Personalisation

Digital Manufacturing allows for the creation of custom-fit clothes and a personalized fashion experience using data from social media, 3D scanners, and online profiles. These can be tailored to fit the wearer's body size, personal style, social role, or wardrobe needs.

VET: How can we use information about people to make clothes that fit them perfectly?

HEI: What information from data sources can be used to make clothing and textiles that match personal preferences and needs? What are the risks of using that data?

DIGITALIZATION

Virtual Fashion

Making virtual clothing and textiles (in programs like Clo3D, Browzwear, Blender, or Optitex Lectra) can facilitate fitting, sharing, or entirely digital fashion. Fewer physical garments are needed, and users can even wear the garments digitally.

VET: How can creating clothes digitally on a computer change the way we wear and share fashion?

HEI: In what ways can virtual fashion and textiles be better than traditional methods in design, production, fitting, and use?

DIGITALIZATION

Digital Production

Advanced digital manufacturing technologies such as 3D printing and computer-controlled machines (spinning, cutting, sewing, knitting, weaving, dyeing, pressing, coating, logistics) streamline the fashion process, enabling innovative and sustainable textile creation and modification.

VET: How can new machines and technology like 3D printers change the way clothes are made and worn?

HEI: How can advancements in digital manufacturing technologies revolutionize the fashion ecosystem workflows and value chains?

DIGITALIZATION

Digital Product Passports

Digital Product Passports provide transparency on garment origins, including material sources, environmental impact (water, energy, carbon), and manufacturing locations, facilitating transparent information practices.

VET: How can tracking where and how clothes are made help us recycle and reuse them better?

HEI: How can the implementation of Digital Product Passports enhance trackability and traceability of garment life-cycles, supporting the transition to a circularity?

DIGITALIZATION

Technographic Web-Tracking

Everything we do on the internet creates information that is recorded and often retained as data. Digitalizing fashion and textile processes over the internet creates new opportunities for data science. Small data about the time, place, and frequency of interactions can tell us many things about the stakeholders and our business model.

VET: How can people's information from the internet help us make it more sustainable?

HEI: How can data collected from stakeholders digital activites be leveraged to create circular fashion systems and comply with new EU reporting requirements like CSRD?

Digital Twin

A digital twin is a digital model of a physical product, process, or system. In fashion, this could mean a detailed, dynamic 3D model (or, more often, a data model) of a garment, factory, store, entire value chain, and/or the interaction of many value chains. This helps us understand how product/service eco-systems are working at a practical level

VET: How can making a virtual copy of clothes or factories help us understand and improve fashion production?

HEI: How can the use of digital twins in fashion ecosystem improve efficiency, sustainability and collaboration?

Blockchain and Unique ID technologies

Tracking every garment and who is wearing it is a complex process. Web3 uses Blockchain technology to create decentralized systems that log data about the life-cycles without central authorities, promoting stakeholder empowerment.

VET: How can blockchain technology help track and trace garments, ensuring fairness throughout the fashion value chain?

HEI: How can blockchain and decentralized technologies be integrated into the fashion ecosystem, and what impact will transparent ownership have on fashion ecosystems?

DIGITALIZATION

Advanced Sorting Technologies

Sorting clothes for reuse and recycling is a difficult process, often with more than 300 categories. New technologies like visual identification AI can be used to help sorters identify and sort materials into recycling and reuse by material and brand. Using phone cameras, wearers could be encouraged to dispose their clothes at an optimal time.

VET: How can using new technology to sort and recycle clothes make recycling easier and better?

HEI: How can visual identification technologies improve the fashion ecosystem processes and encourage sustainable behavior?

DIGITALIZATION

Wear and Tear

As worn garments come back to the brand under the EPR, wear and tear on these clothes can provide valuable data about use, consumption, and the wearer's habits. For example, an iPhone has a 3D scanner that can scan your garment and compare it to the original factory scan to see what has changed.

VET: How can we set up places to fix and repair clothes that look at how jeans age and wear out?

HEI: How can integrating wear and repair photos help businesses promote sustainability, repairability and circularity? What are the initial challenges in implementing such systems?

AR Try-on

Augmented Reality (AR) for clothing and textiles can bridge the gap between digital and physical retail by using phones, VR and computer cameras to create a realistic virtual representation of a product over the users body in real-time for physical and digital fashion.

VET: How can using Augmented Reality (like trying on clothes with your phone) make fashion more fun and useful?

HEI: What are the potential benefits and challenges of implementing Augmented Reality technology in the fashion mnufacturing, retail, use, or recycling?

Data Science, Artificial Intelligence, and Machine Learning (DS, AI, and ML)

DS, AI and ML play a crucial role in Fashion ecosystem processes. From image generation for design, user profile creation, business systems, and production optimization; DS, AI and ML have been a . It can even support sustainability by analyzing images of what you wear understand what is in your wardrobe to helps companies understand what to make or connect you with existing items.

VET: How can DS, AI and ML help make fashion more eco-friendly and reduce waste?

HEI: How can DS, AI and ML predict demand for sustainable fashion, cut waste in production, and boost eco-friendly material use?

Digital Worlds

Digital worlds merge virtual platforms where creators trade digital clothing and fabric patterns (often as NFTs), blending fashion and gaming for avatar customization and immersive experiences. The goal is innovation, waste reduction, and new creative avenues, with fashion brands, designers, and tech firms like DressX and The Fabricant lead this innovation.

VET: How can digital fashion platforms boost creativity and help the environment in Fashion?

HEI: What role do NFTs and other unique identifiers play in transforming the fashion and design industries, especially in virtual and gaming worlds?