

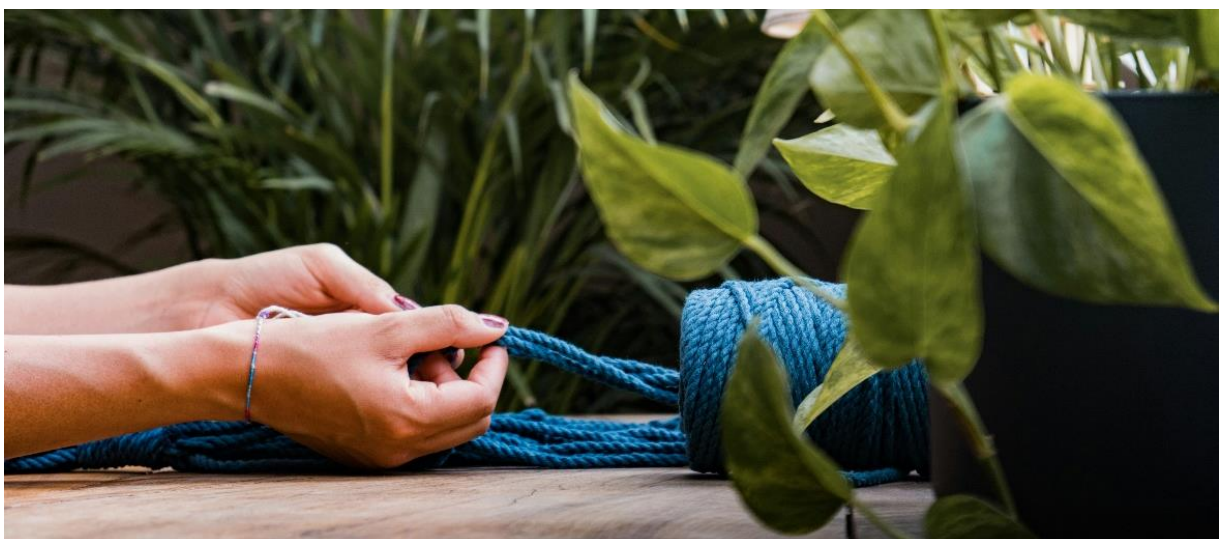
Presentation of the research project

RETRAKT

„Resilient Transformation Management for Circular Economy in the Textile Sector“

RETRAKT Mission Statement

With the European Green Deal, the European Union strives to become the first climate-neutral continent by 2050. A key element in achieving this objective is the transformation of the traditional linear economic model into a re-source-conserving circular economy, which is able to reduce waste, excessive resource consumption, and the industrial use of natural raw materials to a minimum. The RETRAKT project aims to holistically understand and optimize the existing work and process flows of textile and clothing manufacturers operating within the global textile value chain, in order to enable them to produce in a resource-efficient, circular, and recycling-friendly manner in the future. Managing such complex transformations requires a comprehensive process- and work-scientific approach that encompasses the interaction of all stakeholders along the textile supply chain.



Vision and Goals of RETRAKT

Compliance with regulatory environmental requirements – within the framework of the European Green Deal – is a key driver of the transformation to-ward a circular economy in the textile and apparel sector. An effective product compliance management, firmly embedded in operational processes, is essential for the implementation. To achieve this, existing workflows in companies, such as in design, procurement, production, and data management, need to adapt to the new legal requirements. For this transformation, “resilience engineering” provides the systemic framework as well as the analytical and design tools within the RETRAKT project. While classical safety and management approaches focus on error avoidance and stability, resilience engineering is based on social science research: it focuses on employees and the adaptive performance capability of organizations as a whole. In the social science the interaction of people and technical systems within operational processes is referred to as a “socio-technical system.” Resilience engineering therefore deals with the ability of these systems to function successfully under dynamic, uncertain, and complex conditions. Based on practical analyses of existing business processes, the project team evaluates the implementation of the developed tools and methods in collaboration with employees in real-world applications. Additionally, a “Digital Cooperation Platform” for the technical support in the transformation process will be established.



Duration

RETRAKT is active from March 2025 to February 2028.

Funding

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Project partners

- FOM Hochschule für Oekonomie & Management gGmbH
- ITA - Institut für Textiltechnik of RWTH Aachen
- CCE - Center for Circular Economy & HumTec – Human Technology Center, RWTH Aachen University
- i2solutions GmbH
- ORTOVOX Sportartikel GmbH
- Thorey Gera Textilveredelung GmbH



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