



Cross Innovation Class 2025

Problem & Process

Solution

Prototype

Future

FROM PLASTIC WASTE TO PURPOSE

OUR JOURNEY TO REINVENT INNER PACKAGING

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OUR JOURNEY

WITH **STILL**

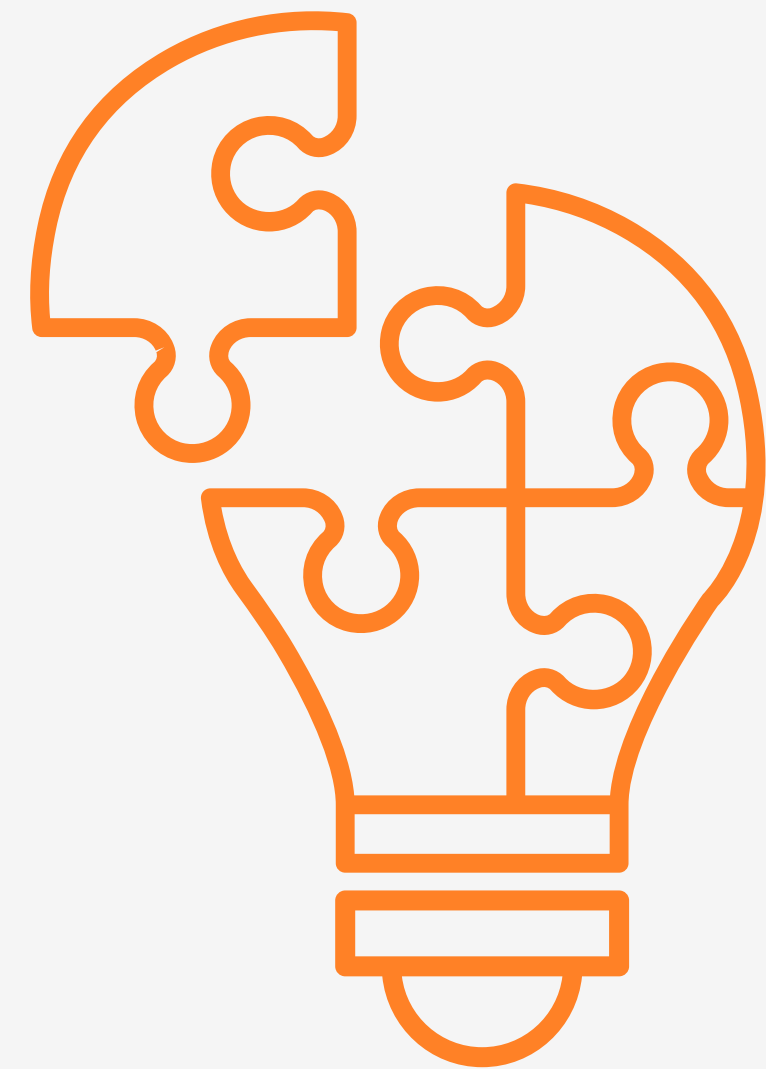
Original Problem:

How can we move vehicles undamaged, efficiently and sustainably?

During the Journey we faced several problems:

1. The navigation of company's and university expectations
2. Understanding sustainability in logistics
3. Combining trans-disciplinary skills

Process caused the problem question to evolve with observing the major issue of waste created in the inner packaging created by suppliers.





PLASTIC WASTE

The global annual production of
plastic is more than

359 million tons.

(Pilapitiya & Ratnayake, 2024)

PROBLEM & PROCESS

New Problem:

How can STILL **provide** their European, German, and local suppliers with **solutions** that **motivate** them to use **sustainable material** in wrapping and **packaging**?

During the Journey we made interesting observations:

1. STILL has over 800 suppliers
2. 77 tonnes plastic waste in 2024
3. Existing circular Outer-Packaging solution
4. Inner packaging is inconsistent, plastic based and waste-heavy

We figured out, what STILL is missing:

1. A versatile, scalable, and sustainable inner packaging device for suppliers
2. Simple and easy usage



THE SOLUTION

STILL will motivate European, German, and local suppliers to use more sustainable packaging by **standardising its circular system** with the use of the **PackMate**.



PackMate - THE FEATURES

Our product stands out from others in the industry:

3D Scanning
and laser-
cutting

Custom Fitting

Reuseable
cardboard
usage

Modular design,
maintenance &
distribution

Meet PackMate

The modularity provides 3 separate compartments

Personalised upgrades and configurations to suit their specific needs are possible.



Designing:

Top - compartment

- 2 Cameras scanning object
- providing 3D Model

Middle - compartment


- cutting cardboard to create packaging


Lower - compartment

- storing the cardboard

The device features a **user-friendly touch screen** angled towards the user, with **color-coded sections** that highlight key functions, while shredded cardboard **leftovers** can be conveniently **stored** in **integrated containers** for sustainable use.

Scanner





Privious Model

Create New

Place the part on the scanner




Preparing...

60%

Cancel

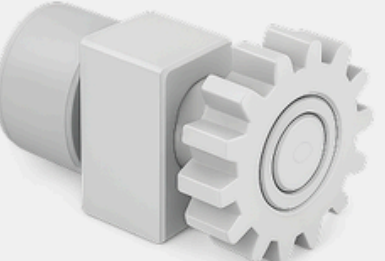
Scanning... 42%



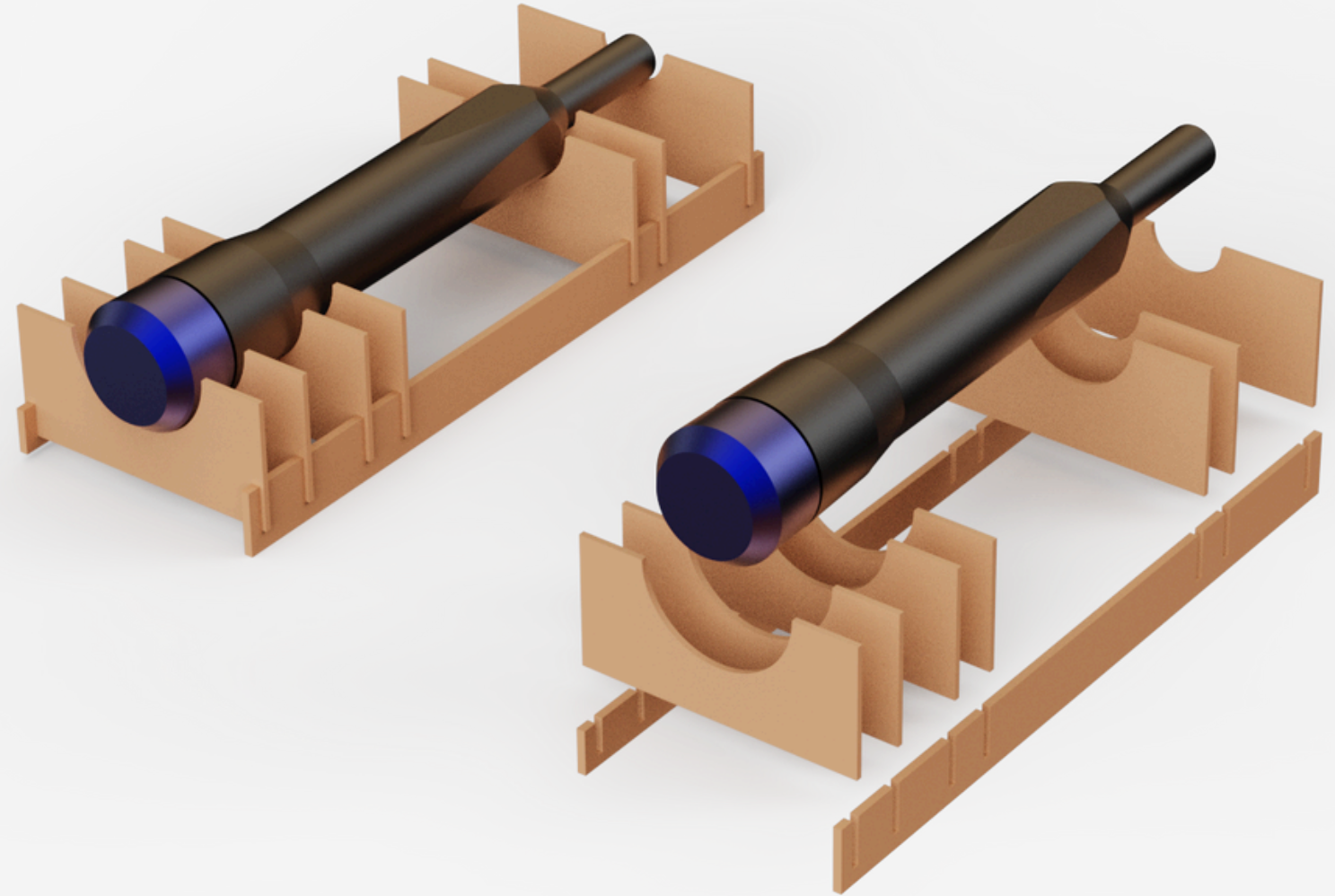
Pause

Cancel

Scan Complete...100%



Start Packing Design



COMPANY VALUE

We create high value for the company by:

Circularity

- Cost saving because no new packaging is needed

Sustainability

- Improvement in brand image

Premium feeling

- Custom made packaging conveys the premium brand image



THE FUTURE

We see high potential with the following ideas:

- 1** More accuracy through improvement in the scanning.
- 2** More variance in size for scanning and packaging larger parts, materials, and even products.
- 3** Experimentation with new and alternative packing materials to lead the market.
- 4** Standardisation of packaging for companies across logistics industry.





MEET THE TEAM



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By turning waste into value, we complete the loop.



THANK

YOU!

LITERATURE

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