



ZeroWIN - Towards Zero Waste in Industrial Networks

Case Study 1 - The D4R Laptop

Circular Economy and Industrial Workshop
The Centre for Sustainable Design
24th March 2014



Wrocław
University
of Technology



ZeroWIN Goals



-30%



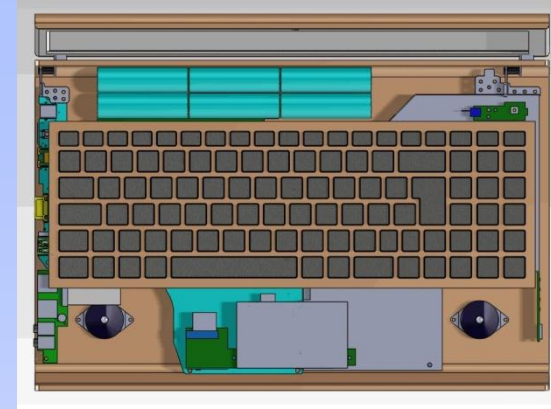
- 70%



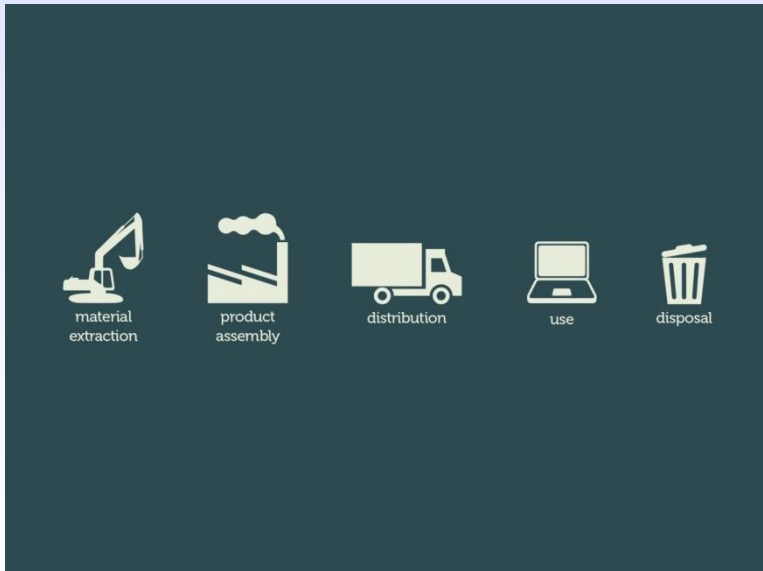
- 75%

ZeroWIN Case Study 1

1. Design & development of a prototype (D4R)



2. Identifying the barriers to market



3. Developing an appropriate and viable industrial network.

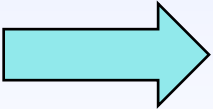
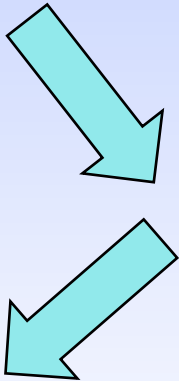
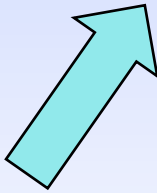
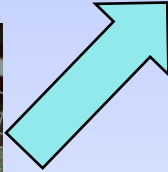
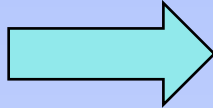
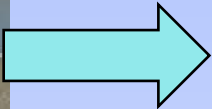
Eco-design principles:

Reduce waste by

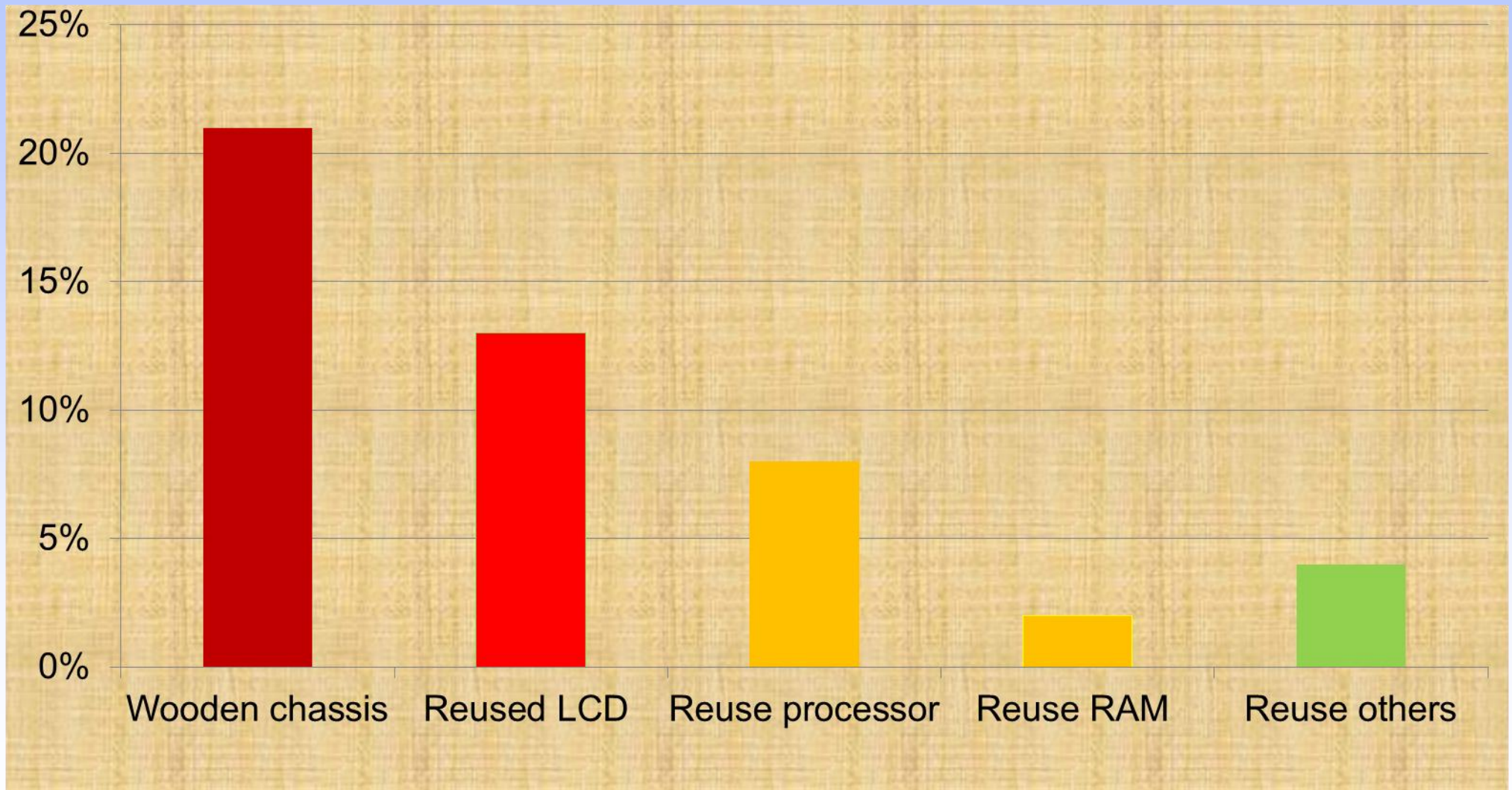
- Using low-carbon materials
- Using reused materials and components
- Design is easy to repair, upgrade and disassemble
- Making more reusable
- Guaranteeing a longer life (10 years)



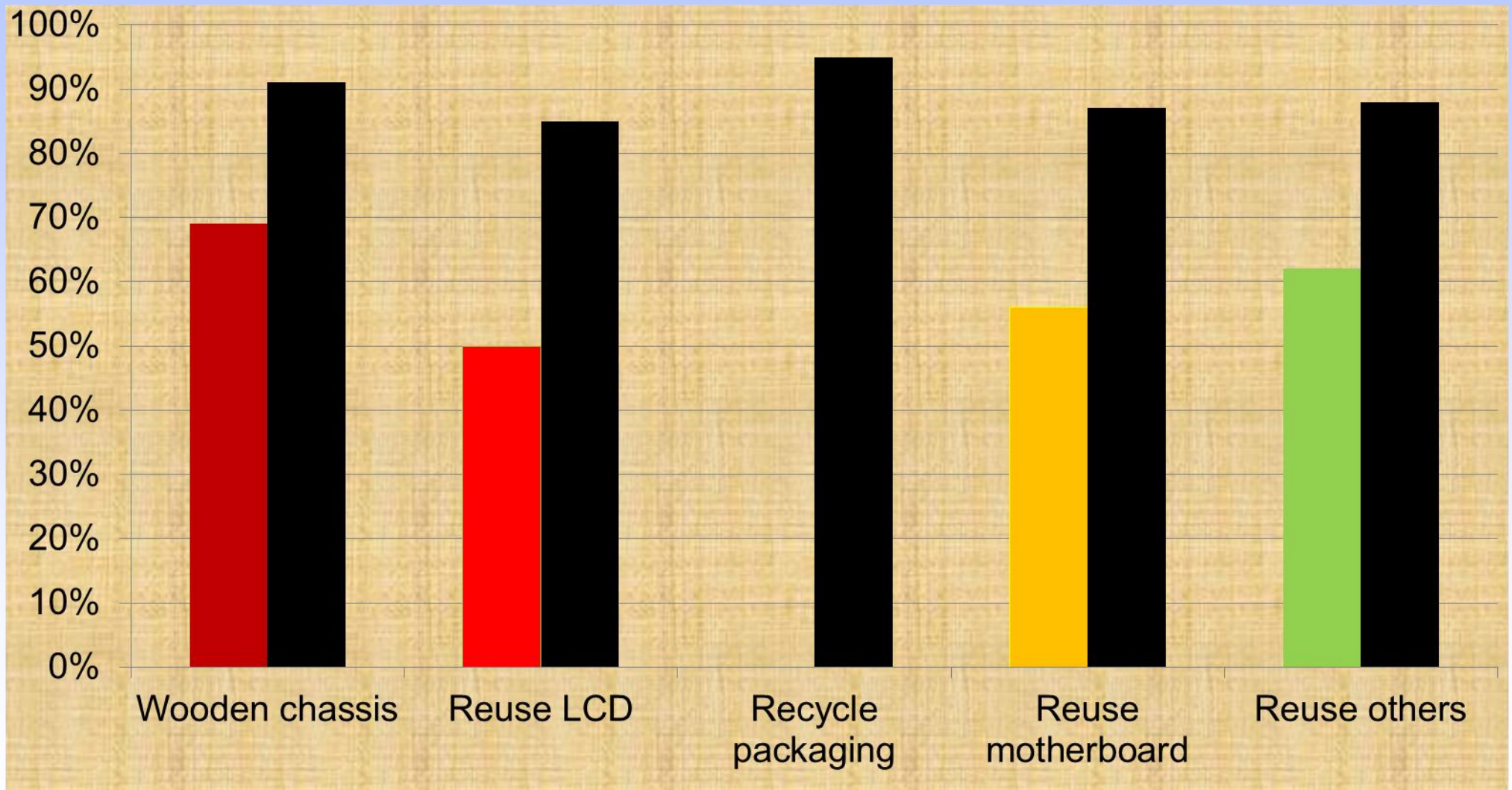
D4R industrial network



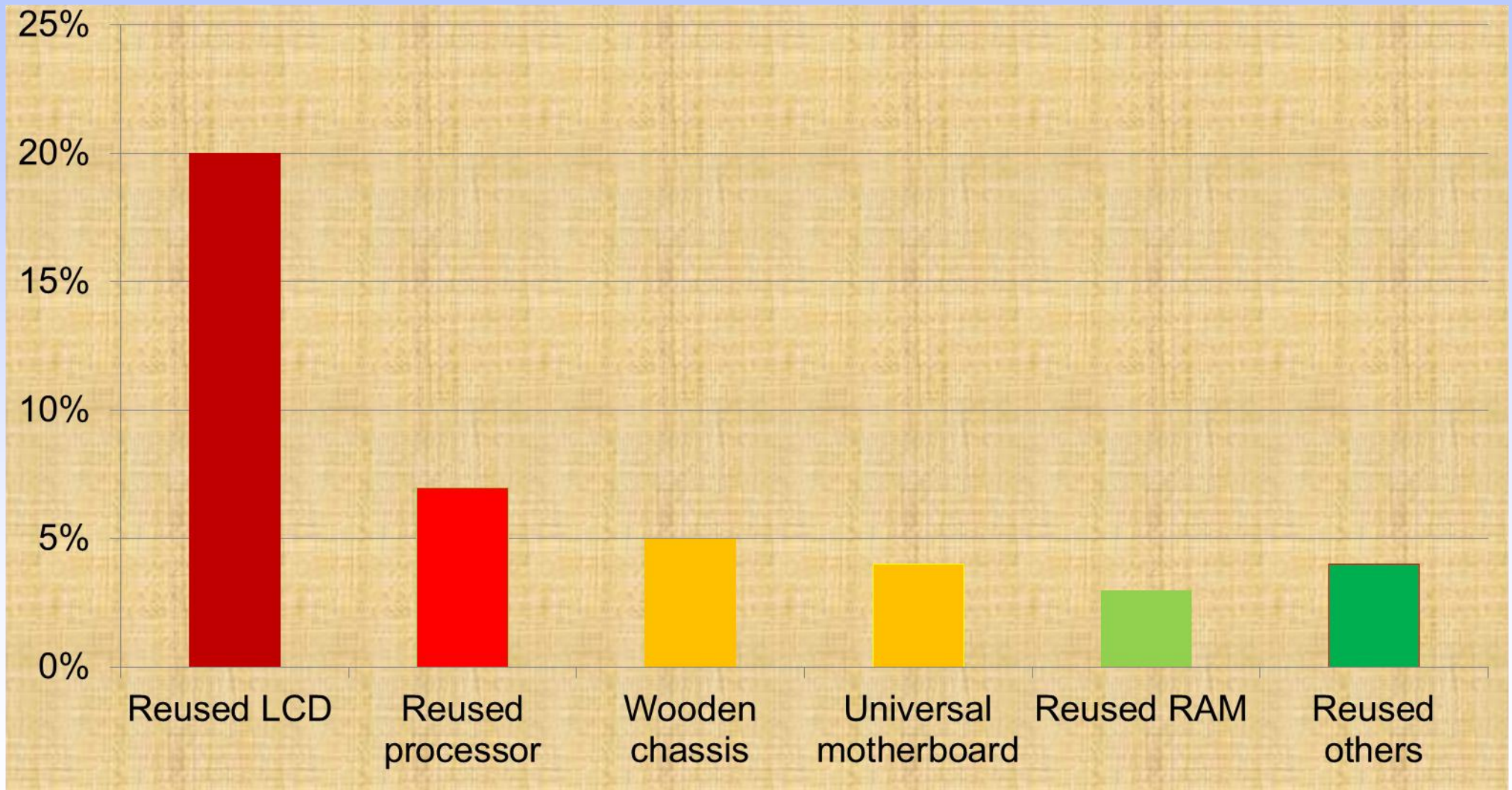
GHG reduction impact - 61%



Reduce waste by reuse and recycling impact - 62% and 89%



Water reduction impact - 55%



GAIA Report on Barriers to Market

Barriers



- Developing a **Brand**
- **Pricing** of product
- Making **manufacture viable**
- Identification of **target markets**
- Identification of **marketing tools and instruments**
- Providing the **cradle to cradle service**
- Continuing **eco-design improvements**

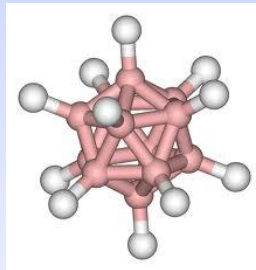
Solutions

- A **marketing study**
- A “bottom line” **expression of demand**
- A high profile **marketing campaign**
- Setting up a **trans-national service network** starting with key markets
- **Continuing R&D** into cradle to cradle eco-design

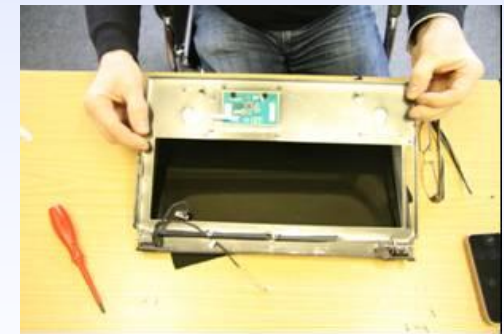
Key Target Groups



Key Actors for an optimal outreach



Product Advantages



Promotion



Further design improvements?

- More R&D
- Improved design
- Keeping up with state-of-the-art
- Life Cycle Assessment results



Improved Manufacturing

- Wooden parts - new and reused - who can supply?
- Metal - new and recycled - who can supply?
- Components - new and reused - who can supply?



Zero
WIN

Towards Zero Waste in Industrial Networks

Service Agency Network

- Need to be indentified and committed in different regions
- Recycling and Reuse companies arfe natural Partners
- Need to be in place before sales can take off.



Marketing

- Marketing by ourselves?
- Marketing with Partners ?
- With Retailers
- From other Countries?



Funding

- SME Programme (deadline June 2014)
- Waste Programme (ZeroWIN 2?) (deadline June 2014)



- Fund privately? - maybe later...



1st Apple Computer!



A laptop with a wooden top and black body sits on a mossy rock in front of a waterfall. The laptop is open, and the screen is dark. The background shows a waterfall cascading over rocks, with moss growing on the surrounding rocks.

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