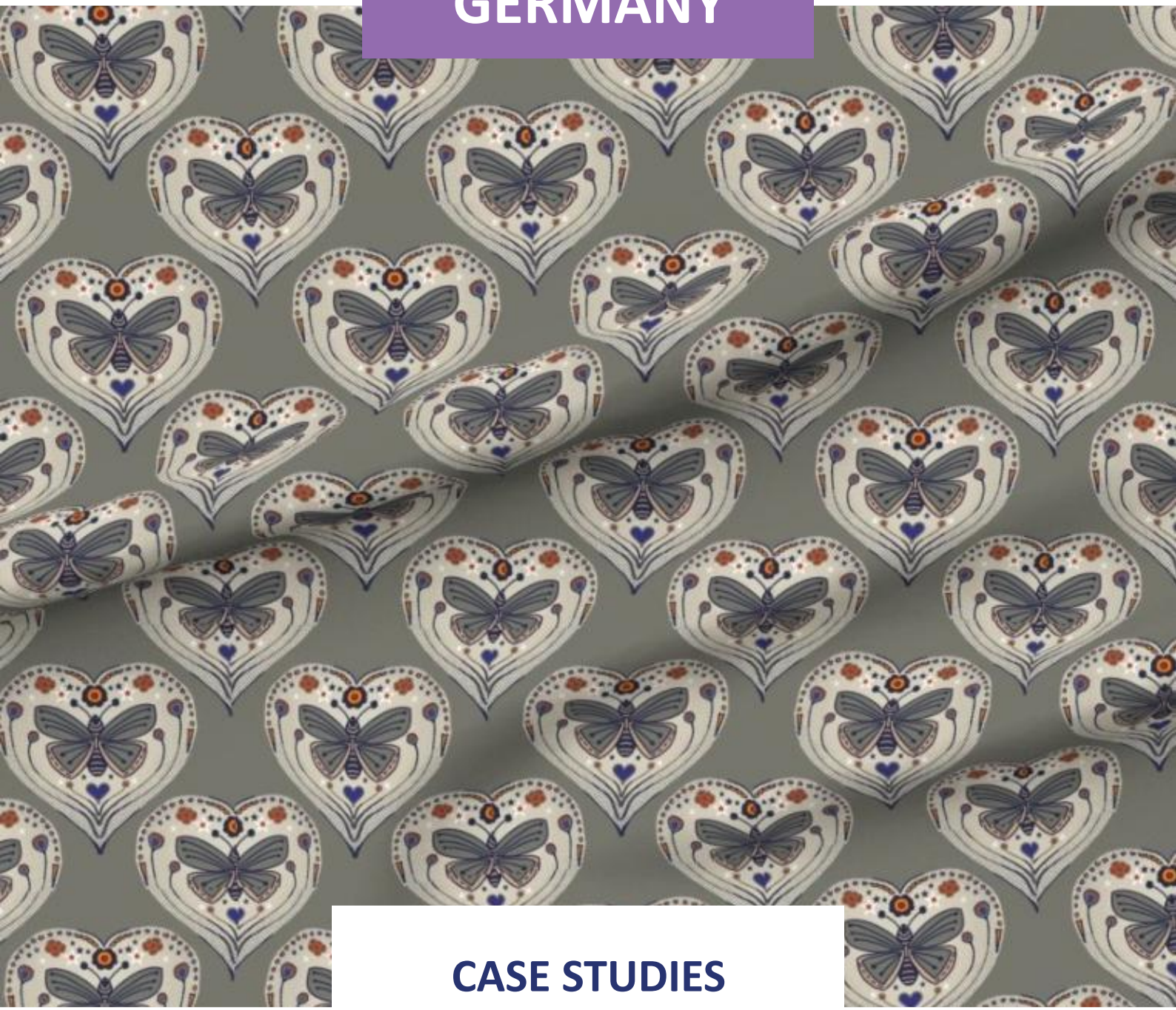
The scope of the collection spans sustainability strategies, digital transformation and ethical entrepreneurship. Each case study is carefully selected to demonstrate practical applications and measurable benefits, enabling educators to adopt and adapt these innovations in their own teaching contexts.

CASE STUDIES

02

CHAMPIONING DIGITAL, DIVERSE & SUSTAINABLE FUTURES

GERMANY



CASE STUDIES

1. Kokolor
2. OCTO Germany
3. saendorn GmbH

Image source: kokolor

Kokolor

FOUNDED

2022

EMPLOYEES

1

MARKET SCOPE

National

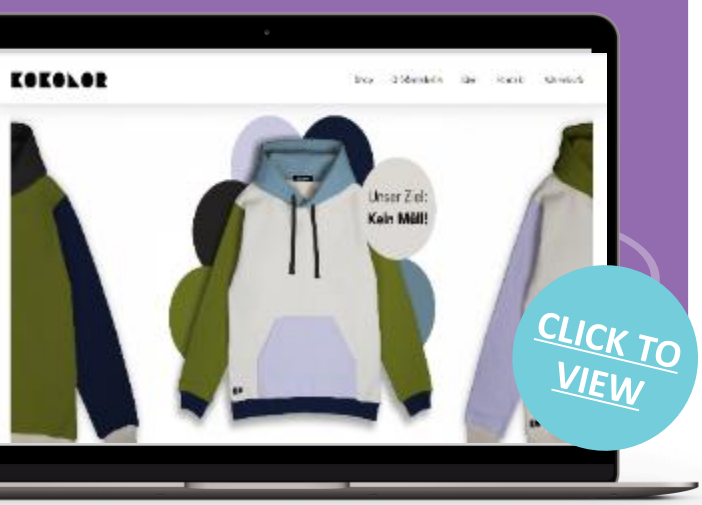
CUSTOMER TYPE

B2C – Online webstore and pop-up stores in the city

SOCIAL MEDIA

WEBSITE

https://kokolor-clothing.de/



ROLE IN THE FASHION/ TEXTILE INDUSTRY

Kokolor is a sustainable unisex streetwear fashion label committed to zero-waste production. Based on a just-in-time model, meaning everything is produced only after an order is placed. Kokolor creates fully customisable garments to reduce overproduction and resource waste. Fabric leftovers are transformed into accessories, while unusable scraps are recycled into new materials. With a strong vision for upcycling and circular fashion, Kokolor redefines how clothes are made.

Katerina Amprazi commented on transparency being equal to sustainable certifications for start-ups:

"Certifications are expensive and unaffordable for emerging entrepreneurs. So I try to build trust with my customers by being as transparent as possible. This presents its challenges as I also depend on my business partners and supply chain to be transparent."

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Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆ (Neutral)	Everything is done by hand (for capacity reasons); in the future, the integration of more technologies.
Sustainable customer insights and Personalisation	☆☆☆ (Neutral)	-
Digital tools in sustainable marketing and sales	☆☆☆☆ (Agree)	More (digital) marketing measures in the future.
Sustainable product development and design	☆☆☆☆ (Agree)	Digital configurator for product design.
Employee training in sustainability and digital technologies	☆☆☆ (Neutral)	MA development to be implemented in future.
Data-driven sustainable decision making	☆☆ (Neutral)	-
Innovation, adaptability, and sustainability	☆☆☆ (Neutral)	Strongly agree with regard to sustainable practices (recycling).

Sustainability & Digital Innovation Highlights

- **Zero-Wate Production Cycle:** Essentially in three levels. First, producing just-in-time. Second, upcycling waste from production in new garments into new products. Finally, recycling old garments and what remains of production into new yarn.

Katerina Amprazi comments on the biggest aid for founding Kokolor:

"The biggest aid in founding my company was networking at events. Getting to know a lot of people built the supporting network to build Kokolor, especially in targeted, diverse groups. As a woman, I attended a workshop for women where I truly engaged and felt supported by all members. Positive opportunities always arise after attending these events."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Reduced Carbon footprint	Uses a just-in-time production process. Recycling and upcycling any waste during production into new yarn or scrunchies.
Materials	Organic Cotton / Recycled Polyester & Cotton	Uses GOTS-certified cotton, recycled yarn and polyester in collaboration with Turns. Material scraps, old garments and plastic bottles are recycled.
Environmental Impact	Product Delivery	Delivery of products to consumers is with DHL GoGreen to ensure climate-neutral delivery. Using sustainable packaging from rhinopaq.
Environmental Impact	Circular Product Cycle / Recycling	Consumers can return old garments to Kokolor, who sends it to Turns recycling it into new yarn.
Labour Practices	Safe working conditions	In its first store they intend to have an open space where customers can see the garments being produced.

Digital Tools in Use

- **AI:** For marketing and social media
- **Hoodie Configuration:** Customise the style of your hoodie on the website
- **Pattern making:** prospectively add more for more efficient work

Explore More

- Introduction to Kokolor
- Kokolor & Frau.Mina Collaboration

Katerina comments on the importance of diverse voices in innovation:

"I acknowledge that at some point diverse people are picked to fill a quota, but especially then people should listen to different perspectives and ideas. Hearing from diverse people is especially important because we all have different motivations, ideas and strategies for our goals."

Proposed Class Activity: Investors Pitch

Instructions:

To deepen your understanding of the Kokolor case and to strengthen competencies related to sustainability, digitalisation, entrepreneurship, and inclusivity, complete the following activity. This task invites you to analyse Kokolor's business model, specifically its "Just-in-Time" and zero-waste approach, propose an innovation that supports the twin transition and create a suitable pitch to investors for funding.

Activity Goal:

You will use parts of the **Triple Layer Business Model Canvas** (TLBMC) from the FAIR FASHION Digital Toolbox to comprehend Kokolor's business model, to identify an opportunity for Kokolor to scale its customisable model sustainably and pitch it to a board of investors (your lecturers/classmates).

Expected Outcome

By completing this activity, you will have gained experience in how to pitch a sustainable business idea to a board of investors and fostered the skills to innovate sustainable solutions for businesses.

Activity 1 — Case Reflection (10–15 minutes)

Based on the information presented in the Kokolor case, reflect on the following guiding questions:

1. **Sustainability Strengths:**
   How does Kokolor's current model (e.g., zero-waste production, upcycling scraps, repair services) already challenge the industry standard?

2. **Digital Opportunities:**
   Where do you see potential for Kokolor to strengthen its digital capabilities? (Consider their current use of AI for marketing and the potential for a "digital configurator" to enhance the customisation experience).

3. **Inclusivity Gaps:**
   As Kokolor scales from a small startup, what internal gaps might arise if the team remains too homogenous? How can the company structurally ensure that diverse voices are not just "filling a quota" but actively shaping business strategy and innovation?

Your reflection will help you identify an area where Kokolor could innovate.

Activity 2 — Digital Tool Application (45 minutes)

Using the **Triple Layer Business Model Canvas (TLBMC)**, analyse and redesign Kokolor's business model to propose a sustainable, inclusive, and entrepreneurial innovation for the company.

Complete the **three layers** of the canvas for your proposed idea:

1. Economic Layer

Describe how the innovation could:

- Create value through enhanced customisation (e.g., digital fitting tools).
- Scale the "Just-in-Time" revenue model efficiently.
- Integrate digital configurators to reduce return rates and improve customer satisfaction.

2. Environmental Layer

Explain how your proposal could:

- Reduce environmental impact across the lifecycle (considering the impact AI has on the environment as well)
- Further close the loop on textile waste (e.g., digital tracking for the take-back scheme).
- Optimise the logistics of individual shipments (e.g., batching orders via AI).
- Use digital simulation to reduce physical sampling during the design phase.

3. Social Layer

Consider how the innovation could:

- Improve inclusivity (e.g., size range, accessibility, community engagement)
- Strengthen fair labour practices and responsible sourcing (consider effect of automatisation)
- Enhance transparency in the supply chain to build trust without expensive certifications.
- Support ethical and values-aligned branding

Students may complete the canvas digitally (recommended), using any accessible online TLBMC template, or recreate it in a document.

Activity 3 — Investor's Pitch (15 minutes preparation + 5 min pitch)

Scenario: Kokolor has successfully proven its concept: a zero-waste, unisex, just-in-time fashion brand. However, manual production is limiting their impact and revenue. The founders are now seeking **€150,000 in seed funding** to implement the innovation you designed in Activity 2.

Your Goal: Acting as the Kokolor founding team, prepare a 5-minute pitch to convince a panel of investors (your classmates/lecturer) that your innovation is financially viable. Consider the following questions:

- Explain the bottleneck Kokolor is facing (Why do you need this money?)
- Present your innovation. How does it work? How does it keep the "Zero-Waste" promise while allowing the company to grow?
- How is this innovation sustainable? Would upscaling production contradict the fundamentals of consuming less in sustainability?
- How would this investment generate a return? (e.g., "Reducing manual consultation time by 50% increases our margin per hoodie by €X")
- Forecast what you would gain with this investment for the business and environment. (e.g. "With this investment, we will divert X tons of textile waste over the next 3 years.")

Image source: HSNR

OCTO Germany

FOUNDED

2024

EMPLOYEES

7

MARKET SCOPE

Intend to sell international

CUSTOMER TYPE

B2B – as suppliers, or finished products
B2C – Outdoor and camping lines

SOCIAL MEDIA

WEBSITE

https://www.octogermany.com/

ROLE IN THE FASHION/ TEXTILE INDUSTRY

Octo Germany is a sustainable water repellent fabric producer. Their mission is to offer a sustainable alternative to fluoropolymers, containing forever chemicals, in the water-repellent fabric sector. Their product, *Octogarn,* is a pollutant-free, cold-insulating, breathable and friction-reducing yarn with a similar water-repellent effect to the lotus flower. Their yarn can be used for outdoor products such as camping, protective medical textiles or for building constructions textiles and many more.

Alexandria Plewnia commented on the recyclable friendly qualities of Octogarn:

"The big advantage we have is that we aim to make Octogarn a monomaterial product. This allows for the material to easily breakdown after its use and to be recycled back into the production cycle."

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Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆ (Disagree)	-
Sustainable customer insights and Personalisation	☆ (Strongly Disagree)	-
Digital tools in sustainable marketing and sales	☆ (Strongly Disagree)	-
Sustainable product development and design	☆☆☆☆ (Agree)	Use of Vispi to reduce trials which saves material and energy.
Employee training in sustainability and digital technologies	☆☆☆ (Neutral)	-
Data-driven sustainable decision making	☆☆ (Neutral)	-
Innovation, adaptability, and sustainability	☆☆☆ (Neutral)	-

Sustainability & Digital Innovation Highlights

- **Patented Octogarn:** Brings a new opportunity for industries to diminish the production of fluoropolymers and unsustainable water repellent textiles. Its benefit also lies in it not needing to be impregnated, considering that the yarn itself has repellent features.
- **Simulation Software:** Allows researchers to visualise and test results digitally without having to waste resources and costs.

Alexandria mentions apps as a lucrative platform to meet business partners:

"In the beginning I had an innovative idea and wanted to create a business out of it. I wanted to find a partner to start it with and decided to look online on entrepreneurial matching apps. Luckily the first profile I stumbled upon was the perfect fit to kick-off Octogarn."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Product design: Circular product life cycle / Recycling	Product is designed as a monomaterial so that it can be easily recycled and reintroduced into production again. OCTO also intends to use recycled PET for materials.
Environmental Impact	Reduced Carbon Footprint: Chemical reducing	Octogarn is produced naturally without chemicals to replace fluoropolymers in water-repellent fabrics.
Environmental Impact	Waste reduction	Waste-saving processes are favoured, and the process is designed so that auxiliary materials can be reused.
Labour Practice	Social employment	Are currently recruiting employees and encouraging diverse teams.
Labour Practices	Fair Wages / Safe working conditions	Wages and working conditions are set as per the collective agreement for the public sector as the company runs under a university.

Digital Tools in Use

- **Green Web Foundation Website:** Currently in the process to build their website on a sustainable host provider
- **Supply Blockchain:** OCTO intends to implement blockchain for supply chain transparency
- **VISPI:** Simulator of polymer flows while spinning for research
- **AI:** Uses for marketing & Social Media
- **DeepL:** To translate official documents to English

Explore More

- Founding of Octogarn
- Video Presentation of OCTO (GER)
- Chemstar Interview with Co-Founder Alexandra Plewnia

Alexandria highlights the importance of learning from other experienced entrepreneurs:

"Starting a business you have to do a lot for the first time, without knowing anything about it. A big challenge was finding out where to start. What helped us was attending several Start-Up programs. Workshopping and networking with upcoming entrepreneurs and industry experts helped us to create our vision."

Proposed Class Activity:

Instructions:

To deepen your understanding of responsible entrepreneurship we will debate the business model of OCTO Germany. The case highlights a common "Deep Tech" paradox: OCTO has world-class sustainability technology (green) but self-rates its digital maturity for sales/marketing as "low." This activity asks you to identify and reflect upon the digital gap between providing sustainable products and curating digital business practices. Thereafter, through a simulation game you will act as stakeholders negotiating business opportunities.

Activity Goal:

Review the OCTO case study details and use the guiding questions below to diagnose their current business model using the **Triple Layer Business Model Canvas** (TLBMC) framework.

Expected Outcome

By completing this activity, you will have gained critical thinking experience in identifying gaps between sustainable business practices and digitalisation.

Activity 1 — Classroom Discussion (15-20 minutes)

Consider the following questions and discuss in class:

Theme 1: Twin Transition

- OCTO uses "Vispi" software only for internal R&D. Should they pivot to selling this software as a service (SaaS) to brands, rather than just selling yarn?
- OCTO innovates digitally in the lab but uses traditional sales methods. Can they claim to be a "Twin Transition" leader if their digitisation doesn't reach the customer?

Theme 2: Sustainability

- Big brands (North Face etc.) rely on established, arguably not very sustainable, supply chains. Is OCTO underestimating the massive cost and risk required for clients to disrupt their own supply chain switching to their "Green" yarn?
- Can OCTO scale from a university lab to mass production without compromising its "Social Employment" and "Zero-Waste" values? How would it achieve this?

Theme 3: Business Model

- Given that OCTO's core competency is intellectual property (the patent and the software), should they even be a yarn manufacturer? Would it be more sustainable and profitable, to pivot to a Licensing Model, where they simply sell the 'recipe' and the 'software' to existing factories, rather than trying to build their own production lines?
- If OCTO sells their 'recipe' to a fast-fashion giant, that giant might use the *Octogarn* name to greenwash their entire brand while changing very little else. Is it responsible entrepreneurship to profit from an industry that might use your innovation as a marketing shield rather than a genuine systemic change?

Activity 2 — The "Ecosystem Puzzle" Networking Challenge (45 minutes)

Theme: *Building a Supply Chain & Value Network*
In the real world, a deep-tech company like OCTO cannot succeed alone. Deep-tech success requires a network of brands, investors, and researchers. In this activity, the class is split into four stakeholder groups, each holding only part of the puzzle. You must network and trade information to solve your specific business challenges

Part 1: Set-Up (15 minutes)
Divide the class into 4 groups. Each group only has their own data. They will trade with other groups. Within each group there are job characters which each student should play.

Groups start with cash, green stars (sustainability), and blue stars (digitalization) to trade. If a group needs more green stars, they can buy them from the lecturer. The price is negotiated based on the group's specific commitments or incentives.Group A: The Innovators (OCTO Germany)

- Your Asset (What you HAVE): A patented, non-toxic, water-repellent yarn (Octogarn) that eliminates "forever chemicals". You have **3 green stars** for any funding or collaborations you have you can offer your partner.
- Your Problem (What you NEED): You have no customers and no way to mass-produce. You need a Brand to test the product and Capital to scale. You only have **€10,000 capital,** and could self-produce for the cost of €60,000 and need to get 1 blue star (digitalisation rating).

Group B: The Outdoor Brands (Ex: Patagonia)
- Your Asset: Access to the "Camping & Outdoor" consumer market and established distribution channels which is seen as transparent and sustainable. You have **€60,000** and 1 blue star.
- Your Problem: New EU regulations are banning fluoropolymers. You desperately need a sustainable material alternative to keep selling waterproof jackets, but you don't know how to make it. You need an alternative material for your products, and need to get a +2 green stars.

Group C: The Tech Partners (R&D/Producer)
- Your Asset: "Vispi" Simulation Software that can digitally test fabrics, saving money and waste. As well as produce any fabric. Your costs for production runs between **€20,000 - €40,000,** and have 2 blue stars to offer.
- Your Problem: You have great software, but it's stuck in the lab. You need a Startup to apply it in the real world to prove it works.

Group D: The Impact Investors
- Your Asset: Funding and business mentorship. You are looking for a high-potential startup to invest up to **€150,000 and 0 green stars.**
- Your Problem: You need to invest in a product that supports the circular economy to meet your fund's green targets. Your funds green target is to have 5 green stars.

Government: (Played by the lecturer)
- Your Assets: You have 5 green stars to sells. You want as many sustainable collaborations with the community as possible. If applicants show that they have a blue star, you can offer them a green star for cheaper.
- Your Problem: New EU regulations are banning fluoropolymers and you need partners to be as sustainable as possible.

Part 2: The Networking "Marketplace" (15–20 Minutes)
Instructions: Students must leave their groups and walk around the room individually or in pairs.
The Goal: They must find people from other groups who can solve their specific "Problem.“
The Exchange: When they find a match, they must exchange "Business Cards" (or simply write down the partner's details). The more connections you make, the more boxes you can fill in your Canvas in the next step.

Part 3: Canvas Integration (15 Minutes)
Students return to their original groups and fill out their Business Canvas with the completed connections they have made, making sure to write down the individuals the spoke to for each agreement.

Part 4: Presentation and Debrief (20 Minutes)
Each group quickly presents their deals to the classroom and discuss the networking skills they have learned.

Activity 2 — The "Ecosystem Puzzle" Networking Challenge (45 minutes)

Mechanic Overview:

Group A: OCTO Germany (The Distressed Startup)
- Assets: (3 Green Stars - The Patent) & €10,000 Capital (Almost broke)
- Needs (To Win): 1 Blue Star (To validate the tech)
- Must end with > €0 Capital (Cannot go bankrupt)
- Your Strategy: You need the Tech Partner's services (which cost €20k-40k), but you only have €10k. You MUST negotiate with partners to gather funding.

Group B: Outdoor Brands (The Customer)
- Assets: (1 Blue Star - Existing IT systems)& €60,000 Capital
- Needs (To Win): (2 Green Stars - To meet EU regulations)
- Your Strategy: You have cash, through collaboration with companies that foster sustainable products and services you can acquire green stars. But be careful, other parties might also want green stars which could drive the price up.

Group C: Tech Partners (The Service Provider)
- Assets: (2 Blue Stars - "Vispi" Software Licenses)
- Services: You offer Digital Validation.
- Price: You can charge between €20,000 and €40,000.
- Needs (To Win):1 Startup Client (You need OCTO to pay you).
- Revenue: Maximise your profit.
- Your Strategy: Meet the Startups and see what collaborations you might be able to make together. Could you negotiate with them for funding?

Group D: The Investors
- Assets: €150,000 Capital
- Needs (To Win): (5 Green Stars - To close your Fund)
- Your Strategy: There are limited Green Stars the You need 5 of them.

Group E: The Government (The Regulator)
- Assets: (5 Green Stars - Subsidies/Certificates)
- The "Twin Transition" Rule: If a group has a Blue Star, the Green Star is cheaper (Administrative Fee).
- Your Strategy: Force the industry to digitise by incentivising groups with blue stars.

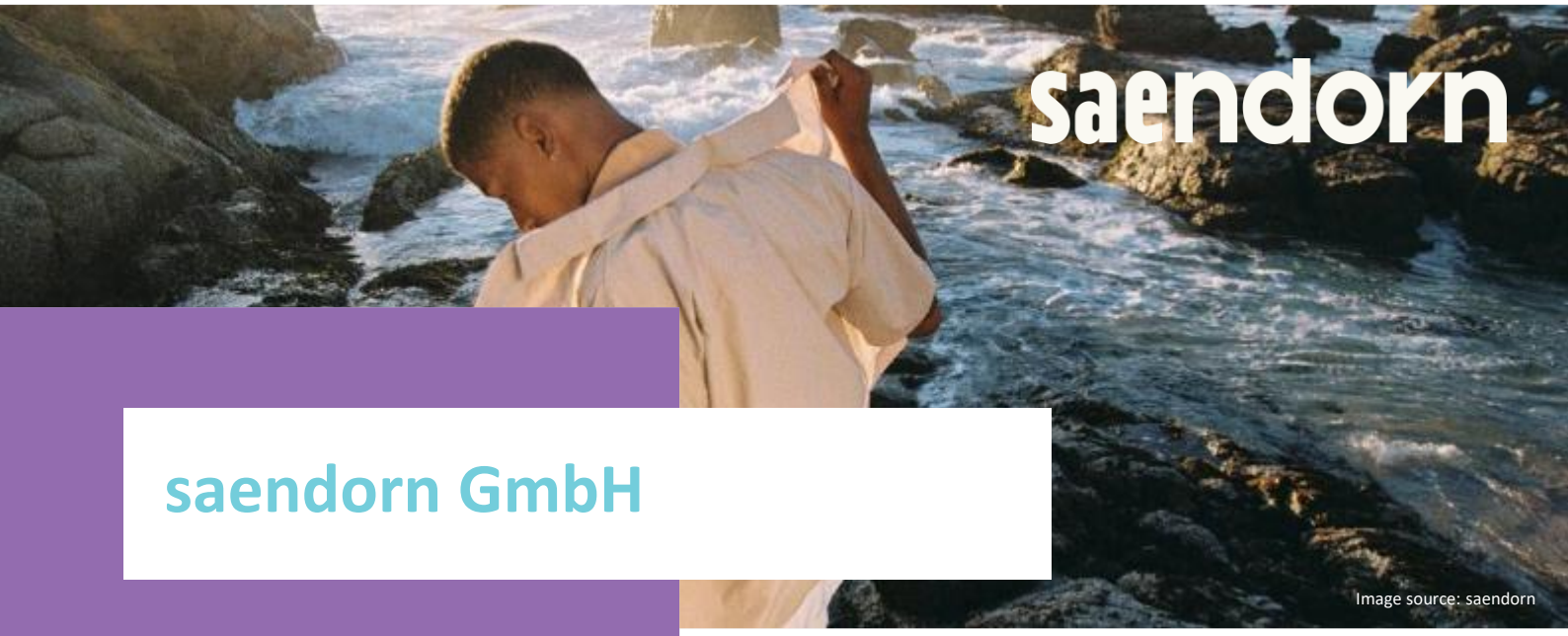


Image source: saendorn

saendorn GmbH

FOUNDED

2024

EMPLOYEES

2

MARKET SCOPE

National

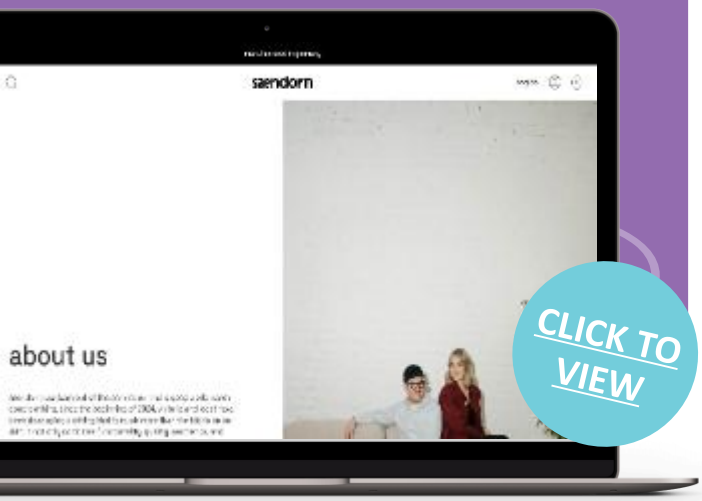
CUSTOMER TYPE

B2B and B2C - Offers direct services to consumers and businesses

SOCIAL MEDIA

WEBSITE

https://saendorn.de/en



ROLE IN THE FASHION/ TEXTILE INDUSTRY

saendorn develops sustainable menswear that combines functionality, quality, aesthetics, and comfort. Inspired by a self-determined lifestyle, the brand focuses on materials from controlled cultivation and the highest manufacturing quality, all made in Germany.

Viktoria Vossebrecher explains how they created their business concept:

"Everybody in the fashion industry should decide how to bring value to the industry. Nobody needs a newly printed hoody, and that is how we decided to create timeless, year-round pieces. Embracing minimalist design to ensure longevity and not following current or seasonal trends. We rather consciously design pieces and publish it in limited quantities following a just-in-time production model."

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Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆ (Agree)	Will be working with technologies such as Notion
Sustainable customer insights and Personalisation	☆☆☆☆ (Agree)	Used for future performance marketing.
Digital tools in sustainable marketing and sales	☆☆☆☆ (Agree)	Used for future performance marketing.
Sustainable product development and design	☆☆ (Disagree)	Mainly manual labour.
Employee training in sustainability and digital technologies	☆☆☆ (Neutral)	Further employees are to be trained.
Data-driven sustainable decision making	☆☆ (Disagree)	Open to new digital tools and technologies in the future.
Innovation, adaptability, and sustainability	☆☆☆☆ (Agree)	-

Sustainability & Digital Innovation Highlights

- **Supply Chain Transparency:** Explicitly lists the location of manufacturers, weaving mill, button and zip manufacturers.
- **Reduce Waste:** Company utilises leftover stock for new garments and avoids creating more waste by reducing sampling rounds
- **Focus on durability:** Blending recycled and organic materials with blended fibers to ensure a longer product cycle

Viktoria Vossebrecher comments on the controversy of monomaterials:

"Combining the benefits of natural and synthetic fibers, also addresses the style factor. After ten washes a Cotton-chino already has a 'used' look. Embracing durability acknowledges that it should last in peak condition for longer which you cannot easily achieve through monomaterials."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Reduced Carbon Footprint	The materials are sourced and produced exclusively in Germany and Italy to minimise ecological footprint.
Environmental Impact	Product Design	The focus of the products is on functionality, quality and durability making use of mixed materials and designed to wear for multiple seasons.
Labour Practices	Fair Wages	Production is purposefully close to Head Quarters to ensure fair wages.
Transparency	Supply Chain Transparency	Product catalogue on website exactly lists material composition, where it was sourced and produced.
Materials	Organic Cotton / Recycled Polyamid	Garments are made of organic and recycled materials. Making use of blended fibres for natural feel.

Digital Tools in Use

- **Utilising Artificial Intelligence for Marketing & Social Media**

Explore More

- Founders of saendorn (GER)
- Founders of saendorn (ENG)

Viktoria, also, commented on the biggest challenges they faced founding their business.

"During the funding stages I didn't realise how difficult it was to explain what sustainable or innovative fashion truly is to non-textile or fashion experts."

Proposed Class Activity: Sustainable Concept Pitch

Instructions:

To deepen your understanding of the Saendorn case and to strengthen competencies related to sustainability, digitalisation, entrepreneurship, and inclusivity, complete the following activity. This task invites you to analyse Saendorn's business model and propose an innovation that supports the twin transition and inclusive entrepreneurial thinking.

Activity Goal:

You will use the **Triple Layer Business Model Canvas (TLBMC)** from the *FAIR FASHION Digital Toolbox* to identify an opportunity for Saendorn to grow sustainably, strengthen its digital maturity, and expand inclusively.

Expected Outcome

By completing this activity, you will apply real-world sustainability thinking, digital reasoning, and entrepreneurial analysis to envision how Saendorn can evolve as a responsible, inclusive, and future-ready fashion brand.

Activity 1 — Case Reflection (10–15 minutes)

Based on the information presented in the Saendorn case, reflect on the following guiding questions:

1. **Sustainability Strengths:**
   Which aspects of Saendorn's current model support sustainability (e.g., transparency, durability, just-in-time production, leftover stock use)?

2. **Digital Opportunities:**
   Where do you see potential for Saendorn to strengthen its digital capabilities (e.g., customer communication, material traceability, design processes, performance marketing)?

3. **Inclusivity Gaps:**
   Whose needs may currently be underserved (e.g., body diversity, accessibility, broader gender identities, affordability, material sensitivities)?

Your reflection will help you identify an area where Saendorn could innovate.

Activity 2 — Digital Tool Application (45 minutes)

Using the **Triple Layer Business Model Canvas (TLBMC)**, analyse and redesign Saendorn's business model to propose a sustainable, inclusive, and entrepreneurial innovation for the company.

Complete the **three layers** of the canvas for your proposed idea:

1. Economic Layer

Describe how the innovation could:

- Create new value for customers
- Generate revenue in a sustainable way
- Strengthen Saendorn's competitiveness and resilience
- Integrate digital tools or processes to improve performance

2. Environmental Layer

Explain how your proposal could:

- Reduce environmental impact across the lifecycle
- Improve transparency and traceability
- Enhance durability, circularity, or material efficiency
- Use digitalisation (e.g., impact tracking, supply chain mapping) to support sustainability goals

3. Social Layer

Consider how the innovation could:

- Improve inclusivity (e.g., size range, accessibility, community engagement)
- Strengthen fair labour practices and responsible sourcing
- Enhance communication of sustainability to diverse audiences
- Support ethical and values-aligned branding

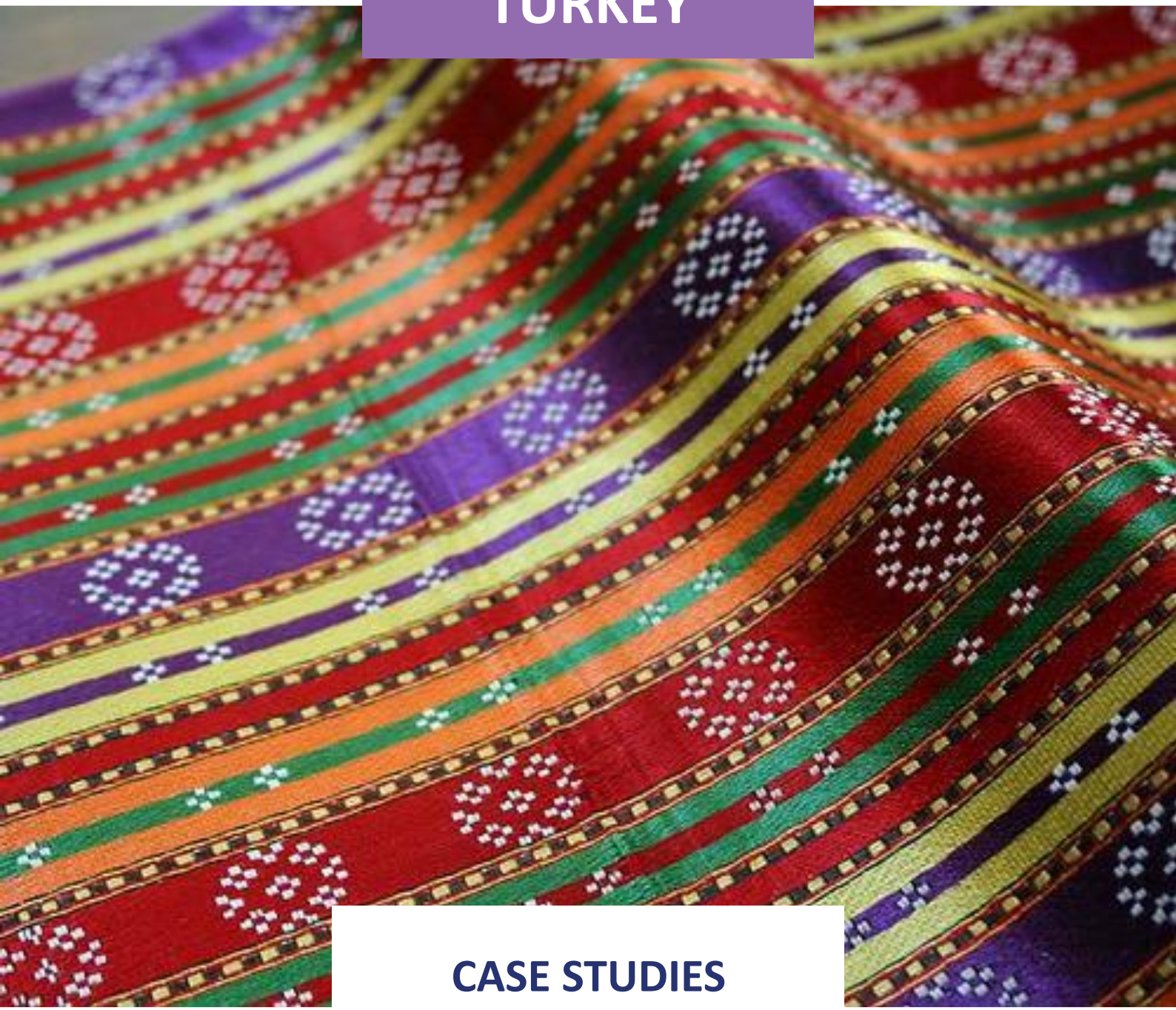
Students may complete the canvas digitally (recommended), using any accessible online TLBMC template, or recreate it in a document.

Activity 3 — Concept Pitch (5 minutes per pitch)

Prepare a short pitch that includes:

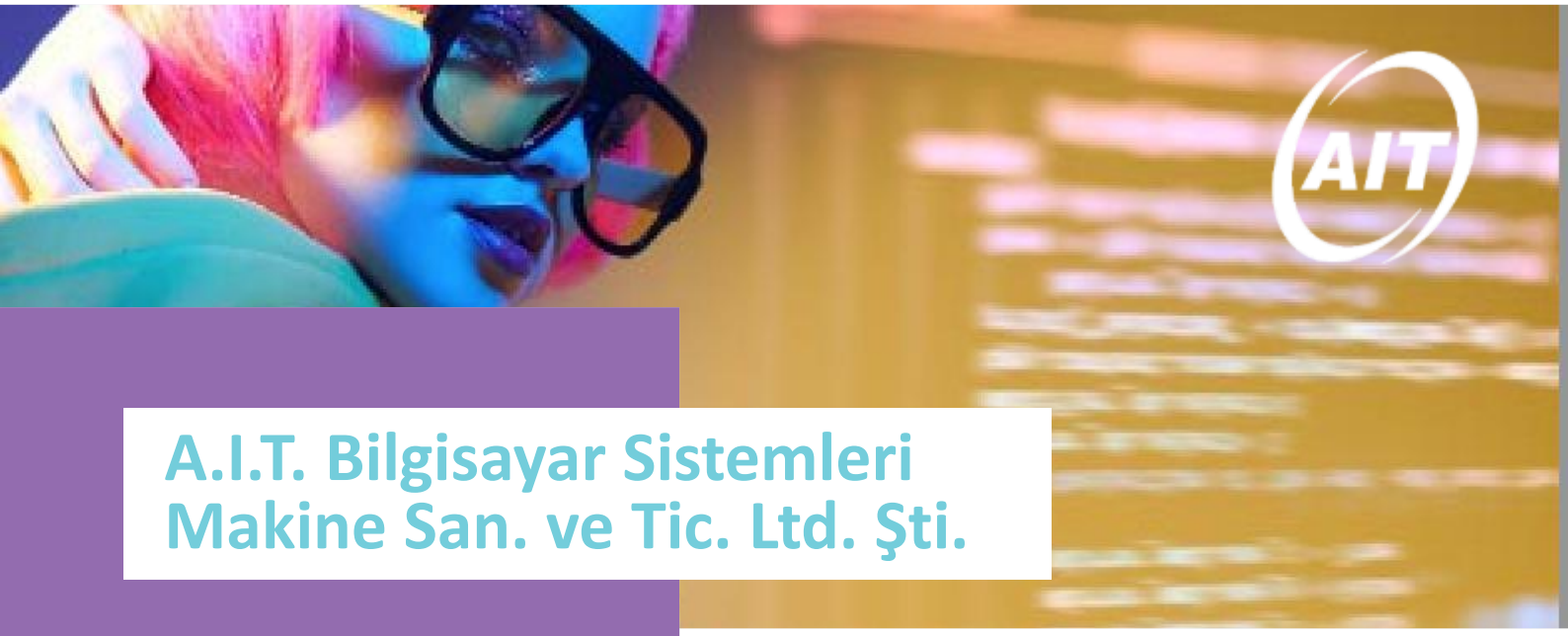
- The opportunity you identified
- Key insights from your TLBMC
- How your proposed innovation strengthens:
  - sustainability
  - digitalisation
  - inclusivity
  - entrepreneurial viability

TURKEY



CASE STUDIES

1. A.I.T.
2. Ereks Blue Matters
3. Myth AI
4. Orhun AI Labs - Optimimax
5. WearTechClub
6. Yugen Company



A.I.T. Bilgisayar Sistemleri Makine San. ve Tic. Ltd. Şti.

FOUNDED

1996

EMPLOYEES

6 - 38

MARKET SCOPE

Local, national, and international

CUSTOMER TYPE

B2B and B2C - Offers direct services to consumers and businesses

SOCIAL MEDIA

WEBSITE

www.ait.com.tr

ROLE IN THE FASHION/ TEXTILE INDUSTRY

A.I.T. is Türkiye's first and only company that has been providing software, hardware, consumables, and technical support for the textile industry since 1996. A.I.T. is a pioneer in digital textile technology, offering solutions that cover the full spectrum from design to production. The company empowers fashion brands with industrial digital printing machines, AI-supported software tools, and design automation, enabling flexible and personalised manufacturing.

Umut Çeliker explains how they incorporate AI into their services:

"What do our artificial intelligence tools do? Together with web-based data software, they allow you to generate new textile patterns much more easily and quickly using generative AI - directly within the design production process and within the constraints you set."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Uses only web-based tools to eliminate paper reporting.
Sustainable customer insights and Personalisation	☆☆☆☆☆ (Strongly Agree)	Personalisation using digital tools is emphasised.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Focus on promoting eco-friendly products via digital means.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Digital printing significantly reduces water consumption.
Employee training in sustainability and digital technologies	☆☆☆☆☆ (Strongly Agree)	Staff trained to use digital tools and adopt sustainable practices.
Data-driven sustainable decision making	☆☆☆☆☆ (Strongly Agree)	Decisions are strongly influenced by digital insights.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Proactive in adopting digital and green innovations.

Sustainability & Digital Innovation Highlights

- **Water Conservation:** Uses machines designed to minimise water consumption in textile printing.
- **Digital Product Design:** Employs digital tools to streamline colour management and pattern creation.
- **Zero Paper Strategy:** Internally developed CRM eliminates paper waste through web-based operations.
- **AI & Automation:** Offers proprietary AI tools for pattern design, improving speed and creativity.
- **Certifications & Supplier Standards:** Engages only with certified material suppliers (e.g., dye suppliers).

Çeliker commented on water consumption as a major issue for sustainability in the Textile Industry:

"Water is both consumed and unfortunately polluted. Beyond consumption, we are also degrading the existing water resources through textiles. There are ongoing efforts on this issue. We are actually one of the leading companies in Türkiye working in this area."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Low Water Usage	Uses printing machines that significantly reduce water use
Environmental Impact	Product Design	Promotes digital printing to reduce environmental load
Digital Practices	Digital Design Tools	Provides advanced software for colour and pattern design

Digital Tools in Use

- **Miracle Textile Software (Colorway, ColorSEP):** Advanced colour separation and pattern design for optimal output.
- **Wear Design**: Simulates finished textile designs on products and models.
- **Power RIP4:** Processes digital images for large-format printers.
- **AIT AI Tools:** In-house AI suite that supports commercial textile design.
- **AIT CRM:** A custom CRM system to manage operations paperlessly and track sales/services.

Explore More

- AI Pattern Design Demo
- Digital Printing in Action – Short
- Pattern Visualization Tool
- Eco-Friendly Printing Solutions

Çeliker, also, commented how fashion is a driver in the industry, affecting sustainability.

"As you can appreciate, when fashion comes into play, the dynamics of fashion also change the process of greening this world every year. One year, printed designs are in fashion. Another year, unprinted items become trendy. And then everything slows down - factories go idle."

Proposed Activity: Understanding How Digitalisation Drives Sustainability at A.I.T.

Instructions:

Based on the A.I.T. case study, match each digital practice or technology used by the company with the environmental impact it creates.
Review the list of Digital Aspects and Environmental Impacts below. Draw lines (or assign matching letters/numbers) to connect each digital aspect with its most relevant environmental impact. Some digital tools may contribute to more than one environmental outcome—choose the primary impact.

Activity Goal:

You will understand the link between digital technologies and environmental impact in the fashion and textile industry. By analysing the case of A.I.T., you will explore how specific digital tools and systems contribute to measurable sustainability outcomes, particularly in resource efficiency and waste reduction, making the twin transition inseparable.

Expected Outcome

By completing this activity, you will be able to:

i. Identify clear cause–and–effect relationships between digitalisation and sustainability

ii. Recognise how digital decision-making tools reduce environmental impact in fashion production

iii. Apply twin transition thinking (digital + green) to a real-world textile technology company

Part A — Digital Aspects at A.I.T.

A. Digital textile printing technologies

B. AI-supported pattern and design software

C. Web-based CRM and zero-paper workflow

D. Digital colour management and simulation tools

E. Design automation and virtual visualisation tools

Part B — Environmental Impacts

A. Reduced water consumption in textile printing processes

B. Lower chemical use and reduced dye waste

C. Elimination of paper waste and reduced administrative footprint

D. Reduced material waste through fewer physical samples

E. Improved production efficiency leading to lower energy and resource use

Reflection Questions

1. Which digital tool at A.I.T. do you think creates the most significant environmental impact, and why?
2. How does digitalisation help move sustainability efforts upstream, before physical production starts?
3. Can you think of another environmental impact that could emerge if A.I.T. further scales its digital tools?

EREKS-ERA

Ereks Konfeksiyon Sanayi ve Ticaret A.Ş. Blue Matters

FOUNDED

1985

EMPLOYEES

600

MARKET SCOPE

Local, national, and international

CUSTOMER TYPE

B2B

SOCIAL MEDIA

WEBSITE

www.ereksgarment.com

ROLE IN THE FASHION/ TEXTILE INDUSTRY

Ereks Blue Matters is a leading denim manufacturer deeply committed to sustainability, digital integration, and process innovation, producing high-performance, eco-friendly denim through advanced digital systems. The company pioneers the adoption of these technologies in the fashion textile sector by implementing intelligent, resource-efficient production methods, paving the way for the next-generation sustainable denim solutions.

Pelin Birsen explains their vision on integrating deep technology to EREKS:

"At Ereks Denim, digital transformation is fundamental. Our entire factory runs on an integrated ERP system, enabling seamless digital flow. We're constantly working on adopting new technologies to boost efficiency and reduce our environmental footprint. Digitalization is an ongoing journey for us, crucial for optimizing everything from energy use to waste management."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆ (Agree)	ERP system is being used in all company operations including the factories.
Sustainable customer insights and Personalisation	☆☆☆☆☆ (Strongly Agree)	Insights since 1985 from its B2B customers fed company's boutique and sustainable production strategies till today.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Integrated ERP tools are being used.
Sustainable product development and design	☆☆☆☆ (Agree)	In addition to using organic cotton, rainwater, laser technologies and eco-stones are utilised to reduce water usage and the creation of toxic chemicals as part of conscious waste management strategies.
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	In-depth orientation and practical introduction are provided to staff on digital and sustainable practices.
Data-driven sustainable decision making	☆☆☆ (Neutral)	Influenced but not intentionally collected
Innovation, adaptability, and sustainability	☆☆☆ (Neutral)	Although there is willingness, it is not prioritised due to the budget restrictions

Sustainability & Digital Innovation Highlights

- **Integrated Digital Manufacturing:** Operates the entire factory with ERP for seamless digital flow and optimised processes.
- **Advanced Water Management:** Features 90% water recycling and rainwater harvesting at its LEED-certified facility.
- **Reduced Harmful Processes:** Significantly cut stonewashing using laser and eco-stone technologies.

Birsen underlined their holistic approach on sustainability since 1985:

"For Ereks Denim, sustainability is a comprehensive approach, built into our core since 1985. Our LEED-certified factory features rainwater harvesting and a 90% water recycling system. We've dramatically cut environmentally harmful stonewashing to just 8% of production, thanks to lasers and eco-stones. Beyond environmental gains, our focus on social sustainability includes inclusive health programs and initiatives. True sustainability covers environmental, social, and financial aspects holistically."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Low Water Usage	Uses advanced water filtration and recycling methods to significantly reduce water consumption.
Environmental Impact	Product Design	Reduces stonewashing production by using laser and eco-stone technologies
Digital Practices	Digital Design Tools	Utilises an integrated ERP system that connects the entire factory, facilitating digital quality control with tablet scanning

Digital Tools in Use

- **Canias ERP System:** Integrated enterprise resource planning tool used to streamline production, inventory, and business operations across departments.

Explore More

- LinkedIn Post | Denim Deal
- IULM Romain Narcy | Ereks-Blue Matters
- LinkedIn Post| Ereks-Blue Matters
- DDM Eğitim | Ereks-Blue Matters
- LinkedIn Post | rematters - textile recycling solutions | 11 comments

Birsen emphasised the need to fashion a sustainable future through innovation.

"Fashion is inextricably linked to deep tech and sustainability. It's no longer just about the product, but how it's made. We prioritise sustainable fabrics and use advanced tech like lasers to minimise waste in denim production. The future of fashion demands 'twin transformation': blending green practices with digital innovation. This means utilizing smart manufacturing to reduce resource consumption and create high-quality, responsible products. Fashion has a powerful role in showing that style and sustainability can go hand-in-hand."

Proposed Activity: Digital Meets Green: Designing the Next Digital Step for EREKS Blue Matters

Instructions:

In this activity, you will examine how EREKS Blue Matters currently uses digital technologies to support its sustainability goals. You will then move beyond analysis to propose new digital solutions that could further strengthen the company's environmental performance and digital maturity, applying twin transition thinking in a practical, real-world context. You will complete this activity in three stages.

Activity Goal:

The goal of this activity is to help you analyse how existing digital technologies support sustainability at EREKS Blue Matters, and to encourage you to think entrepreneurially by proposing new digital tools that could further enhance the company's digital maturity and environmental performance.Through this activity, you will develop an understanding of how digitalisation and sustainability are interconnected and mutually reinforcing in the fashion and textile industry.

Expected Outcome

After completing this activity, you should be able to critically analyse existing digital sustainability practices in a real company, apply toolbox-based digital thinking to propose new solutions, demonstrate entrepreneurial and future-oriented reasoning, and clearly articulate the twin transition logic within the fashion and textile industry.

Stage 1 — Analysing Existing Digital Technologies

Based on the EREKS Blue Matters case study, identify digital technologies or systems the company already uses.

For each example, briefly explain: What the digital tool does and how it contributes to sustainability (e.g. reduced waste, resource efficiency, transparency). Identify at least 2–3 examples.

Existing Digital Aspect	What It Enables	Sustainability Impact
Example: Digital production planning	*Better demand forecasting*	*Reduced overproduction*

Stage 2 — Proposing New Digital Tools

Now, imagine you are part of the innovation team at EREKS Blue Matters.

Using inspiration from the **FAIR FASHION Digital Toolbox**, propose at least two new digital tools or systems that could further strengthen the company's digitalisation and sustainability.

Proposed Digital Tool	Purpose	Expected Environmental Benefit
Example: Blockchain-based traceability	*Track material origins*	*Increased transparency & responsible sourcing*

Stage 3 — Innovation Pitch

In this final stage, you will again act as a member of the innovation team at EREKS Blue Matters.

Prepare a 2-minute pitch in which you present one digital solution you proposed in Stage 2. Your pitch should briefly explain:

- The problem or opportunity you identified
- The digital tool or system you propose
- How it strengthens both digitalisation and sustainability
- Why is it a realistic and valuable next step for the company

Reflection Questions

1. Which existing digital tool at EREKS Blue Matters currently creates the strongest sustainability impact?
2. Which proposed digital solution do you think would be most realistic to implement in the short term?

MYTH AI

FOUNDED

2020

EMPLOYEES

8

MARKET SCOPE

Local, national, and international

CUSTOMER TYPE

B2B and B2C - Offers direct services to consumers and businesses

SOCIAL MEDIA

WEBSITE

www.myth-ai.com

ROLE IN THE FASHION/ TEXTILE INDUSTRY

Myth AI is a deep-tech generative AI company rooted in design, sustainability, and efficiency innovation, producing AI-powered design products and solutions. The company pioneers the integration of these technologies in the fashion textile sector, home textile, carpet, ceramic, and gaming industries by developing intelligent, personalised design tools that combine rapid pattern generation with next-generation sustainable workflows.

Gökçe Dinçer underscored the transformative role of AI in accelerating and personalizing digital product development.

"At Myth AI, deep tech is central to our operations. We've integrated 3D product development, allowing clients across various sectors—from textiles to ceramics—to visualise designs digitally. Our AI platform, backed by Myth Academy, empowers efficient and personalised design, significantly streamlining processes and adding value for clients."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆ (Agree)	Utilises advanced visualization tools for product design, significantly reducing material waste and improving time management by eliminating the need for physical samples
Sustainable customer insights and Personalisation	☆☆☆ (Neutral)	Indirectly contributing to environmental impact through end-user behavior rather than direct application to sustainability concerns.
Digital tools in sustainable marketing and sales	☆☆☆ (Neutral)	Prioritises digital tools for marketing and sales, minimizing physical materials by utilizing QR codes and digital platforms
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Fully digital in its operations
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	Prioritises mutual learning and internal knowledge transfer, particularly within the technical team, by integrating incoming data and experience-based feedback
Data-driven sustainable decision making	☆☆ (Disagree)	Commercial decision making, manages resource consumption by strategically limiting high-resolution output,
Innovation, adaptability, and sustainability	☆☆☆☆ (Agree)	Operates digitally, promoting sustainability with positive environmental impacts largely driven by end users.

Sustainability & Digital Innovation Highlights

- **AI-Powered 3D Design:** Offers AI tools for 3D product and pattern design, reducing the need for physical samples and material waste.
- **Personalised AI Platforms:** Creates custom AI platforms for clients, enabling unique, on-brand design generation.
- **Resource-Efficient Workflow:** Promotes digital design to significantly reduce the carbon footprint from traditional sampling.
- **Operational Digitalisation:** Emphasises digital internal processes, including paperless marketing.
- **Continuous Digital Training:** Focuses on internal training for all teams to maximise digital tool utilisation and innovation.

Dinçer emphasised that harnessing digital tools is key to enabling sustainable, low-impact production in fashion:

"Myth AI contributes to sustainability by minimizing physical waste in production. Our platform lets clients visualise designs digitally, cutting down on material waste and saving time. We also manage our own footprint, for example, by limiting server use for high-resolution outputs to manage energy consumption. Our digital-first approach inherently promotes efficiency and resource conservation for our clients."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Product Design	Minimises waste in the design process and accelerating production with eco-conscious
Digital Practices	Digital Design Tools	Accelerates collection development by 90%, enabling fashion brands to design trend-driven, personalised, and sustainable collections in seconds.

Digital Tools in Use

- **Pipedrive:** CRM platform used by sales admins and managers to streamline sales processes and manage pipelines.
- **Instagram:** Engagement tool leveraged by the sales team to connect with audiences and promote products.
- **YouTube:** Educational and promotional channel used by sales and design teams to share tutorials and product use cases.

Explore More

- https://myth-ai.com/about-us/
- https://www.youtube.com/@MYTHAIGENERATOR?themeRefresh=1

Dinçer asserted that the future of fashion lies at the intersection of digital innovation and environmental responsibility.

"Fashion is crucial for the twin transformation of digitalization and sustainability. Our advanced 3D CAT systems and AI tools enable fashion brands to iterate designs digitally, reducing the need for physical prototypes, and thereby minimizing waste and energy. This digital shift is key to making fashion more sustainable, proving that innovation drives both style and ecological responsibility."

Proposed Activity: Redesigning MYTH AI with Sustainability Intentionality

Instructions:

In this activity, you will analyse the business model of MYTH AI and redesign it using the Triple Layer Business Model Canvas (TLBMC) to make sustainability a deliberate and central objective, rather than a secondary outcome.

Activity Goal:

The goal of this activity is to help you understand sustainability intentionality by redesigning a digital fashion business model using the economic, environmental, and social layers of the TLBMC.

You will explore how AI-driven innovation can be aligned with sustainability goals in a structured and measurable way.

Expected Outcome

After completing this activity, you will be able to use the Triple Layer Business Model Canvas to redesign a digital fashion business model with clear sustainability intentionality and explain how intentional sustainability strengthens the twin transition.

Stage 1 — Analysing MYTH AI's Current Business Model

Using the case study, analyse MYTH AI's existing business model. Focus on:

- How MYTH AI creates value through AI and digital tools
- Where sustainability benefits currently appear (if at all)
- Whether sustainability is intentional, indirect, or missing
- Briefly note your observations before moving to the redesign stage.

Stage 2 — Redesigning the Business Model with TLBMC

Redesign MYTH AI's business model using the Triple Layer Business Model Canvas. When completing the canvas:

- Economic Layer: Identify how sustainability-driven value creation strengthens competitiveness and long-term viability.
- Environmental Layer: Define explicit environmental objectives (e.g. waste reduction, resource efficiency, avoided overproduction) enabled by AI.
- Social Layer: Consider impacts on stakeholders such as designers, brands, and supply-chain actors.

Your redesign should clearly show how sustainability becomes a core intention, not an accidental outcome.

Reflection Question:

How does redesigning MYTH AI's business model with the Triple Layer Business Model Canvas change sustainability from an indirect benefit into an intentional strategic objective?

Orhun AI Labs - Optimimax

FOUNDED

2020

EMPLOYEES

8

MARKET SCOPE

Local, national, and international

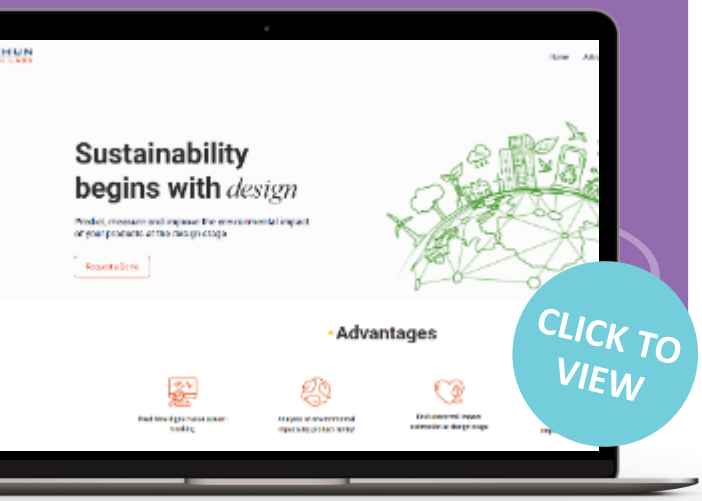
CUSTOMER TYPE

B2B - Offers direct services to businesses

SOCIAL MEDIA

WEBSITE

http://www.optimimax.com/



ROLE IN THE FASHION/ TEXTILE INDUSTRY

Orhun AI Labs' Optimimax is an eco-design software company rooted in sustainability, AI, and environmental impact prediction, producing AI-powered digital assistance for sustainable product development. The company pioneers the integration of these technologies in the textile sector and beyond by developing intelligent, performance-driven software that combines AI-powered impact forecasting with next-generation eco-design solutions.

Betül Bayram Uzun revealed how their Eco-Design AI Assistant is reshaping sustainable production by predicting environmental impacts from the very first design sketch:

"Our Eco-Design AI Assistant is revolutionizing how companies approach sustainability, predicting environmental impacts from the earliest design stages, directly integrating with a company's ERP and machine data. This allows us to estimate real-time impacts, like energy consumption based on production location, giving our clients a clear picture of their footprint and where to improve. It's a game-changer for proactive sustainability."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Leverages digital tools to from coding to project management.
Sustainable customer insights and Personalisation	☆☆☆☆☆ (Strongly Agree)	Digital tools are being used for customer data and insight.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Digital tools are being used for customer data and insight.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	All product development and design processes are digital, with a rare environmental externality.
Employee training in sustainability and digital technologies	☆☆☆☆☆ (Strongly Agree)	Employment trainings are enabled for all team during the phase of skills development for AI technologies.
Data-driven sustainable decision making	☆☆☆ (Neutral)	Although data driven, engagement and insight development is mainly done through conventional channels of the sector
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Continuously develops AI Technologies within the company

Sustainability & Digital Innovation Highlights

- **Eco-Design Prediction:** Uses AI to predict environmental impacts from product design, integrating with client data for early impact estimation.
- **Real-time Impact Monitoring:** Tracks environmental impacts during production for continuous improvement and efficiency gains.
- **Cross-Sector Application:** Extends AI-powered impact prediction beyond textiles to other high-impact manufacturing sectors.
- **Data-Driven Decisions:** Empowers sustainable choices through data and AI-driven insights.
- **Digital Operations:** Maintains fully digital internal operations and uses HubSpot for CRM.

Uzun addressed the hurdles of scaling sustainability tech in Türkiye:

"The market for sustainability solutions is still maturing, particularly in textiles, despite growing pressure from initiatives like the Green Deal. While we work with major players, we're actively exploring other high-impact sectors, such as metal manufacturing, and strategically expanding into the European market. Our recent market research in the Netherlands confirmed strong demand for our innovative solutions, signaling a promising future abroad even as the domestic market develops."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Product Design	The AI tool helps companies minimise environmental impact and enhance product lifecycle management with less hazards, currently being focused on apparel sector.

Digital Tools in Use

- **Hubspot Tool:** Customer relationship platform used by company employees to manage customer data and gain actionable insights.

Explore More

- https://www.linkedin.com/posts/orhunailabs_optimimax-circulareconomy-twintransformation-activity-7293208519648907264-nKXl?utm_source=share&utm_medium=member_desktop&rcm=ACoAABjp3p4ByU6hwxPJy1O90vMrzYUfNloouDo
- https://www.linkedin.com/posts/orhunailabs_amsterdam-nfia-amsterdam-activity-7285932623678361600-gOnn?utm_source=share&utm_medium=member_desktop&rcm=ACoAABjp3p4ByU6hwxPJy1O90vMrzYUfNloouDo

Uzun showcased how continuous learning and seamless operations power both innovation and client success.

"Optimimax runs on a completely digital foundation. From coding to project management, we leverage digital tools extensively, recently integrating HubSpot for enhanced customer relationship management. Our commitment to digital goes hand-in-hand with a strong culture of continuous internal training. We constantly share knowledge across our technical, marketing, and sales teams, ensuring everyone is up-to-date on new AI tools and best practices. This internal learning loop is key to our efficiency and client engagement."

Proposed Activity: From Case Study Matching to Strategic Insight

Instructions:

Digital optimisation tools can help companies reduce waste, improve efficiency, and make more informed environmental choices—but their value depends on where and how they are applied. In this activity, you will explore how Orhun AI Lab's optimisation tools could support sustainability across different business contexts, using real companies from the FAIR FASHION case study collection. This activity consists of two parts.

Activity Goal:

The goal of this activity is to help you understand how data-driven optimisation tools can support sustainability by:

- Identifying suitable use cases across different companies
- Linking optimisation logic to environmental outcomes
- Exploring how digital tools enable strategic, evidence-based sustainability decisions

Expected Outcome

By completing this activity, you will be able to identify relevant use cases for digital optimisation tools, explain how data-driven decisions support sustainability outcomes, and articulate the strategic role of optimisation technologies in the twin transition.

Part A — Identifying Suitable Company Matches

Review the FAIR FASHION case study collection. Select two companies (excluding Optimimax) that you believe would significantly benefit from Optimimax. For each selected company, answer the following questions:

1. What is the main operational or sustainability challenge the company faces?
2. Which aspect of Optimimax's tool could address this challenge?
3. How could optimisation lead to measurable sustainability benefits (e.g. reduced waste, lower energy use, improved resource efficiency)?

Use the table below to structure your analysis:

Selected Company	Identified Challenge	How Optimimax Could Help	Sustainability Benefit

Part B — Data-Driven Sustainability at Optimimax

Now focus on Orhun AI Labs itself. Answer briefly:

- How can a company like Orhun AI Labs support data-driven sustainable decision-making for its clients?
- What types of data are most critical for enabling sustainability-focused optimisation?
- How does using data shift sustainability decisions from intuition to evidence-based strategy?

You may draw on examples from the Orhun AI Labs - Optimimax case study or insights from the FAIR FASHION Digital Toolbox.

Reflection Questions:

- How does applying Optimimax's tools to different companies demonstrate that sustainability challenges require data-driven, context-specific solutions rather than one-size-fits-all approaches?
- In what ways can data-driven decision-making change sustainability from a reactive goal into a proactive strategic practice for both Orhun AI Labs and its clients?

WearTechClub

FOUNDED

2023

EMPLOYEES

16

MARKET SCOPE

Local, national, and international

CUSTOMER TYPE

B2B and B2C - Offers direct services to consumers and businesses

SOCIAL MEDIA

WEBSITE

www.weartechclub.com

ROLE IN THE FASHION/ TEXTILE INDUSTRY

WearTechClub is a deep-tech wearable technology company rooted in sustainability, AI, and health innovation, producing performance-based smart apparel with AI-powered digital training. The company pioneers the integration of these technologies in the fashion textile sector in Türkiye and beyond by developing intelligent, performance-driven apparel that combines digital training with next-generation wearable solutions.

Özgül Dalkılıç explains how they blend deep tech, health and fashion:

"Our wearable technology products bring together not just fabric, but also artificial intelligence, IoT, embedded software, and health sciences. With our multidisciplinary team based at ITU ARI Teknokent, we're developing garments that can analyze everything from muscle and nerve movements to key health indicators. Our goal is to create a digital health companion that empowers individuals to monitor and understand their own data."

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Leverages IoT and AI tools to optimise resource use, reduce waste, and improve operational efficiency.
Sustainable customer insights and Personalisation	☆☆☆☆☆ (Strongly Agree)	Advanced data analytics are utilised to offer personalised eco-friendly product recommendations.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Data-driven insights are used to target eco-conscious audiences, reducing carbon footprint while promoting transparency.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Digital prototyping and sustainable material selection tools are used to minimise environmental impact.
Employee training in sustainability and digital technologies	☆☆☆☆☆ (Strongly Agree)	Staff trained to use digital tools on AI, IOT and adopt sustainable practices.
Data-driven sustainable decision making	☆☆☆☆☆ (Strongly Agree)	Decisions are strongly influenced by digital insights.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Proactive in adopting digital and green innovations.

Sustainability & Digital Innovation Highlights

- **Smart Clothing with AI & IoT:** Wearables track health data via embedded sensors, supported by mobile app integration.
- **Circular Product Design:** Uses 90%+ sustainable materials and a repair-return model to extend product life.
- **Digital Health Platform:** Tiered app-based memberships offer real-time insights and expert feedback.
- **Data for Impact:** Health tracking reduces healthcare costs and supports early intervention.
- **Continuous Innovation:** Monthly workshops and team training drive sustainable, tech-forward development.
- **Certified Materials:** Collaborates with certified suppliers and plans full green certification at scale.

Dalkılıç emphasised the critical role of the take-back-repair-resend model of WearTechClub:

"For us, sustainability is not just about materials—it's about reducing healthcare costs, extending product life, and empowering users. We use over 90% sustainable materials and implement a take-back–repair–resend system for worn-out items. These efforts contribute not only to reducing textile waste but also to alleviating pressure on healthcare systems, making it a true green transformation."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Recycled Materials	Uses high-performance recycled polyamide sourced from certified suppliers.
Environmental Impact	Product Design	Designs smart garments for circularity and long-term use, minimizing environmental impact.
Green Practices	Waste Reduction	Implements a repair-return system to extend product life and reduce textile waste.
Green Practices	Reduced Carbon Footprint	Health tracking via wearables aims to reduce healthcare-related emissions by enabling early intervention.
Digital Practices	Digital Design Tools	Utilises digital tools for embedded tech integration, garment development, and app-based services.
Digital Practices	E-commerce Sustainability	Offers a digital membership model instead of physical product-focused sales, reducing unnecessary production.

Digital Tools in Use

- **SolidWorks:** Advanced industrial design and 3D modeling for product development.
- **ESP32 Framework:** IoT device development tailored for wearable technology.
- **TensorFlow:** AI and machine learning model development for smart systems.
- **CLO 3D:** 3D prototyping solution for realistic garment visualisation and design.
- **Zephyr RTOS:** Real-time operating system optimised for embedded device control.
- **MATLAB:** Biomechanical data analysis for performance and product optimisation.
- **PyCharm:** Python programming environment for AI and embedded software development.
- **GitHub:** Version control and collaboration platform for code and project management.

Explore More

- WearTechClub Smart Sportswear Video
- WearTechClub Launch Video ISPO – Munich Dec 2024
- WearTechClub Founder is pitching Video
- WearTechClub Sabanci Sunum Nano Open Webinar Video

Dalkılıç, also, commented how fashion today must combine function with purpose, driving sustainability.

"Fashion today is defined not just by aesthetics, but also by function and responsibility. At WearTechClub, we merge performance-focused, health-monitoring, and sustainably made garments to unite fashion with well-being and environmental awareness. Wearable tech gives us a whole new perspective on the future of textiles."

Proposed Activity: Using CLO 3D in the Case of WearTechClub

Instructions:

In this activity, you will explore how WearTechClub uses CLO 3D and analyse how this tool contributes to sustainability outcomes by transforming traditional design and production processes.

Activity Goal:

The goal of this activity is to help you understand how 3D digital design tools, specifically CLO 3D, support sustainable practices in fashion by reducing material waste, energy use, and overproduction.

Expected Outcome

After completing this activity, you will be able to explain how CLO 3D reduces environmental impact in fashion design, analyse its application within a real ecosystem like WearTechClub, and articulate how digital design tools enable sustainability.

Analysing CLO 3D's Sustainability Impact

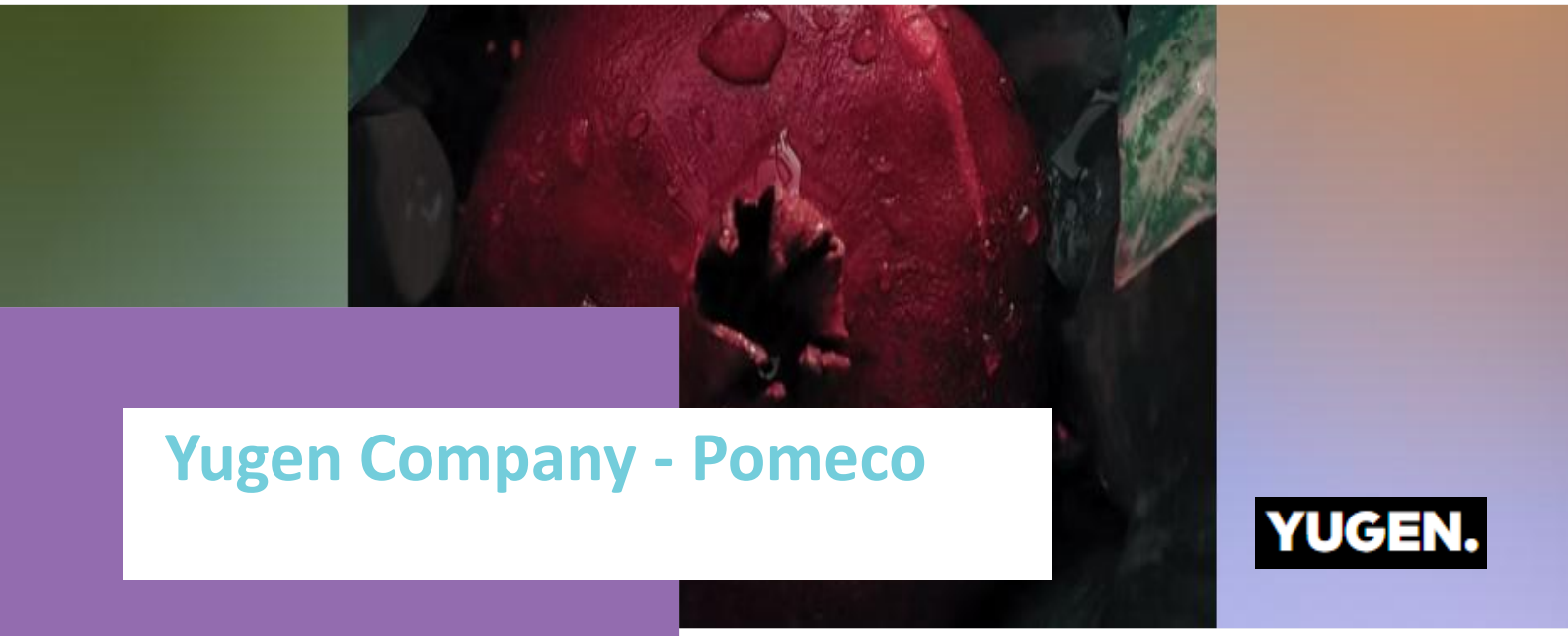
Based on the WearTechClub case study and the CLO 3D description in the Digital Toolbox, answer the following:

1. How does/would WearTechClub integrate CLO 3D into its activities (e.g. training, prototyping, design development)?
2. Which stages of the traditional fashion design process are replaced or reduced through CLO 3D?
3. Match the CLO 3D functions below with their primary sustainability impact:

CLO 3D Function	Sustainability Impact
Virtual garment prototyping	Reduced physical samples
Digital fitting and simulation	Lower material waste
3D design iteration	Reduced time, energy, and resource use
Digital asset creation	Lower carbon footprint from logistics

Reflection Questions:

1. Which sustainability challenges (e.g. overproduction, waste, inefficient sampling) are most effectively addressed through CLO 3D?
2. How does using CLO 3D change sustainability from a late-stage correction into an early-stage design choice?



Yugen Company - Pomeco

YUGEN.

FOUNDED

2022

EMPLOYEES

4

MARKET SCOPE

Local, national, and international

CUSTOMER TYPE

B2B

SOCIAL MEDIA

WEBSITE

www.yugencompany.com

ROLE IN THE FASHION/ TEXTILE INDUSTRY

Yugen Company operates as a start-up with a strong focus on circular and sustainable material innovation within the textile industry. They develop plant-based, eco-conscious materials that serve as viable alternatives to traditional and synthetic leathers. With POMECO, they upcycle pomegranate peels sourced from juice production, effectively minimizing agricultural waste while aligning with scalable, sustainable production practices. Their process, which is patent-pending, integrates into existing manufacturing systems, demonstrating a commitment to environmental impact and sustainable innovation.

Sevgi Karkın underlined Pomeco's strategic scalability and sustainable design:

«Thanks to our conscious partnership strategy, we built a scalable system from day one—turning fruit waste into a sustainable leather alternative that fits directly into existing production lines.»

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆ (Neutral)	Does not have any daily operations as they are an early stage startup
Sustainable customer insights and Personalisation	☆☆☆ (Neutral)	Conducts customer research at an optimal level, identifying brands committed to sustainable decisions and aligned objectives
Digital tools in sustainable marketing and sales	☆☆☆☆ (Agree)	A separate branding effort, including Instagram and a website, is currently being developed to articulate the positive environmental impact of the product
Sustainable product development and design	☆☆ (Disagree)	Planning Stage
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	Staff is trained to use available and planned digital tools
Data-driven sustainable decision making	☆☆☆☆ (Agree)	Decisions are influenced by digital insights.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Proactive in adopting digital and green innovations

Sustainability & Digital Innovation Highlights

- **Scalable Bio-Leather:** Upcycles pomegranate waste from Döhler into sustainable leather, ensuring consistent, circular sourcing.
- **Smart Production Partnerships:** Integrates with existing leather facilities for efficient, scalable manufacturing.
- **Custom & Consistent:** Delivers tailored materials for fashion and auto sectors, with high-quality texture and colour control.
- **Digital Growth Plans:** Exploring CRM/ERP systems and lifecycle tools to manage B2B relations and track impact.
- **Purposeful Branding:** Building a digital identity that reflects its commitment to sustainability.

Karkın emphasised the essentiality of customised fashion branding approach that Yugen Company offers:

"From colour consistency to texture, each brand asks for something unique—so we design with flexibility in mind, balancing high standards with adaptability."

Featured Good Practices

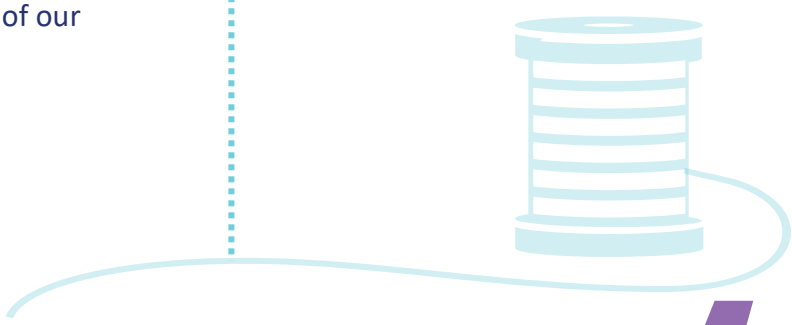
Category	Practice Area	Description
Environmental Impact	Low Water Usage	POMECO uses significantly less water in production compared to traditional leather.
Environmental Impact	Reduced Carbon Footprint	Replaces animal-based and petroleum-based materials, minimising carbon emissions.
Environmental Impact	Product Design	Designed with sustainability principles, incorporating circular economy practices.
Digital Practices	Digital Design Tools	Early stage on usage of digital practices.
Animal Welfare	Vegan Materials	Pomeco is 100% vegan.

Digital Tools in Use

- **Impact Forecast:** Used to conduct impact assessments and generate SDG profiles, widely adopted by environmentally focused startups.
- **openLCA:** Life Cycle Assessment software planned for use in evaluating the full environmental impact of our products.

Explore More

- https://www.yugencompany.com/
- https://www.linkedin.com/company/yugen-company/?originalSubdomain=tr



Looking ahead, Karkın highlighted how digital tools will shape their roadmap for growth and digital transformation.

"As we scale, integrating tools like CRM and life cycle assessment software will be key to managing customer relations and quantifying our environmental impact."

Proposed Activity: Choosing the Right Digital Tools for Sustainable Product Development at YUGEN

Instructions:

In this activity, you will explore how YUGEN could further develop its sustainable product design process by strategically using digital tools from the FAIR FASHION Digital Toolbox.

Activity Goal:

The goal of this activity is to help you understand how digital design and decision-support tools can strengthen sustainable product development.

Expected Outcome

By completing this activity, you will be able to identify suitable digital tools for sustainable product development, explain how they influence design decisions, and demonstrate how digitalisation strengthens sustainability outcomes in fashion design.

Part A — Identifying Design Challenges

Based on the YUGEN case study, identify **two possible sustainability challenges related to product development and design** (e.g. material use, sampling, durability, lifecycle impact). Briefly describe each challenge in your own words.

Part B — Selecting Digital Toolbox Tools

Now imagine you are part of YUGEN's product development and design team.

From the FAIR FASHION Digital Toolbox, select two digital tools that could support YUGEN in addressing the design challenges you have identified. For each tool, explain:

- What the tool is used for
- At which stage of product development it is applied
- How it supports more sustainable design decisions

Use the table below:

Digital Toolbox Tool	Design Stage	How It Supports Sustainability

Reflection Question:

How does using digital tools in the early design phase help companies reduce their environmental externalities more effectively than making changes later in the production process?

THE NETHERLANDS

CASE STUDIES

1. Mended
2. The Fabricant

MENDED

FOUNDED

2022

EMPLOYEES

2 founders, 2–10 employees

MARKET SCOPE

Netherlands, Germany

CUSTOMER TYPE

B2B & B2C — Online clothing repair, alteration, and resale services

SOCIAL MEDIA

WEBSITE

www.mended.eu

ROLE IN THE FASHION/ TEXTILE INDUSTRY

MENDED fills a pivotal role in the circular fashion movement by transforming repair from a niche, offline service into a mainstream, brand-integrated offering. The platform digitises the repair journey—from booking and shipping to local tailor fulfilment and delivery—transforming garment repair into a customer experience that rivals buying new. By partnering with sustainable brands like Kings of Indigo and MUD Jeans, MENDED aligns circular economy principles with modern consumer expectations. Their collaboration with Tom Tailor underlines how repair services can deepen brand loyalty, create recurring revenue opportunities, and shift consumer behaviour toward more sustainable wardrobe habits.

Weber also commented on how fashion brands can drive the adoption of repair services, affecting sustainability:

"If repair is done right—and by right, I mean making it as easy as buying new—then the customer adoption curve is huge. The usage is always exceeding expectations of what brands think, even if they think they know the customer."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Fully digital bookings, tracking, and analytics via an online portal and CRM
Sustainable customer insights and Personalisation	☆☆☆☆ (Agree)	Repair data enables tailored loyalty offers and reveals repair needs
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Repair services integrated into brand platforms, increasing engagement.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Repair insights guide material choices and design improvements
Employee training in sustainability and digital technologies	☆☆☆☆☆ (Strongly Agree)	Handles logistics and tech, while skilled tailors focus on craftsmanship
Data-driven sustainable decision making	☆☆☆ (Neutral)	Drives growth through repair analytics and partnerships.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Award-winning newcomer, expanding regionally and integrating with global brands

Sustainability & Digital Innovation Highlights

- Fully digital repair platform streamlines bookings, shipping, and tracking.
- Integrates with brand loyalty programmes to deepen engagement.
- Extends garment life, reducing waste and resource use by up to 30%.
- Provides data to brands for better product design and sustainability decisions.
- Connects a network of skilled local tailors for fast, high-quality repairs.

Weber reflected on how MENDED makes repair part of a modern brand experience:

"For us, doing it right means focusing on the experience and the play. So especially for the mid to high price brands, that's really important. Customers expect these sort of services, not necessarily from a sustainability point of view, but from a service and quality expectation towards the brand."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Waste Reduction	Extends garment life and cuts textile waste by promoting repair over disposal.
Environmental Impact	Circular Services	Enables brands to offer repair as a standard, reducing the need for new production.
Digital Practices	Seamless Repair Platform	Uses a fully digital portal for booking, tracking, and managing repairs efficiently.

Digital Tools in Use

- Booking Portal: Online system for customers and brands to request and track repairs.
- Tailor Dashboard: Digital interface for tailors to manage, update, and complete repair orders.
- Brand Dashboard: Platform for brands to monitor campaigns, repairs, and customer engagement.
- Integrated CRM: Tool for managing communication, customer data, and service logistics.
- Analytics Platform: Provides insights on repair trends, garment issues, and sustainability metrics.

Explore More

- MENDED Clothing Repair Platform
- Tom Tailor x MENDED Repair Collaboration
- Making Circular Fashion Fun – Podcast with Agnes Weber
- What If We Can Wear Our Favorite Clothes For Longer? – FashionUnited Article

Weber explained the unique business challenge and opportunity for fashion repair:

"Repair is not a process that can be replicated like a production process where everything is mass. Repair is very much individual and one-off… The real opportunity is in the fact that brands are looking for new business models and new ways of interacting with the customer. Repair can be a key customer engagement moment."

Proposed Class Activities Aligned with MENDED

Instructions:

*Divide the class into **5 groups of 5 students**.*
Assign each group one stakeholder in MENDED's ecosystem:

Group A: Customer
Group B: Fashion brand partner
Group C: Local tailor
Group D: MENDED platform team (tech & logistics)
Group E: Sustainability & data analytics team

Each group maps their stakeholder's journey in the repair process:

- First contact / trigger for repair
- Digital tools used
- Decisions made
- Pain points
- Sustainability impact

Groups design improvements to the journey using MENDED's digital tools (booking portal, dashboards, CRM, analytics).
*After 30 minutes, groups combine their work into one shared **end-to-end digital service blueprint**.*
Each group presents their section (3 minutes each).

Activity Goal:

- Understand how digital platforms enable circular business models.
- Explore repair as a scalable fashion service rather than a niche craft.
- Analyse the interaction between technology, brands, and local craftsmanship.
- Learn how customer experience drives sustainable behaviour.

Expected Outcome

AT the end of this activity, you will be able to:

- Describe how digital tools coordinate complex repair logistics.
- Explain how repair services reduce environmental impact and extend product life.
- Identify value creation for brands, customers, and tailors.
- Visualise how circular services operate at scale.

Activity 1 –

This activity turns the classroom into a living garment, stitched together by data instead of thread. One group listens to the customer's frustration over a torn seam, another hears the soft hum of a tailor's machine, while others translate both into dashboards and delivery routes.
As the journey unfolds, repair reveals itself not as a humble afterthought but as choreography: parcels moving like notes in a score, digital confirmations tapping time, hands and software trading the needle. Sustainability appears not as a lecture, but as a side effect of convenience done well.

Proposed Class Activity 2

Instructions:

*Divide the class into **5 groups of 5 students**.*
Each group acts as a consultancy team hired to help a fashion brand integrate MENDED's repair services.

Assign each group a brand profile:

Group A: Premium denim brand
Group B: Fast-fashion retailer transitioning to sustainability
Group C: Outdoor apparel brand
Group D: Luxury fashion label
Group E: Online-only direct-to-consumer brand

*Each group designs a **repair-based customer engagement strategy**, including:*

- How the repair service is presented to customers
- Digital touchpoints used
- Loyalty or incentive mechanisms
- Data collected and how it is used
- Expected sustainability benefits

Groups prepare a short presentation or strategy sheet.
Each group presents (4–5 minutes).
The class votes on the most convincing and scalable strategy.

Activity Goal:

- Understand repair as a commercial and marketing innovation.
- Analyze how circular services can increase brand loyalty.
- Explore data-driven sustainability strategies.
- Practice designing service-based business models.

Expected Outcome

AT the end of this activity, you will be able to:

- Propose viable business models for fashion repair services.
- Connect sustainability goals with customer experience design.
- Understand how data from repairs informs product development.
- Evaluate repair as a competitive advantage rather than a cost.

Activity 2 –

In this lab, repair steps onto the stage wearing a tailored suit. Students discover that a stitched pocket can be a marketing channel and a zipper replacement a customer relationship.

Teams shape loyalty programs from loose threads, weave analytics into brand storytelling, and design experiences where care becomes currency. Slowly, the idea settles in: garments do not retire. They accumulate biographies. And brands, like careful editors, can decide whether those stories fade into landfill or continue, chapter after chapter, seam after seam.

The Fabricant

FOUNDED

2018

EMPLOYEES

5 (1 woman, 4 men, 1 is gay – diversity details can be added)

MARKET SCOPE

International (operates globally in digital fashion)

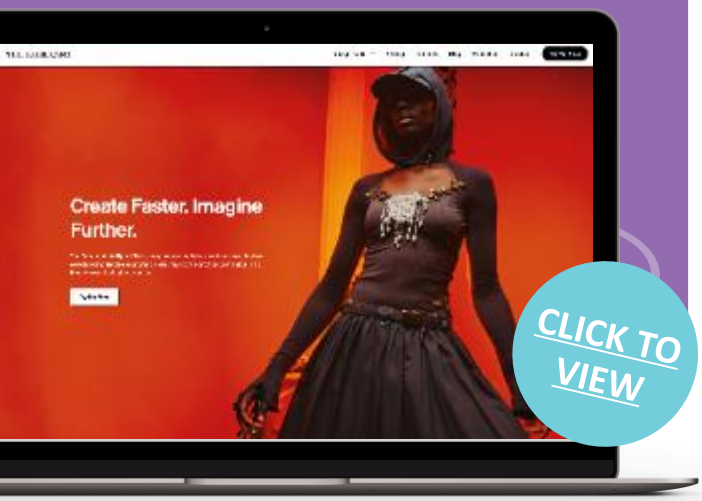
CUSTOMER TYPE

B2B (serving fashion brands/industry), previously experimented with B2B2C.

SOCIAL MEDIA

WEBSITE

https://www.thefabricant.com/



ROLE IN THE FASHION/ TEXTILE INDUSTRY

As a frontrunner in digital fashion, The Fabricant empowers industry players to adopt entirely virtual design and marketing processes. The company originated as a reaction to unsustainable practices in traditional fashion, initially offering digital fashion shows and later transitioning into full-service digitalization of catalogues and marketing assets for brands. Today, The Fabricant's main focus lies in the development of proprietary AI-powered software that streamlines the design-to-visualization pipeline, making it possible for brands and designers to create, review, and approve collections digitally. This enables a significant reduction in unnecessary sampling and physical production, driving both efficiency and positive environmental impact.

Adriana Pereira explains how The Fabricant incorporates AI into their services:

"The mission is still the same: to actually make a more sustainable and profitable industry, through digitalisation. The way we are doing it now is the smartest one, because you don't need training, you don't need to change your processes—it's just doing the same process with new tools that are very fast and easy to implement."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆ (Agree)	All processes are digital, ensuring a paperless, waste-free workflow.
Sustainable customer insights and Personalisation	☆☆ (Disagree)	AI tools offer tailored solutions for clients of all sizes.
Digital tools in sustainable marketing and sales	☆☆☆ (Neutral)	Sales and marketing use only digital assets, no physical samples needed.
Sustainable product development and design	☆☆☆☆ (Neutral)	Design, iteration, and approval happen virtually, reducing material use.
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	The platform is intuitive and requires minimal training.
Data-driven sustainable decision making	☆☆☆☆ (Agree)	AI insights drive efficiency and sustainable choices.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	The Fabricant continually innovates for greater sustainability.

Sustainability & Digital Innovation Highlights

- **Digital Sampling:** Replaces physical samples and showrooms with fully digital design and approval, minimising waste and reducing material use.
- **AI-Driven Design:** Provides intuitive AI-powered tools for fast, creative design and photorealistic visualisation.
- Paperless Workflow: All operations and approvals are handled digitally, eliminating the need for printed materials.
- **Accessible Technology**: Makes advanced digital tools available to both large brands and independent designers, lowering entry barriers.
- **Process Efficiency:** Speeds up collection development, reduces costs, and supports sustainable, on-demand production.

Pereira commented on digitalisation as a major driver of sustainability in the fashion industry:

"By shifting all design and approval processes to digital, we eliminate unnecessary sampling and waste. This approach not only reduces the industry's environmental impact but also enables brands to be more creative and efficient."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Waste Reduction	Eliminates physical sampling and photoshoots through fully digital design and approval.
Environmental Impact	Virtual Product Development	Enables brands to iterate collections without producing unnecessary materials.
Digital Practices	AI-Powered Design Tools	Provides advanced, user-friendly solutions for rapid, creative digital prototyping.

Digital Tools in Use

- **Intelligent Tools Suite:** Proprietary AI-powered software for transforming designer sketches and references into photorealistic digital fashion visuals.
- **Pattern Visualisation:** Enables rapid virtual prototyping and internal approval of new designs without the need for physical samples.
- **Automated Editing:** Integrated editing features for instant adjustments and customisation directly within the platform.
- **Fully Digital Workflow:** All design, iteration, and approvals are managed digitally, with no need for external 3D modelling tools.
- **Digital Asset Management:** Supports the complete lifecycle of digital assets from concept to marketing materials.

Explore More

- AI Pattern Design Demo
- Sketch-to-Photoreal Tool
- Model Photography Studio
- Workflow Video Demo

Pereira also commented on how fashion drives the industry's sustainability shift:

"Our goal is simple: empower designers to create without limits while making fashion more accessible, efficient, and sustainable."

Proposed Class Activity 1 Aligned with The Fabricant

Instructions:

Divide the class into **5 groups of 5 students**.
Assign each group one stage of the traditional fashion design and development process:

Group A: Concept & creative direction
Group B: Design & pattern development
Group C: Sampling & prototyping
Group D: Collection approval & marketing assets
Group E: Production planning & sales preparation

Ask each group to first outline how their stage works in a **traditional physical workflow** (materials used, time, costs, waste generated).

Then, using The Fabricant case study, each group redesigns their stage using a **fully digital workflow**, including:

- Which AI or digital tools are used
- How decisions are made digitally
- What physical resources are eliminated
- How sustainability improves

Groups summarise their work on a poster or shared digital board.
Each group presents their "before vs after" transformation (4 minutes per group).
As a class, connect the redesigned stages into one continuous digital pipeline.

Activity Goal:

- Understand how digitalisation transforms fashion product development.
- Analyse the sustainability impact of AI-powered design and digital sampling.
- Compare traditional and digital workflows critically.
- Develop awareness of process innovation in the fashion industry.

Expected Outcome

At the end of this activity, you will be able to:

- Describe the environmental and economic benefits of digital fashion workflows.
- Identify key AI tools used in virtual design and visualisation.
- Explain how digital sampling reduces waste and speeds up time-to-market.
- Map the complete digital product development cycle.

Activity 1 –

This activity invites students to take apart the fashion industry's familiar machinery and rebuild it with light instead of fabric. Scissors become software. Samples evaporate into pixels. The classroom becomes a design studio where garments are born without ever touching a cutting table.
As each group replaces cardboard boxes of samples with invisible files floating between screens, the contrast sharpens: creativity no longer drags a tail of discarded fabric behind it. What emerges is a production process that travels at the speed of approval clicks, leaving only ideas and electricity in its wake.

Proposed Class Activity 2 Aligned with The Fabricant

Instructions:

Divide the class into **5 groups of 5 students**.
Each group becomes a digital design team using The Fabricant's AI platform to develop a mini virtual collection for a fictional brand.
Assign each group a brand profile:

Group A: Luxury fashion house
Group B: Streetwear brand
Group C: Sustainable independent designer
Group D: Sportswear company
Group E: Digital-only fashion label

Each group defines:

- Target customer
- Collection theme
- Sustainability goals
- How AI tools will support design and visualisation

Groups create a **concept presentation** (sketches, mood boards, or written descriptions of digital outputs) explaining:

- How AI replaces physical sampling
- How approvals are handled digitally
- How marketing assets are created without photoshoots
- What resources are saved

Each group presents their virtual collection strategy (5 minutes).
The class discusses which approach delivers the strongest mix of creativity, efficiency, and sustainability

Activity Goal:

- Explore AI as a creative partner in fashion design.
- Understand digital fashion as both a sustainability tool and a business model.
- Practice strategic thinking for B2B fashion services.
- Strengthen collaboration and conceptual design skills.

Expected Outcome

At the end of this activity, you will be able to:

- Demonstrate how AI tools support rapid design and iteration.
- Articulate sustainability benefits of digital-only sampling and marketing.
- Understand how brands integrate digital assets into commercial workflows.
- Propose realistic digital fashion strategies for different market segments.

Activity 2 –

Here, the classroom turns into a constellation of tiny virtual ateliers, each stitching collections from algorithms instead of thread. Jackets are rendered before they are imagined in cotton. Models pose without casting calls. Approval emails replace garment bags.
Students quickly discover that in this studio, sustainability is not an afterthought sewn into a label. It is woven into the operating system itself. Design becomes lighter, faster, strangely weightless, like fashion learning to leave footprints made of data instead of dye.

Human Material Loop

FOUNDED

2022 (research phase), officially incorporated in 2023

EMPLOYEES

5

MARKET SCOPE

Local (Netherlands)
Headquarters: Helene, NL

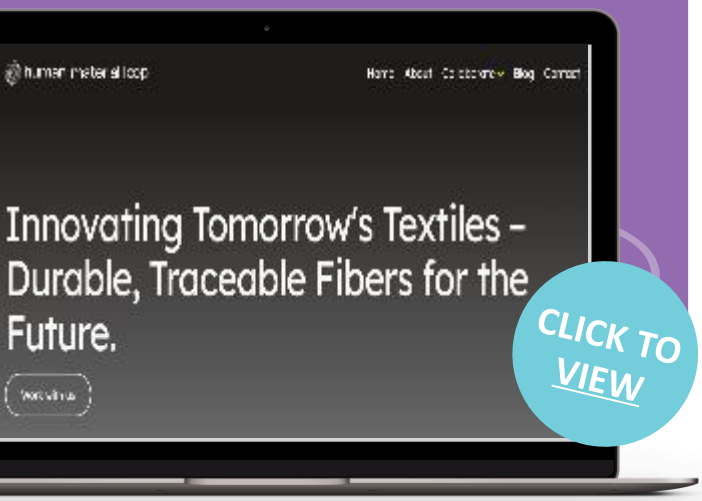
CUSTOMER TYPE

B2B – supplies textile fibers and materials to designers, brands and manufacturers

SOCIAL MEDIA

WEBSITE

www.humanmaterialloop.com



ROLE IN THE FASHION/ TEXTILE INDUSTRY

Human Material Loop operates in textile production and material innovation, with applications in both fashion and interior textiles. The company develops and produces Adara, a keratin-based textile fiber derived from human hair waste.
By transforming locally sourced waste streams into functional, high-quality fibers, the company positions itself as a circular-material innovator at the very beginning of the fashion value chain. Rather than creating finished garments, Human Material Loop enables other fashion companies to design and manufacture more sustainable products by replacing conventional synthetic or resource-intensive fibers with a regenerative alternative.

Founder Zsófia Kollár explains: Human Material Loop emerged from scientific research into keratin recovery and circular material systems.

"Human Material Loop emerged from scientific research into keratin recovery and circular material systems. After a research phase starting in 2022, the company was formally incorporated in 2023 to commercialise its patented fiber technology and collaborate with textile and fashion partners."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Agree)	none
Sustainable customer insights and personalisation	☆☆☆☆☆ (Strongly Disagree)	B2B material supplier, no direct consumer analytics
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Agree)	none
Sustainable product development and design	☆☆☆☆☆ (Agree)	none
Employee training in sustainability and digital technologies	☆☆☆☆☆ (Agree)	none
Data-driven sustainable decision making	☆☆☆☆☆ (Agree)	none
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Agree)	none

Sustainability & Digital Innovation Highlights

Core Green Innovation: Adara Fiber
Adara is a novel keratin-based protein fiber produced from human hair waste collected locally.

Key sustainability aspects:

- **Waste valorisation**: Converts abundant human hair waste into a valuable raw material.
- **Circular material flow**: Keeps biological resources in use and reduces landfill and incineration.
- **Reduced dependency on synthetics**: Offers an alternative to fossil-based fibers such as polyester and nylon.
- **Local sourcing**: Shortens supply chains and lowers transport-related emissions.
- **Biomaterial innovation**: Introduces a new category of protein fiber into the textile ecosystem.

Digital Enablement
While primarily a material science company, Human Material Loop integrates digital tools to support sustainable R&D, collaboration and scaling:

- Digitally tracked chemical inventories and laboratory experiments.
- Cloud-based documentation and collaboration to reduce paper use.
- Digital communication and visual tools to accelerate partnerships, presentations and industry outreach.

Overall, Human Material Loop shows strong maturity in integrating digital tools into research, operations and collaboration, while sustainability is embedded directly into its core product design.

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Waste Reduction	Reprocessing keratin proteins from human hair into spinnable textile fiber.
Environmental Impact	Innovative Product Development	Designing production methods around circularity from the outset.
Green Practices	Waste avoidance	Aligning material innovation with local waste streams rather than imported virgin resources.
Innovation	Transferability	Targeting both yarns and nonwoven textiles to maximise application potential across fashion and interiors

Digital Tools in Use

- **Digitally tracked** chemical inventories and laboratory experiments.
- C**loud-based** documentation and collaboration to reduce paper use.
- **Digital communication** and visual tools to accelerate partnerships, presentations and industry outreach.
- **Platforms** used include Google Drive, Slack, FindMolecule, Canvas.

Explore More

- **Textile industry overview:**
- **Company blog:**
- Textiles For Life - Human Material Loop
- regenerative business model - Human Material Loop

Certifications & Intellectual Property

Patent: Keratin fiber production process (estimated grant: April 2025)

Plans for the future…

- Scaling production to hundreds of kilograms per batch.
- Expanding into commercial yarns and nonwoven textiles.
- Running multiple pilot projects with industry partners to demonstrate performance and versatility.
- Increasing industry collaborations with designers, manufacturers and research institutions.
- Showcasing the fiber at international innovation events.
- Funding secured through a combination of private investors and public subsidies, supporting both R&D and early industrial scaling.

Proposed Class Activity 1

Instructions:

Divide the class into **5 groups of 5 students**.
Assign each group the role of a different stakeholder in the fashion value chain:

Group A: Raw material & waste collection
Group B: Fiber production (Human Material Loop)
Group C: Textile manufacturing (yarns / nonwovens)
Group D: : Fashion brands & designers (B2B clients)
Group E: : End users & post-consumer recovery

Provide each group with a short summary of Human Material Loop and Adara fiber (or ask them to review the case study).

Each group designs how Adara fiber flows through their stage of the value chain, including:

- Key activities
- Sustainability benefits
- Digital tools that could support their stage
- Risks or bottlenecks

After 30 minutes, groups come together to assemble a complete circular value chain map on the board or shared digital canvas.
Each group presents their contribution (3 minutes per group).

Activity Goal:

- Understand how circular materials integrate into the fashion value chain.
- Analyse the strategic role of material innovators like Human Material Loop.
- Connect sustainability principles with operational and digital practices.
- Develop systems thinking across production, design, and consumption stages.

Expected Outcome

At the end of this activity, you will be able to:

- Explain where and how keratin-based fibers create value in fashion and interior textiles.
- Identify sustainability advantages of waste valorization and local sourcing.
- Recognise how digital tools support circular innovation.
- Visualise a complete closed-loop system for biomaterials.

Activity 1 –

Students collaboratively construct a living “map” of a circular fashion ecosystem built around human hair waste. Each group acts as a different organism in this industrial biosphere, shaping how Adara fiber travels from barber shop floors to designer studios and eventually back into recovery loops. As the chain forms piece by piece, the classroom transforms into a miniature supply network where science, design, logistics, and sustainability negotiate their boundaries and handoffs.
The final discussion highlights tensions between innovation and scalability, idealism and industry, and how invisible materials quietly steer visible fashion trends.

Proposed Class Activity 2 Aligned with The Fabricant

Instructions:

Divide the class into **5 groups of 5 students**.
Each group acts as a consulting team hired by Human Material Loop.
Assign each group one strategic focus:

Group A: Scaling production sustainably
Group B: Market adoption by fashion brands
Group C: Digital tools & data management
Group D: Communication & storytelling to designers and consumers
Group E: Future applications beyond fashion (interiors, medical, composites)

Each group develops a **mini-strategy proposal** answering:

- What problem are we solving?
- How does Adara fiber help?
- Which digital tools support this strategy?
- What sustainability impact is created?

Groups prepare a **1-page concept sheet or 3-slide pitch**.
Each group presents to the class.
The class votes on the most impactful strategy

Activity Goal:

- Apply theoretical knowledge of sustainability and innovation to a real company case.
- Practice strategic thinking in circular business models.
- Explore how material science, digitalization, and marketing intersect.
- Strengthen teamwork and persuasive communication.

Expected Outcome

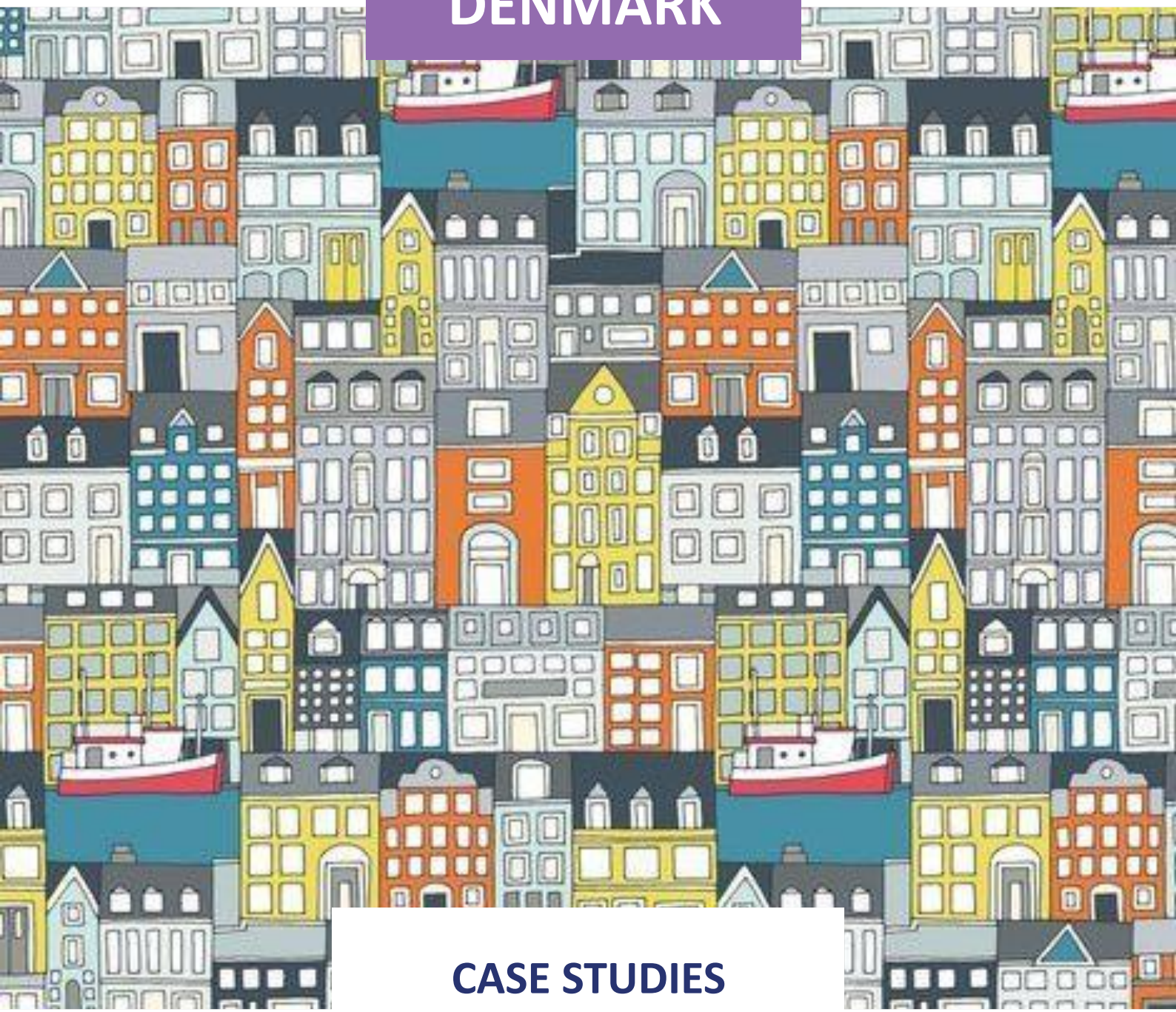
At the end of this activity, you will be able to:

- Propose realistic growth strategies for a biomaterial startup.
- Evaluate trade-offs between environmental impact and commercial scaling.
- Understand how B2B fashion innovation is communicated and adopted.
- Demonstrate the ability to link product innovation with digital infrastructure

Activity 2 –

This activity turns the classroom into a strategy greenhouse where ideas sprout, cross-pollinate, and occasionally mutate into bold futures. Teams sculpt possible destinies for Human Material Loop, deciding whether the company grows like a careful bonsai or a fast-climbing vine across industries.
As presentations unfold, students encounter how fragile innovation can be when stretched between laboratory reality, industrial appetite, and planetary limits. The discussion that follows often circles around one central realization: the smallest fibers can carry the heaviest ambitions.

DENMARK



CASE STUDIES

1. KnowledgeCotton Apparel
2. Son of a Tailor
3. Soulland

KnowledgeCotton Apparel

FOUNDED

2008

EMPLOYEES

50-200

MARKET SCOPE

International – Europe, North America

CUSTOMER TYPE

B2C – Direct-to-consumer via e-commerce and select retail

SOCIAL MEDIA

WEBSITE

www.knowledgecottonapparel.co.uk

ROLE IN THE FASHION/ TEXTILE INDUSTRY

KnowledgeCotton Apparel is a Danish sustainable apparel brand pioneering responsible fashion through certified organic materials, transparency, and digital traceability. The company integrates blockchain-enabled lifecycle tracking and sustainable supply chain practices to align brand integrity with consumer values. It partners with traceability platforms (e.g. Retraced) to provide customers full visibility into garment origin and impact. KnowledgeCotton has won Scandinavian sustainability awards for combining eco-conscious design with profitable business.

Mads Mørup, Founder & CEO of KnowledgeCotton Apparel, on sustainability innovation:

"This sustainability award is a testament to our unwavering commitment to innovation, responsibility, and pushing the boundaries of what we can achieve."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Blockchain traceability embedded in operations.
Sustainable customer insights and Personalisation	☆☆☆☆ (Agree)	Customers informed via transparency data and impact metrics.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Sustainability storytelling integrated into branding and campaigns.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Uses certified organic and recycled materials throughout.
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	Teams educated on traceability tech and sustainability reporting.
Data-driven sustainable decision making	☆☆☆☆☆ (Strongly Agree)	Lifecycle data informs material and process decisions.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Award-winning sustainable product innovations.

Sustainability & Digital Innovation Highlights

- **Blockchain traceability:** Products registered using Retraced platform for lifecycle transparency.
- **Certified organic materials:** Uses GOTS-certified or recycled textiles, including Supima cotton.
- **Award-winning sustainability:** Won Scandinavian Outdoor Award for the VENT CANVAS 200™ Classic Jacket in 2024.
- **Digital storytelling & impact:** Utilises digital media and educational content to communicate traceability and eco-credentials.

Founder Mads Mørup on the power of long-term thinking in sustainable fashion:

"We believe in taking responsibility across the entire value chain—from cotton seed to consumer. Our mission is to be part of changing the industry by showing that it is possible to create fashion in a more responsible and conscious way."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Blockchain Traceability	Transparent product origin via digital passports
Green Practices/Materials	Certified Organic Fabrics	Primary use of organic Supima cotton and recycled textiles.
Labour Practices	Supplier Standards	Works only with certified, audited suppliers.
Digital Practices	Impact Communication	Digital tools deliver sustainability data directly to consumers.

Digital Tools in Use

- **Retraced Platform:** For product digital passports and audit trail data.
- **E-commerce Analytics:** Sales platform integrated with sustainability dashboards.
- **Content & storytelling tools:** For imagery, impact reporting, and customer education.
- **Materials database:** Used for evaluating fabrics by environmental and social metrics.

Explore More

- Knowledge Awarded: "A New Level of Sustainability"
- The Natural Contender
- Retraced traceability overview

Mads Mørup on building sustainable fashion:

"Trying to make things better brings a warm and highly contagious feeling to life. Once you've started taking action… there is no going back."

Proposed Class Activity – Knowledge Cotton Apparel

Instructions:

After carefully studying the Knowledge Cotton Apparel Case Study please review the below activities, either individually or within a group and follow the steps to complete tasks outlined.
Take time to consider all perspectives, don't rush these activities. They will allow you to better understand the approaches and nuances within the industry.

Activity Goal:

By completing these activities, you will be able to:

- Understand how sustainability and digital innovation are applied in the fashion industry
- Analyse the role of transparency and traceability in ethical fashion
- Evaluate business decisions using environmental, social, and economic perspectives
- Propose realistic improvements for a sustainable fashion brand

Expected Outcome

At the end of this activity, you will have:

- Improved understanding of sustainable fashion systems.
- Enhanced ability to critically evaluate sustainability claims & identify credible, evidence-based practices
- Greater awareness of how sustainability-driven innovation strengthens brand integrity, and competitiveness.

• Activity 1: Critical Thinking – Triple BottomLine (Individually or in Groups) (45 mins)

KnowledgeCotton Apparel aims to balance **People, Planet, and Profit**.

Discuss and answer:

- **People.** How does the brand support ethical labour and social responsibility?
- **Planet.** How do material choices (e.g. organic cotton, recycled textiles) reduce environmental impact?
- **Profit.** How can sustainability also be good for business?

Write one paragraph for each area and really consider each element in its own right. Had you considered all these perspectives before? *Does this make you look differently at certain Fashion brands? How can we support those who ae working hard for social good within this industry?*

• Activity 2: Decision-Making Scenario (Individually or in Groups) (1Hr)

Imagine KnowledgeCotton Apparel is planning to launch a new jacket! Thinking about their mission, and keeping conscience decision making at the forefront of your mind please complete the below activity.

Your Task:

- Choose **one material** for the jacket (e.g. organic cotton, recycled polyester, conventional cotton).
- Justify your choice using sustainability, cost, and customer expectations.
- Suggest **one digital tool** that could be used to communicate the product's impact to customers.

Son of a Tailor

FOUNDED

2014

EMPLOYEES

11-50

MARKET SCOPE

International

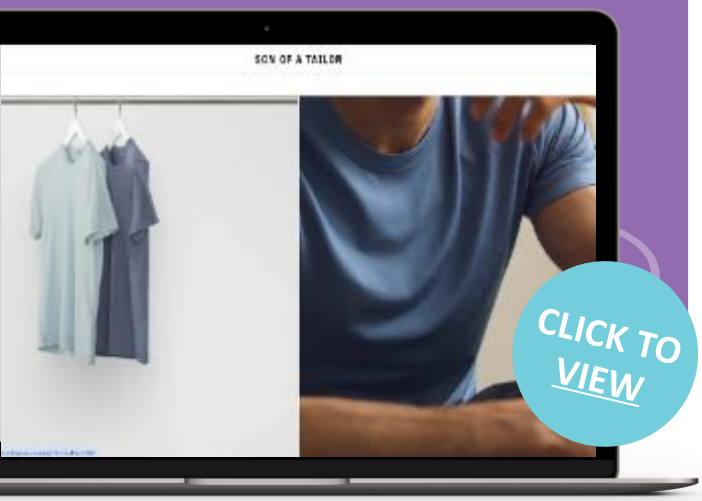
CUSTOMER TYPE

B2C – Direct-to-consumer online retailer

SOCIAL MEDIA

WEBSITE

www.sonofatailor.com



ROLE IN THE FASHION/ TEXTILE INDUSTRY

Son of a Tailor is a Danish menswear company offering custom-made T-shirts, polos, and knits. By combining algorithmic sizing technology with a made-to-order production model, they eliminate overproduction and reduce waste. Each garment is created on demand using digital patterns tailored to individual customer data, which minimises returns and ensures long-lasting fit and satisfaction. The company focuses on sustainable materials and transparent supply chains, with production carried out in Europe.

CEO Jess Fleischer explains:

"We don't guess what sizes to make and hope to sell them. Every single garment is made when you order it—just for you. The result: no overproduction, fewer returns, and better clothes."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Uses digital sizing and on-demand production to reduce waste.
Sustainable customer insights and Personalisation	☆☆☆☆☆ (Strongly Agree)	Personalised garments reduce surplus and enhance fit.
Digital tools in sustainable marketing and sales	☆☆☆☆ (Agree)	Online shop showcases sustainability with clear storytelling.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Data-driven design increases longevity and cuts waste.
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	Staff trained in digital workflows and responsible sourcing.
Data-driven sustainable decision making	☆☆☆☆☆ (Strongly Agree)	Business decisions led by sizing and demand data.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Continuously innovating with materials and systems.

Sustainability & Digital Innovation Highlights

- **On-Demand Production:** All garments are custom-made to order, eliminating overproduction.
- **Algorithmic Sizing:** Customers enter data, generating precise digital patterns to reduce returns.
- **Responsible Materials:** Organic cotton and extra-fine Merino wool used; certified and traceable.
- **Transparent Supply Chain:** Customers can track where and how products are made.
- **European Manufacturing:** Ethical production in Portugal and Italy for quality and lower carbon footprint.

Jess Fleischer highlighted the environmental value of made-to-order clothing:

"Made-to-order is how clothing should be made. It eliminates overproduction, reduces returns, and creates garments that last longer—because they're made for the person wearing them."

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Zero Overproduction	Every product is made on demand, eliminating excess inventory and waste.
Green Practices / Materials	Sustainable Materials	Uses certified organic cotton and traceable wool for lower impact.
Digital Practices	Algorithmic Sizing	Generates custom fit through user data, increasing satisfaction and reducing returns.

Digital Tools in Use

- **Proprietary Sizing Algorithm:** Creates digital patterns for each customer based on input data.
- **E-commerce Platform:** Interactive digital store guiding users through sizing and product customisation.
- **ERP and Supply Chain Tracking Tools:** Manage just-in-time production and trace materials.
- **Product Lifecycle Traceability Interface:** Allows customers to see where each garment is made.

Explore More

- Berlin Fashion Summit Panel
- Behind the Algorithm – How Sizing Works
- How made-to-order solves fashion's overproduction crisis
- IS CUSTOM THE KEY TO SUSTAINABLE FASHION?

Fleischer reflects on fashion's systematic issues:

"The fashion industry needs to slow down. The future of fashion is not about producing more, faster—it's about producing better, only when needed."

Proposed Class Activity – Son of a Tailor

Instructions:

After studying the Son of a Tailor Case study, please carefully consider the following activities, following the below task guidelines to complete the activities to the best of your ability. Spend time considering your own thoughts and ethics in regards to the fashion industry and then compare these to the wider industry standard. Hopefully this will give you some real food for thought!

Activity Goal:

By the end of this activity, students will be able to:

- *Explain the problem of overproduction in the fashion industry*
- *Describe how made-to-order production differs from traditional mass production*
- *Analyse the role of digital tools (e.g. sizing algorithms, data-driven production) in reducing waste*
- *Evaluate the sustainability impact of a business model using the triple bottom line (People, Planet, Profit)*
- *Propose informed recommendations for more sustainable fashion practices*

Expected Outcome

This activity should build learners' understanding of the causes and impacts of overproduction in the fashion industry by engaging them in mapping real-world problems linked to mass production and directly connecting these to solutions demonstrated in Son of a Tailor's made-to-order, data-driven business model.

- **Activity 1 Mapping the Problem: Overproduction in Fashion (Group) (30mins)**

Introduction to the concept of overproduction in fashion (unsold stock, markdowns, waste, returns). (Whole Class)

Case Study Review (Individual)
Students review the Son of a Tailor case study, focusing on:

1. Made-to-order production
2. Algorithmic sizing
3. Waste and return reduction

Cause-and-Solution Mapping (Pairs)
In pairs, students complete a simple mapping exercise:

- List 3 problems caused by mass production in fashion
- Match each problem with a feature of Son of a Tailor's business model that helps solve it

Share & Discuss (Whole Class)
Pairs share one problem–solution match with the class.

Proposed Class Activity – Son of a Tailor

Instructions:

After studying the Son of a Tailor Case study, please carefully consider the following activities, following the below task guidelines to complete the activities to the best of your ability. Spend time considering your own thoughts and ethics in regards to the fashion industry and then compare these to the wider industry standard. Hopefully this will give you some real food for thought!

Activity Goal:

By the end of this activity, students will be able to

- *Evaluate a fashion business model using sustainability criteria*
- *Consider trade-offs between speed, cost, and environmental impact*
- *Propose realistic sustainability improvements for an existing brand*
- *Communicate and justify business decisions*

Expected Outcome

This activity should encourage critical thinking about scalability and decision-making by asking students to evaluate whether Son of a Tailor's digital, made-to-order model could be applied to other fashion brands.

- **Activity 2 Sustainability Strategy Challenge – Would This Work Elsewhere?(Group 2-3) (45 mins)**

Scenario Brief

Each group is given the following scenario:
A fast-growing fashion brand wants to reduce waste but is concerned about higher costs and slower delivery times.

Group Task

Groups must:

- Choose one element of Son of a Tailor's model (e.g. made-to-order, sizing algorithms, limited product range)
- Explain how it would improve sustainability (People, Planet, or Profit)
- Identify one challenge of adopting this element
- Suggest one practical solution to overcome the challenge

Mini Presentations: Each group presents their idea in 1–2 minutes.

Soulland

FOUNDED

2002

EMPLOYEES

20 - 50

MARKET SCOPE

International – Europe, North America, and Asia

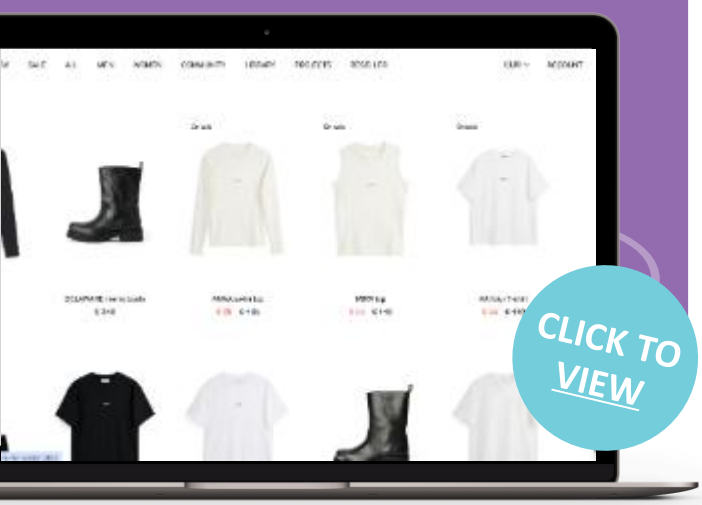
CUSTOMER TYPE

B2C – Primarily direct-to-consumer via e-commerce and select retail partnerships

SOCIAL MEDIA

WEBSITE

www.soulland.com



ROLE IN THE FASHION/ TEXTILE INDUSTRY

Soulland is a Danish fashion brand based in Copenhagen that combines high-end streetwear with a strong emphasis on sustainable innovation. Known for its creative collaborations and Scandinavian design ethos, Soulland integrates circular practices and digital technologies into its production, marketing, and product development. The brand has gained international recognition for its commitment to responsible sourcing, transparency, and experimentation with new digital platforms such as NFTs, virtual experiences, and digital product passports.

Silas Adler, Creative Director and Co-founder of Soulland, reflected on innovation in the fashion industry:

"If you don't rethink how you produce, consume, and connect with fashion, you'll be left behind. For us, digital and circular aren't trends—they're tools to help reimagine how we exist as a brand in the world."

Co-funded by the European Union

Maturity Self-Assessment

Area	Self-Assessment	Notes
Digital tools and technology integration in sustainable operations	☆☆☆☆☆ (Strongly Agree)	Uses digital passports, on-demand printing, and traceability tools.
Sustainable customer insights and personalisation	☆☆☆☆ (Agree)	Customer feedback shapes collaborations and green practices.
Digital tools in sustainable marketing and sales	☆☆☆☆☆ (Strongly Agree)	Uses immersive storytelling and NFTs to promote responsible fashion.
Sustainable product development and design	☆☆☆☆☆ (Strongly Agree)	Prioritises circular materials and lifecycle transparency.
Employee training in sustainability and digital technologies	☆☆☆☆ (Agree)	Staff are trained on new platforms and sustainability reporting.
Data-driven sustainable decision making	☆☆☆☆ (Agree)	Embraces lifecycle data and material impact insights.
Innovation, adaptability, and sustainability	☆☆☆☆☆ (Strongly Agree)	Known for piloting bold digital and green initiatives.

Sustainability & Digital Innovation Highlights

- **Digital Product Passports:** Integrates blockchain-based garment IDs to ensure transparency and traceability.
- **NFT Collaboration:** Partnered with (di)vision and others to launch digital collectibles tied to sustainable drops.
- **Low Impact Materials:** Committed to sourcing GOTS-certified organic cotton, recycled fibers, and biodegradable trims.
- **Circular Design Approach:** Offers repair services and resale via its “Preloved” initiative.
- **Virtual Fashion Week Participation:** Used digital formats to reduce travel and present collections online.

Silas Adler explained their focus on transparency and traceability:

“We want to give customers a reason to care—not just about how something looks, but about where it comes from, how it’s made, and what happens next.”

Featured Good Practices

Category	Practice Area	Description
Environmental Impact	Traceability	Use of blockchain-based passports for garment transparency.
Green Practices / Materials	Circular Design	Incorporates design for longevity and take-back schemes.
Digital Practices	Digital Campaigns	Embraces virtual shows and immersive storytelling to reduce physical footprint
Labour Practices	Transparency	Reports on working conditions and supplier certifications.

Digital Tools in Use

- **EON Product Cloud:** For creating digital IDs and tracking lifecycle data
- **OpenSea**: Used for NFT launches and digital asset sales
- **Shopify + Custom APIs**: E-commerce with integrated sustainability analytics
- **Adobe Creative Cloud:** For digital design, visuals, and immersive media
- **Loom & Instagram Live:** For remote events and storytelling

Explore More

- Sustainability for the Smaller Retailer
- Vogue Scandinavia
- nssMAG
- VMen's "On the Radar: Soulland"

Silas Adler reflected on Soulland's approach to sustainability as a gradual evolution:

"Whenever we looked into it, it became such an overwhelming issue… By taking things step by step, with small wins slowly improving the overall eco objectives of the business."

Proposed Class Activity – Soulland

Instructions:

Please thoroughly read and consider the Soulland case study, referring back to it for context throughout your completion of this case study will ensure that you have the best learning experience.

Activity Goal:

By the end of this activity, students will be able to:

- *Describe how digital tools can increase transparency and consumer trust*
- *Evaluate the sustainability value of emerging digital platforms in fashion*
- *Assess risks and limitations of digital innovation*
- *Propose creative but realistic digital engagement strategies*

Expected Outcome

This activity should help you gain a fuller understanding of the approaches to digital technologies and how they can engage consumers whilst also supporting sustainable development.

• Activity 1 Digital Innovation & Consumer Engagement Challenge (Group) (45 mins)

Introduction to Digital Tools
The teacher briefly revisits Soulland's digital innovations:

- Digital product passports (EON Product Cloud)
- NFTs and digital collectibles
- Virtual fashion shows and online storytelling

Group Scenario Task (Groups of 3–4)
Each group is given the following scenario:

Soulland wants to launch a new sustainable collection and ensure customers care about transparency, longevity, and circularity.

Group Task
Groups must:

- Choose one digital tool used by Soulland (e.g. digital ID, NFT, virtual event)
- Explain how it would educate or engage customers
- Link the tool to a sustainability goal (e.g. transparency, reduced waste, resale)
- Identify one possible risk or criticism and suggest how Soulland could address it

Mini Presentations (Whole Class): Groups present their ideas in 1–2 minutes.

Proposed Class Activity – Soulland

Instructions:

Please thoroughly read and consider the Soulland case study, referring back to it for context throughout your completion of this case study will ensure that you have the best learning experience.

Activity Goal:

By the end of this activity, students will be able to:

- *Define circular fashion and explain how it differs from linear production models*
- *Identify circular practices used by Soulland (materials, repair, resale, traceability)*
- *Analyse how product lifecycle thinking reduces environmental impact*
- *Apply circular design thinking to a real fashion business*

Expected Outcome

This activity should enable you to systematically understand the garment lifecycles, strengthening your ability to identify environmental and social impacts at each stage and to recognise opportunities for circular, more sustainable interventions across the fashion value chain..

- **Activity 2 Circular Fashion in Practice, from Design to Afterlife- a mapping activity. (Individual- 30 mins)**
  - **Garment / Product Focus:** What product are you mapping? (e.g. T-shirt, jacket, trousers)
  - **Product Lifecycle Mapping:** Complete the table below by identifying what happens at each stage of the product's life**.**

Lifecycle Stage	What Happens at This Stage?	Sustainability Benefit	Challenge / Risk	Lifecycle Stage
Design				
Materials & Sourcing				
Production				
Distribution & Sales				
Use & Care				
Repair/ Resale/ End of Life				

Sustainability is about being responsible for the impact of our actions on the environment, on society, and on future generations.

Christina Dean

Summary

FAIR FASHION Case Study Collection Summary

From Research to Practice

The *FAIR FASHION* Case Study Collection presents a diverse set of European fashion and textile ventures that exemplify how the twin transistion is being implemented across theFashion industry. Each case study complements the findings of the FAIR FASHION Literature Review, in one way or another. The majority of featured initiatives in this case study collection are led by women entrepreneurs. Their success stories highlight the importance of role models, mentorship, networking, and gender-sensitive entrepreneurial ecosystems.

Key Themes

Circularity in Action

Case study examples like *Kokolor*, *saendorn GmbH*, and *Yugen Company* are redefining production with just-in-time models, upcycled materials, and monomaterial innovations. These align with literature insights that circular practices must be embedded systemically and supported by policy and infrastructure.

Digital Transformation for Sustainability

The literature's emphasis on the need for digital competencies and cross-sector collaboration to achieve sustainable innovation. Which is seen in
Case study colelction examples including *Myth AI*, *A.I.T.*, and *WearTechClub* leveraging AI, digital twins, and 3D modelling to reduce waste and enhance efficiency.

Tech-Driven Sustainability Models

Optimimax and *MENDED* showcase advanced approaches like predictive eco-design and digitised garment repair. These illustrate how data-driven strategies can support measurable environmental impact—key priorities identified in the literature.

Strategic Takeaway

Together, these case studies form a living laboratory for the FAIR FASHION mission. They not only reflect academic priorities but provide Fashion educators and policymakers with **realistic, innovative, and inclusive pathways** to embed the twin transition into teaching, business models, and systemic transformation.

Therefore, this collection can be seen as an educational catalyst, empowering the next generation to lead with purpose, sustainability, and innovation. The case studies offer replicable models for educators to integrate sustainability and digital tools into curricula, echoing research calls for competence-based education, emotional intelligence development, and alignment with industry standards.

www.fairfashionproject.eu

Co-funded by the European Union

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