

#### From Linear to Circular





#### Meet the DfCE team

Professors & teachers



Prof. dr. Ruud Balkenende



Dr. Conny Bakker



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David Klein



Dr. Ingrid de Pauw

Researchers



Nina Boorsma



Phil Brown



Emilia Ingemarsdotter



Jelle Joustra



Jan Konietzko



Flora Poppelaars



Marita Sauerwein



Deborah Sumter

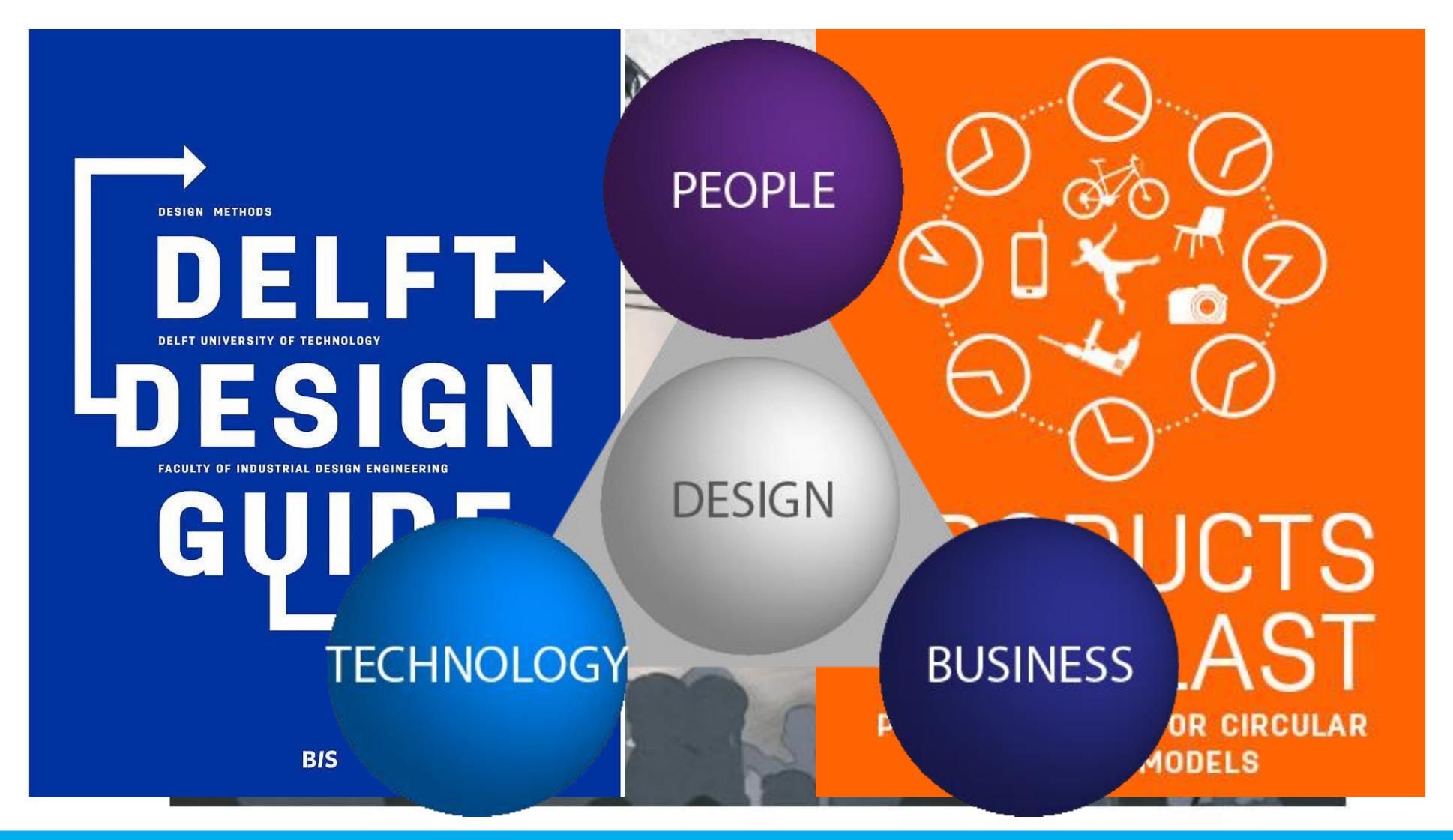


Vivian Tunn



Mandy Willems

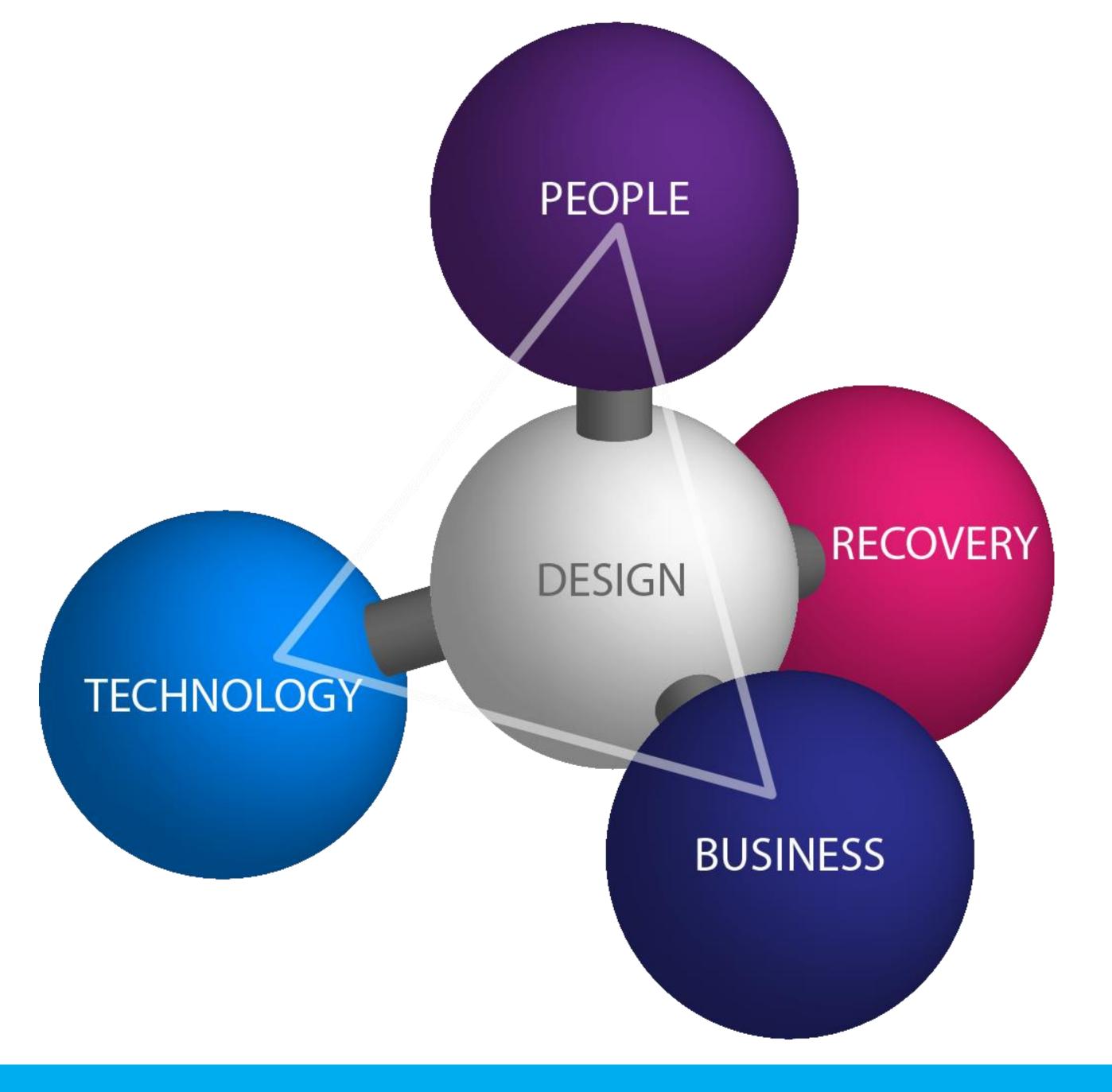
#### TU Delft- Industrial Design Approach





# Designing for Circular Economy

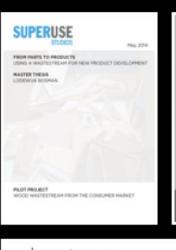
Design for Recovery



#### Research Consumer Acceptance Directions of Flora PEOPLE Consumer Acceptance DfCE team Vivian Methodologies and Tools 3D Printing / Local Electronics Recycling Deborah Materials Farzaneh Mariet DESIGN Composites **TECHNOLOGY RECOVERY** Jelle Reuse / Remanufacturing Nina Internet-Of-Things Emilia Assessment Mandy Sustainable Business BUSINESS Models Jan Collaboration Phil





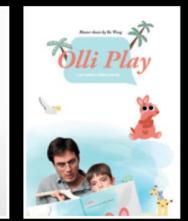






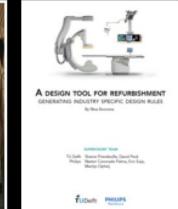


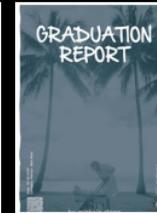


























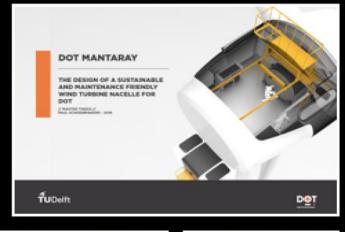




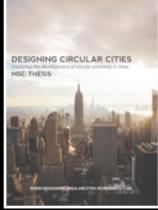




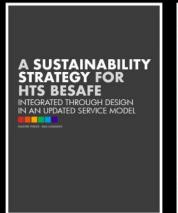






















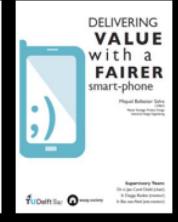










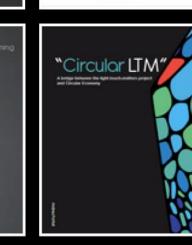




































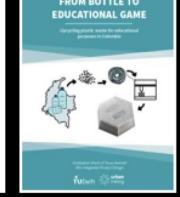








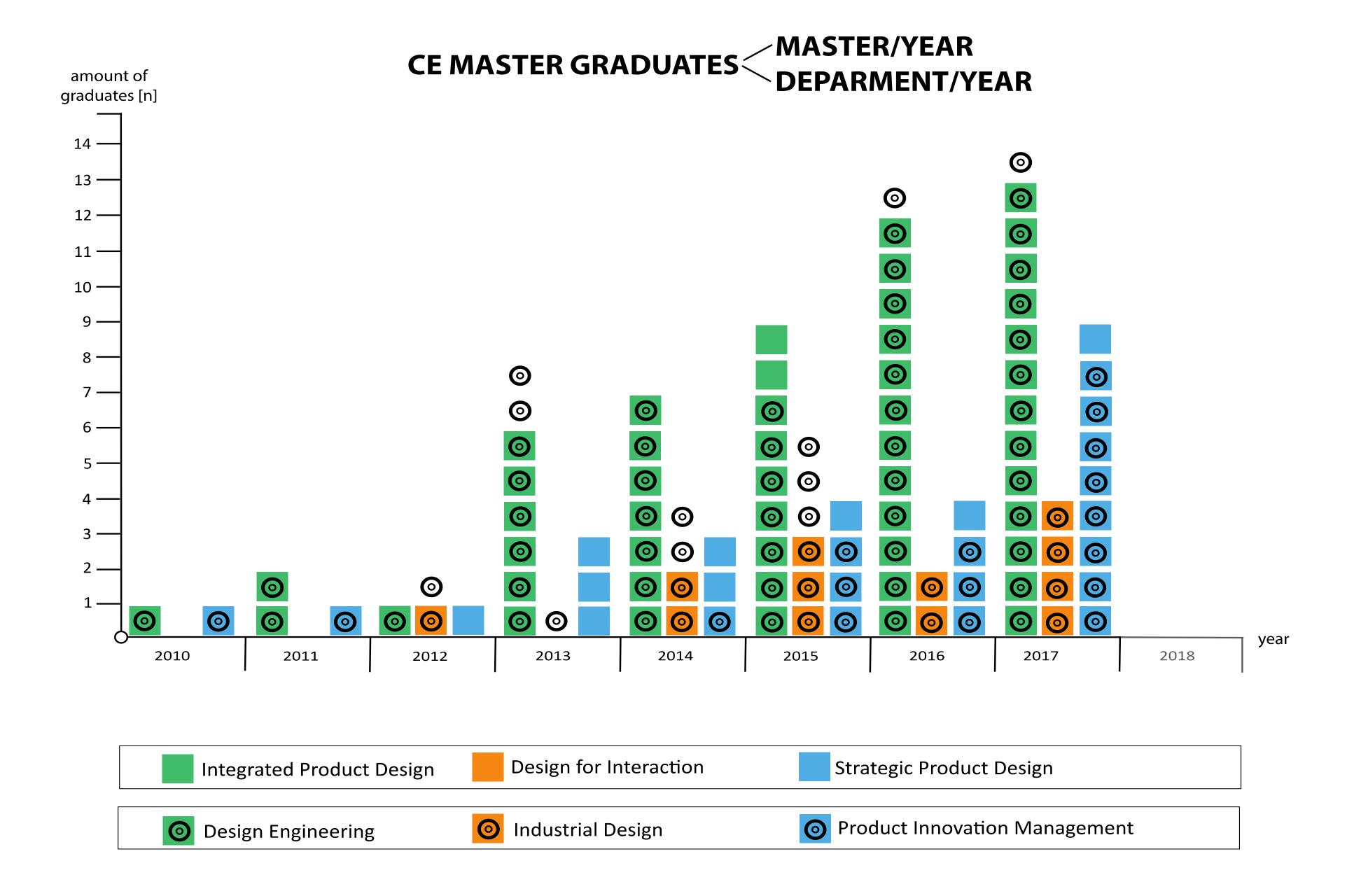






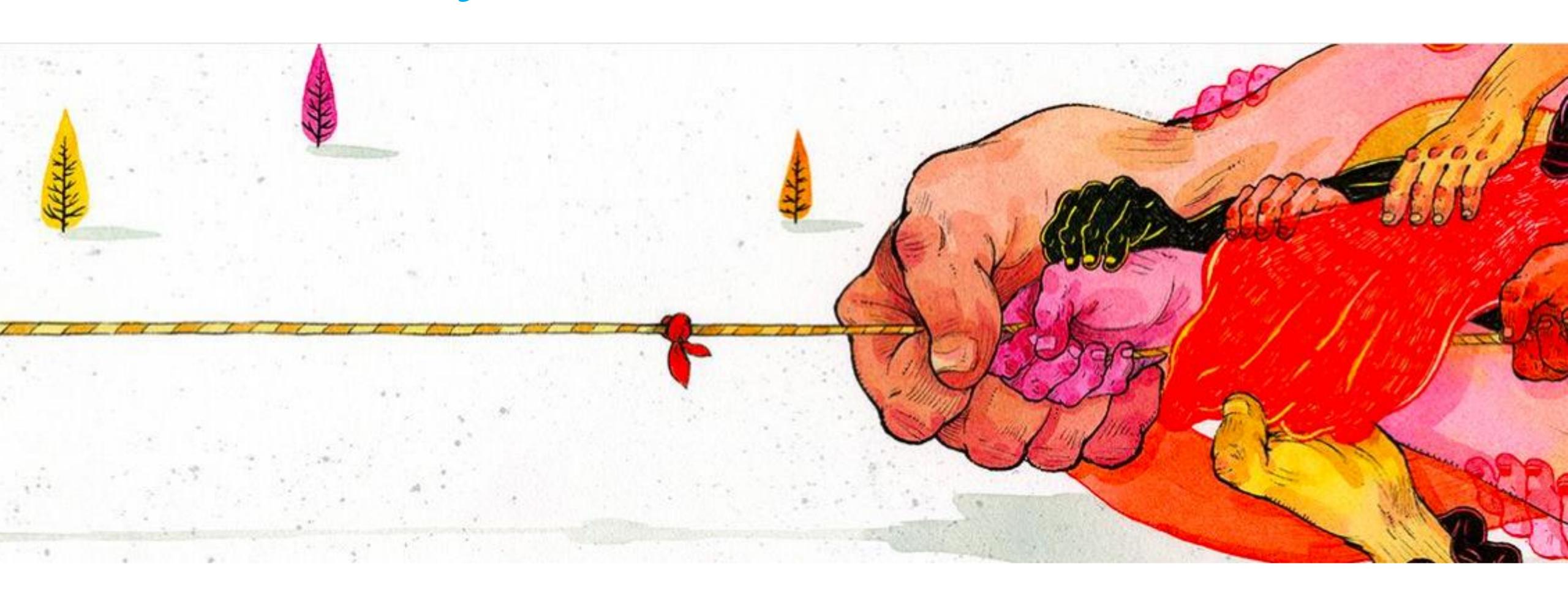








## My Research Focus





Earlier Insights — Barrier to Collaboration Alignment Creating the right environme Incentives: nt for Risk Vs Collaborati Reward Creating Strategic on Shared Decisions -**Finance** Open Vs responsibil Partner and Closed? ity banking -**Selection -**Linear / Who is right? short term profits Hard Soft Trust, Changing Transparen mindsets cy and Motivation to CE Contractin Lack of Collaborati common / on Costs Manageme Risk shared Aversion vision for CE

### Next steps!

- Testing the framework via interviews/workshops with companies developing CE transitions
- Iterating framework to improve and apply to support
- Building workshops to develop tools to support collaborative design and experimentation of CE challenges

#### A selection of funded research projects

#### ResCoM





**ECOBULK** 

Resource Conservatie Manufacturing (ResCoM) is a European Commission co-funded project running until November 2017.

The aim is to support designers and manufacturers capturign value by closing the loop. Twelve organisations from research, industry and technology collaborate in this project. A wide range of knowledge partners and OEMs (Original Equipment Manufactures) have set up pilots for each OEM in which the opportunities and challenges of introducing multiple life cycles are explored.

The first European remanufacturing Network (ERN) supports existing remanufacturers with improving their operations and drives new companies to take on the challenge. It also has the ambition to improve the competitiveness of manufacturers and raise awareness on remanufacturing. The consortium counts 8 partners from 6 EU member states. Two-year long project.

"Circ€uit" - Circular European Economy Innovative Training Network" – is a Marie- Sklodowska-Curie Innovative Training Network within the Horizon 2020 Programme of the European Commission. In a consortium of seven universities and 15 PhD positions, research will look at the circular economy from different perspectives including business modelling, reverse logistics, consumer behaviour, sustainable design, the role of technology, and environmental and economic assessments via input-output analysis and LCA.

Circular Process for Eco-Designed Bulky Products and Internal Car Parts (ECOBULK) aims at contributing to closing the loop of composite products in the automotive, furniture and building sectors by promoting greater re-use, upgrade, refurbishment and recycle of products, parts, and materials. It focuses on large scale demonstration activities in 7 countries and more than 15 demonstrators to address the key components of the circular economy solutions.





CIRCO



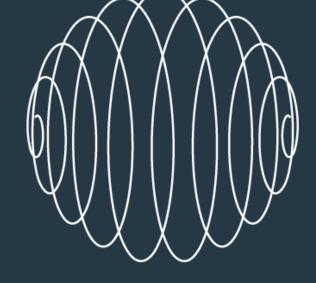
MOOC

CIRCO business classes

Circular Delft



dif



Disruptive Innovation Festival

Circulate

Schmidt-MacArthur Fellowship

## Thanks for listening Questions?

