

Tech Venture Challenge

The digital product passport as a flagship for circular products.

A Study on transferring regulatory requirements into a software solution



Challenge description

In the future (2026 to 2030), only safe, circular and sustainable products are to be allowed on the EU market. The foundation for this goal is the new "Ecodesign for Sustainable Product Initiative" (ESPR).

In order to create transparency and traceability of products on the market and to ensure compliance with the specifications, the future Ecodesign Regulation plans the establishment of a digital product passport (DPP). This is intended to ensure that players along the value chain have access to the product information that is relevant to them.

A number of associations and government supported initiatives are working on standards and interoperability projects but there will also be a need for digital solutions to bring the DPP to life at the consumer and enduser.

Thesis Focus

This master thesis should answer the following question:

What are the requirements for a Software as a Service (SaaS) solution to become a "DPP system" by integrating the DPP regulations, standards and data formats?

Within your master thesis project, you will work on scientific research questions depending on your study program and related to:

- Analysis of regulatory requirements and specific guidelines
- Interviews and stakeholder analysis with associations and industrial manufacturers of products
- Supporting in detailing specific software development requirements to fulfill both regulatory and market needs

Profile and process

You apply individually with a motivation and a CV (but no project draft) and will write an individual master thesis which is suitable to your study program. You should have:

- Exceptional analytical skills
- General understanding of web software
- Good communication skills to be able to interview different stakeholders
- Willingness to take responsibility and work independently

This master thesis project is a cooperation with the Startup ECHO PRM GmbH.

You will receive technical support from the ECHO PRM team and scientific support from the TUM fml team.

Upon successful application, you will become part of the TUM Entrepreneurial Masterclass with all benefits, such as real added value for the ecosystem in and around Munich and access to the UnternehmerTUM ecosystem.

ECHO PRM GmbH

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TUM Entrepreneurial Masterclass

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