



Aalto University
Design Factory

Product Development Project

Introduction to PDP 2021 - 2022



Why are we doing this?

What are the expectations?

What roles are there?

How the work is evaluated?

How are projects resourced and supported?

Day 1

How does the learning happen?

Gala

13.05.2022





PdP – the academic years 1997-2021

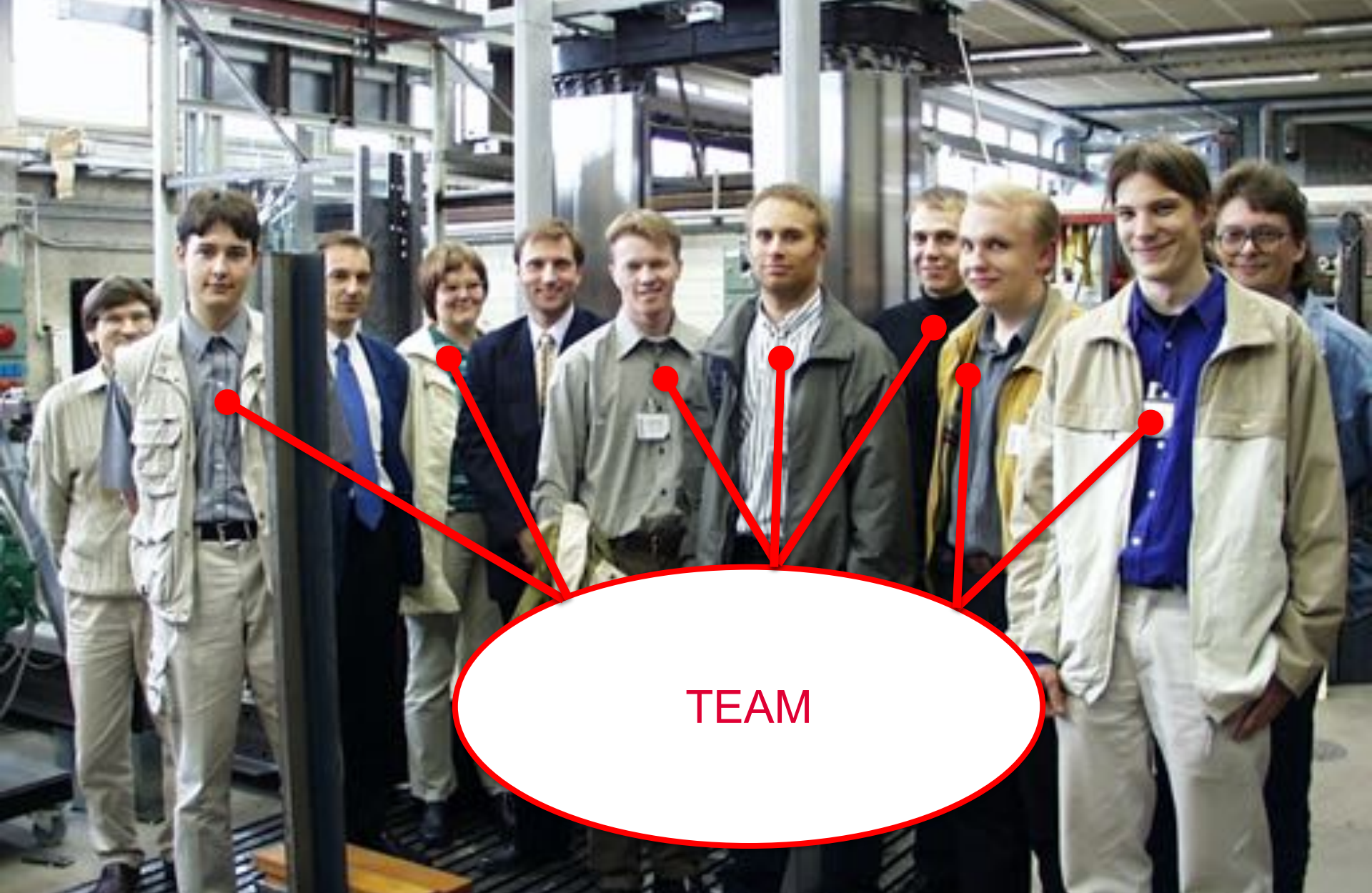


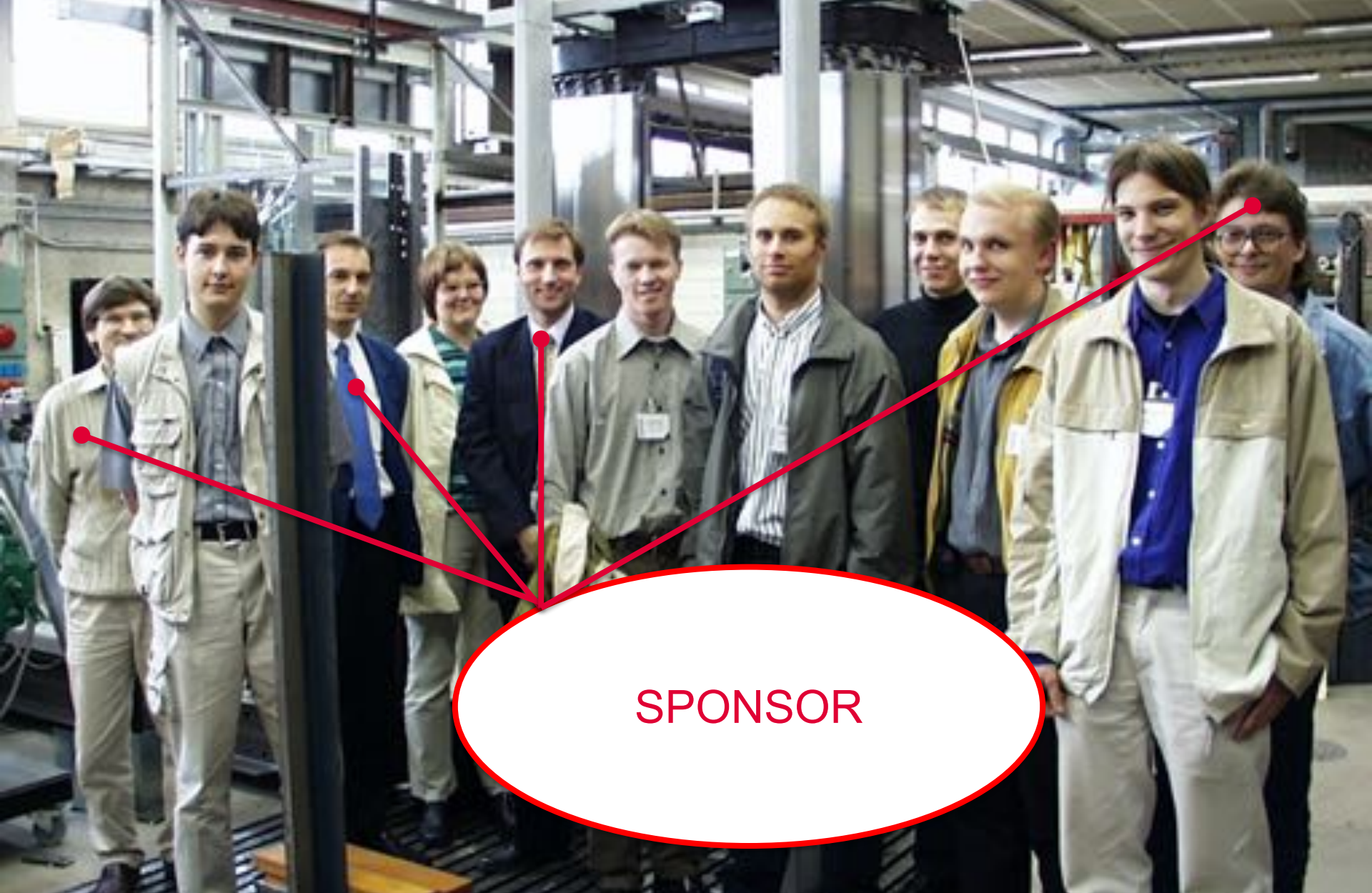
299 projects

2907 students

25 universities

136 partners







RESOURCES



DEMONSTRATION



PdP basic – always 10 ects



PdP Extended – up to 15 ects



Requires:

- theory (lecture/minilecture)
- application (to your project)

- PM
- Creativity WS
- Prototyping WS
- Electronics WS
- 3D printing WS

PdP Incredible = PdP (15) + MEC-E3999 (10)

[design-to-order only]



Integrated studies

Do you have any other course exercises that could be combined with PdP project?

- Language...
- CAD...
- Manufacturing...
- Materials...
- Project...
- Business...
- Service...
- Automation...
- Electronics...
- Software...
- Communication...
- FEM...
- Simulation...
- Testing...
- Management...
- Marketing...
- UX...
- Signal processing...
- Radio engineering...
- Quality...

TEAM

Learning objectives

- all the necessary development **phases** are completed and a **prototype** introduced
- by practicing project work in an **interdisciplinary** team, students shall become able to:
 - work out **project plan** & schedules
 - manage **resources** & risks
 - complete a project successfully
 - **communicate** & document effectively

There is no "I" in TEAM



PERSONAL

Learning objectives

- becomes better aware of the **quality of** his or her own design, engineering, or business **skills**
- understands the **potential** and the **challenges** of interdisciplinary teamwork
- understands how successful PD is based on both traditional and exceptional **methods and tools**
- understands PD **costs** and economy
- is able to deliver high quality oral and written **reports**
- is prepared for **negotiation** situations, and to deal with agreements, NDA's and IPR's ⁽¹⁾

⁽¹⁾ non-disclosure agreement
intellectual property rights

GRADING - aspects on quality

OUTCOME

(e.g. how tough was the challenge, patents, inventions, creativity, attractiveness, quality etc.)

PROJECT

(e.g. planning, execution, risk management, keeping schedules, reporting etc.)

R&D

(demonstrated use of proper R&D methods, e.g. from course text book)

COMMUNICATION

(e.g. CPM's, produced material, presentations, Gala)

ROLES – team / sponsor / staff

About the nature of PDP

-what do we "sell" for companies

-responsibilities

Contract

Project plan

Meetings

Decision making

Report

Prototype



LIFAair®

FOAMWOOD

SAAB

Arto
Saarnio



CleanDet

KONECRANES®

ENSTO



Important dates - to get started

17.09. talk with PM "candidates"

26.09. student profile sheets DL

29.09. Team forming (after lecture)

02.10. PM training

06.10. Meeting the sponsors -> decisions

13.10. Joint lecture for teams and sponsors

21.01. Half-way show

13.05. Final Gala

(¹ info sheets about projects in MyCourses

Project managers

Role of PM

Roles of team members



Should you become a team leader?



MOST IMPORTANTLY

- **The Project flyers at MyCourses**
- **But everything is still subject for change**
- **Your profiles needed at 26.09.**
- **Team forming, defining the roles 29.09.**



What if ...?

I find myself in a wrong team

I find myself in a wrong project

There is a major misunderstanding



We promise that

You will become a team member

Your wish for project will be considered

Whatever happens is the right thing

TRAITOR

Face your moment of truth now

- to quit now = OK
- when teams are set, it's not **your private matter anymore**
- to quit later = to ruin your reputation, to let your team down

