PREFER

Professional Roles and Employability for Future EngineeRs

Sofie Craps
Greet Langie

University-Business Forum,
24-25 October 2019,
Brussels

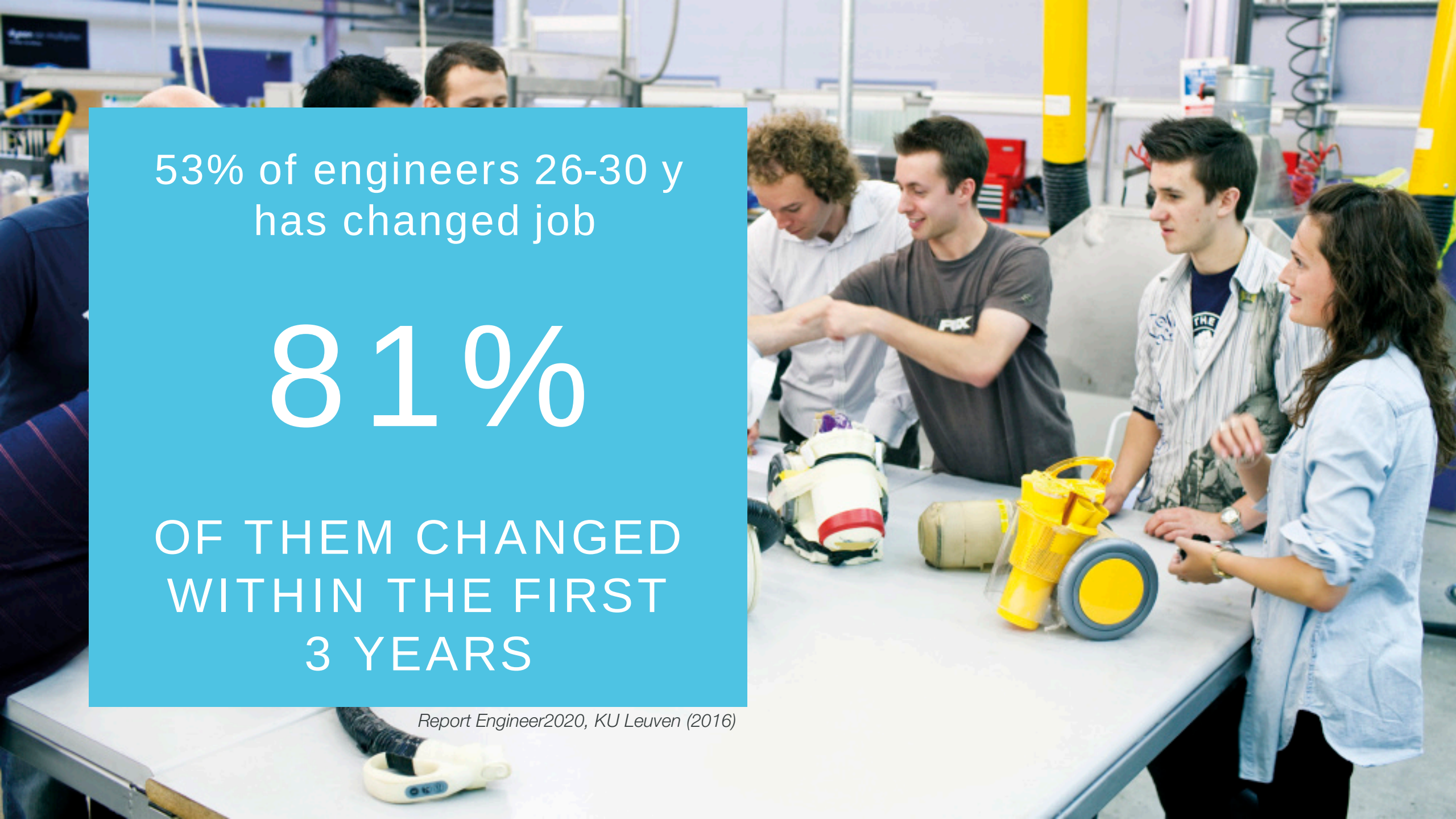
TU Delft

KU LEUVEN

TU DUBLIN
OLLSCOIL TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH
TECHNOLOGICAL UNIVERSITY DUBLIN

Co-funded by the Erasmus+ Programme of the European Union

Erasmus+ knowledge Alliance – 575778 - EPP- 1 -2016 - 1 - BE - EPPKA2 -KA



53% of engineers 26-30 y has changed job

81%

OF THEM CHANGED WITHIN THE FIRST 3 YEARS

Report Engineer2020, KU Leuven (2016)



#1

Job content
59,43%

#2

Career opportunities
35,10%

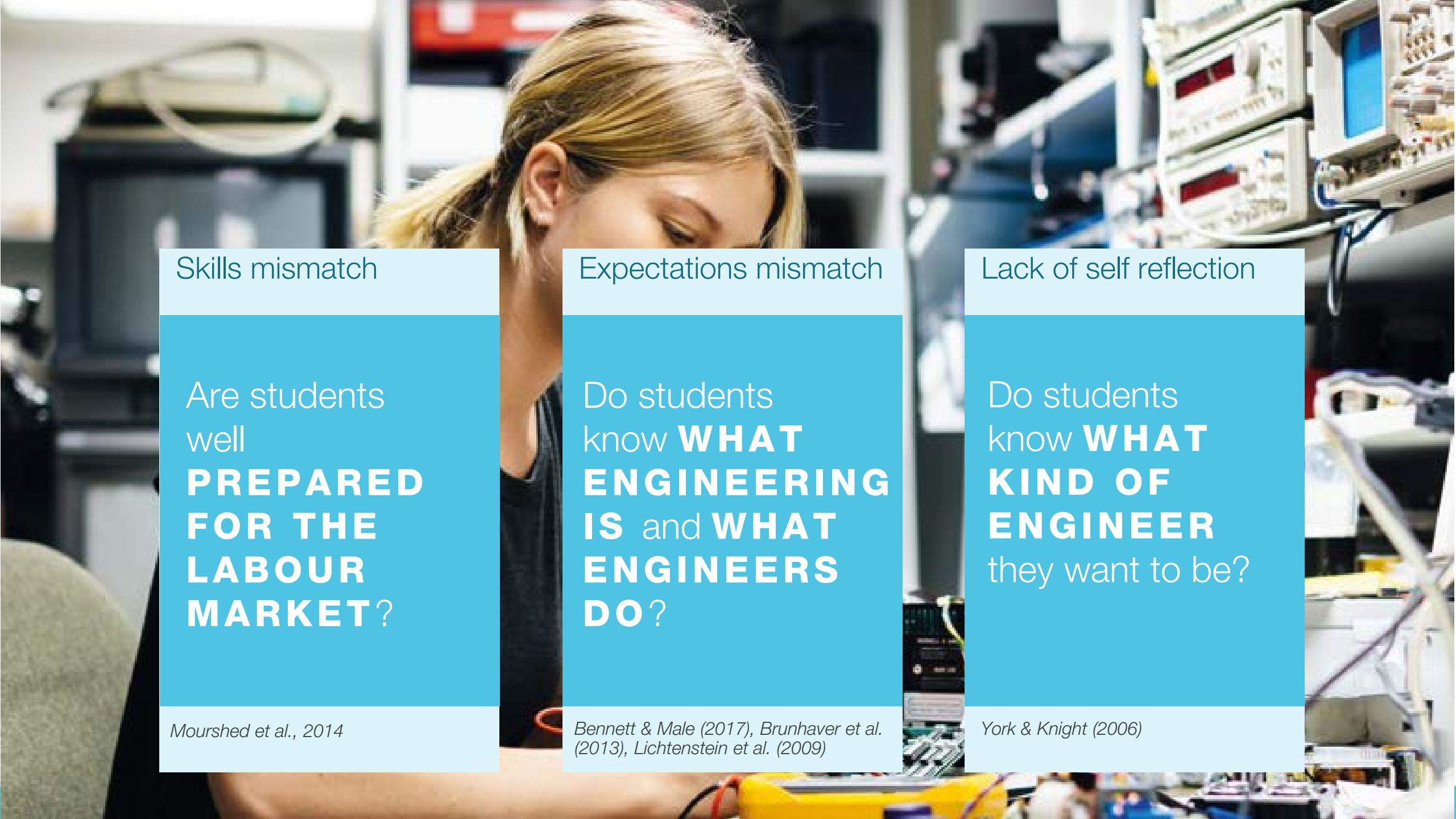
#3

Higher salary
29,17%

#4

Working in larger company 15,54%

Report Engineer2020, KU Leuven (2016)



Skills mismatch

Are students well **PREPARED FOR THE LABOUR MARKET**?

Mourshed et al., 2014

Expectations mismatch

Do students know **WHAT ENGINEERING IS** and **WHAT ENGINEERS DO**?

Bennett & Male (2017), Brunhaver et al. (2013), Lichtenstein et al. (2009)

Lack of self reflection

Do students know **WHAT KIND OF ENGINEER** they want to be?

York & Knight (2006)

PREFER

PROFESSIONAL ROLES AND EMPLOYABILITY FOR FUTURE ENGINEERS

Mission statement

*This knowledge alliance project aims to reduce the skills mismatch in engineering by **equipping engineering graduates** with more adequate tools **to get a grip on the complex engineering reality.***

PREFER

Erasmus+

Field: Higher Education

Action: Knowledge Alliances

Key facts and figures

Partners: 13

Countries: 3

EU grant: € 988,462

Project duration: 2017 - 2020

Professional Roles and Employability of Future Engineers



Lead organisation

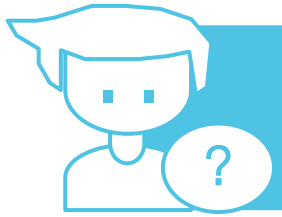
KATHOLIEKE UNIVERSITEIT LEUVEN

Location: Belgium

Project countries

Belgium, Ireland & Netherlands

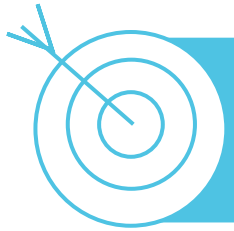
Goal



CREATE PROFESSIONAL AWARENESS

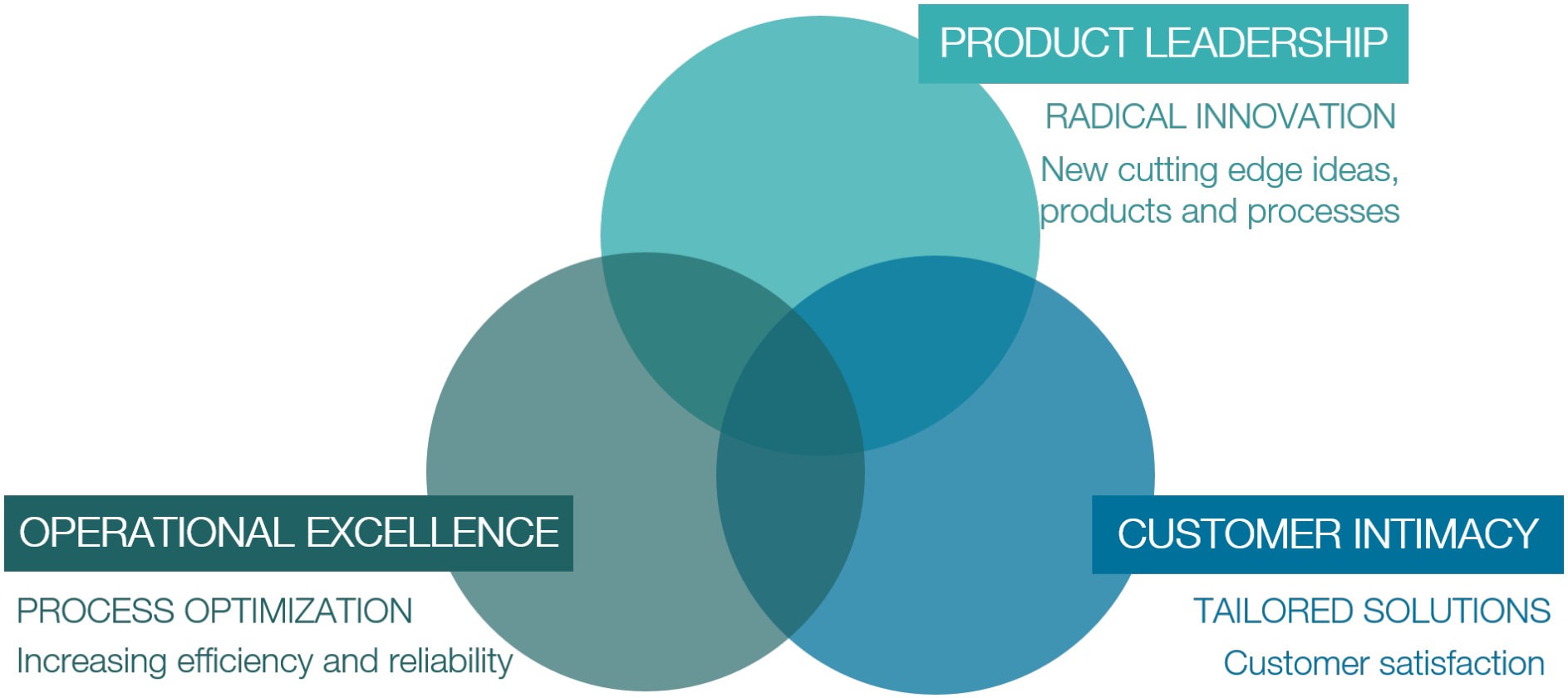


TEST AND REFLECT



TRAIN

Professional Roles Model



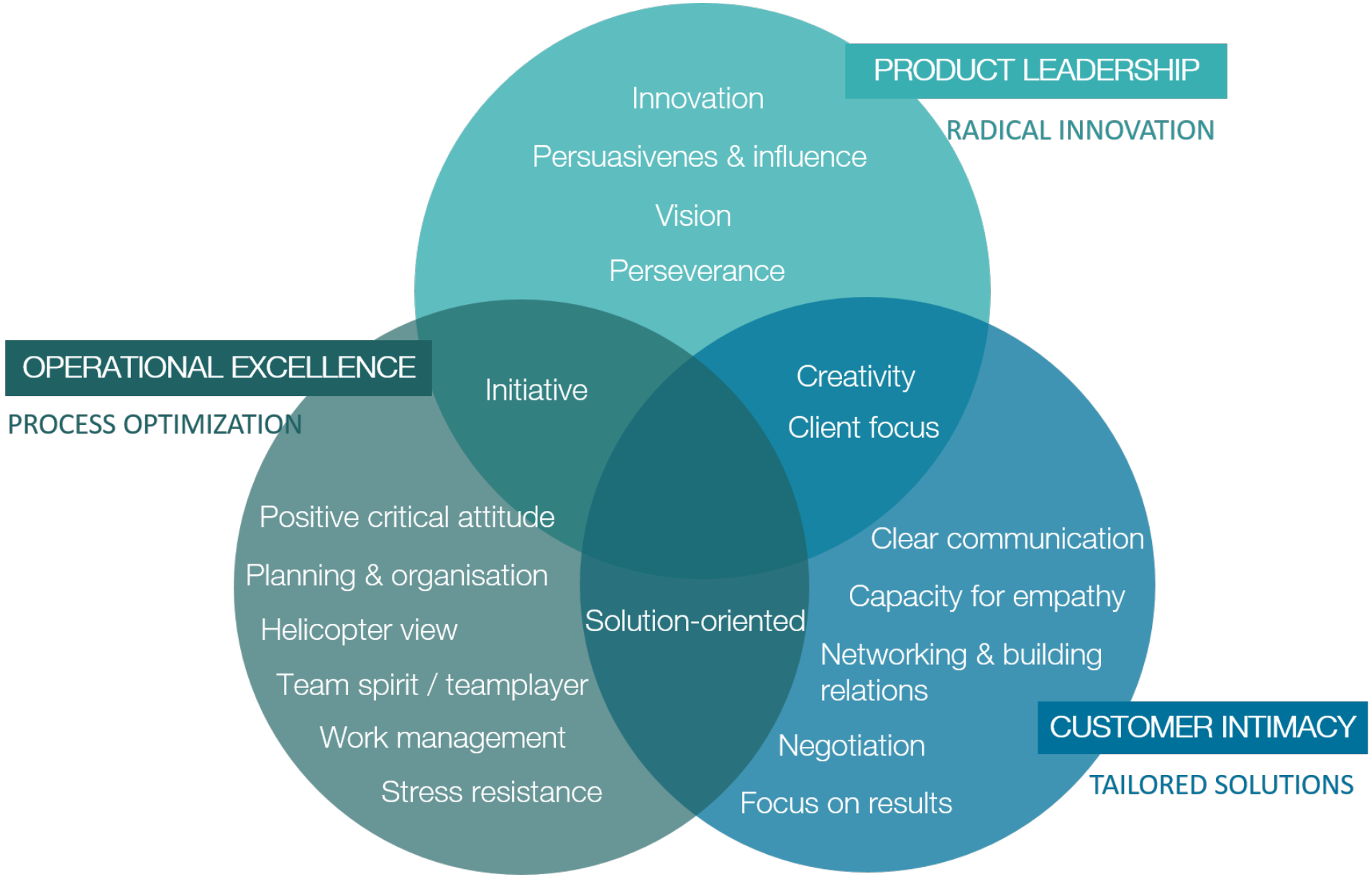
Hofland et al. (2015), Craps, S et al. (2018)

What competences are required?



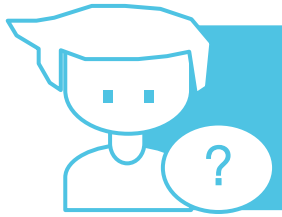
ENGIE SIEMENS ESB engineering boydens janssen PHARMACEUTICAL COMPANIES OF Johnson&Johnson telenet materialise pilz the spirit of safety pdm ZF

ingenium Atlas Copco ALTRAN BASF We create chemistry Agidens imec DURACELL VDL BUS & COACH umicore



Craps, S., Pinxten, M., Knipprath, H., & Langie, G. (2018)

Goal



CREATE PROFESSIONAL AWARENESS



TEST AND REFLECT

Test preference and role alignment

PREFER EXPLORE

- Explore your **preferred role** as an engineer

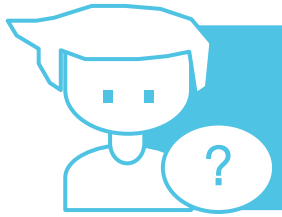
PREFER MATCH

- Learn to what extent you have the **abilities** to take up each of the professional roles
- Get advice on how to develop these **essential competences**



BDO ARUP SIEMENS BOSCH materialise

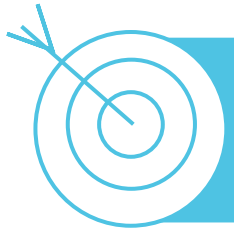
Goal



CREATE PROFESSIONAL AWARENESS



TEST AND REFLECT



TRAIN

Curriculum elements

PLUG-AND-PLAY MODULES

Easy to implement

COMMUNICATION

LIFE LONG LEARNING

INNOVATION BOOT CAMP

1. **Communication** is more than just talking: Chinese Whisper with a Twist (1h)
2. **Lifelong learning**: the power of reflection (30')
3. **Innovation** boot camp **CDIO Style** (40h)
4. Adapt your **communication**: selling your work in 6 questions (4h)

VISIT US AT THE EXHIBITION AREA

Want to know more?

www.preferproject.eu

