

Interactive Session A

4. Technology to Support the Activation of People with Intellectual Disabilities

Presented by
**TNO - Innovation for Life,
The Netherlands**

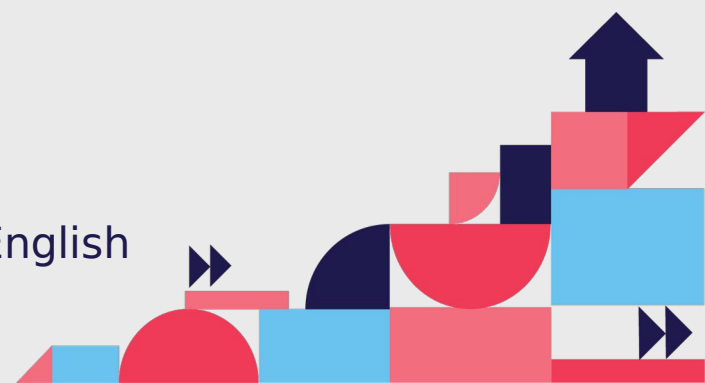
TNO innovation
for life

14.15 - 15.15

Room LIVE 4-5



Session in English



Inclusive Technology Implementing & Upscaling

European Social Services Conference 2023

Michiel de Looze

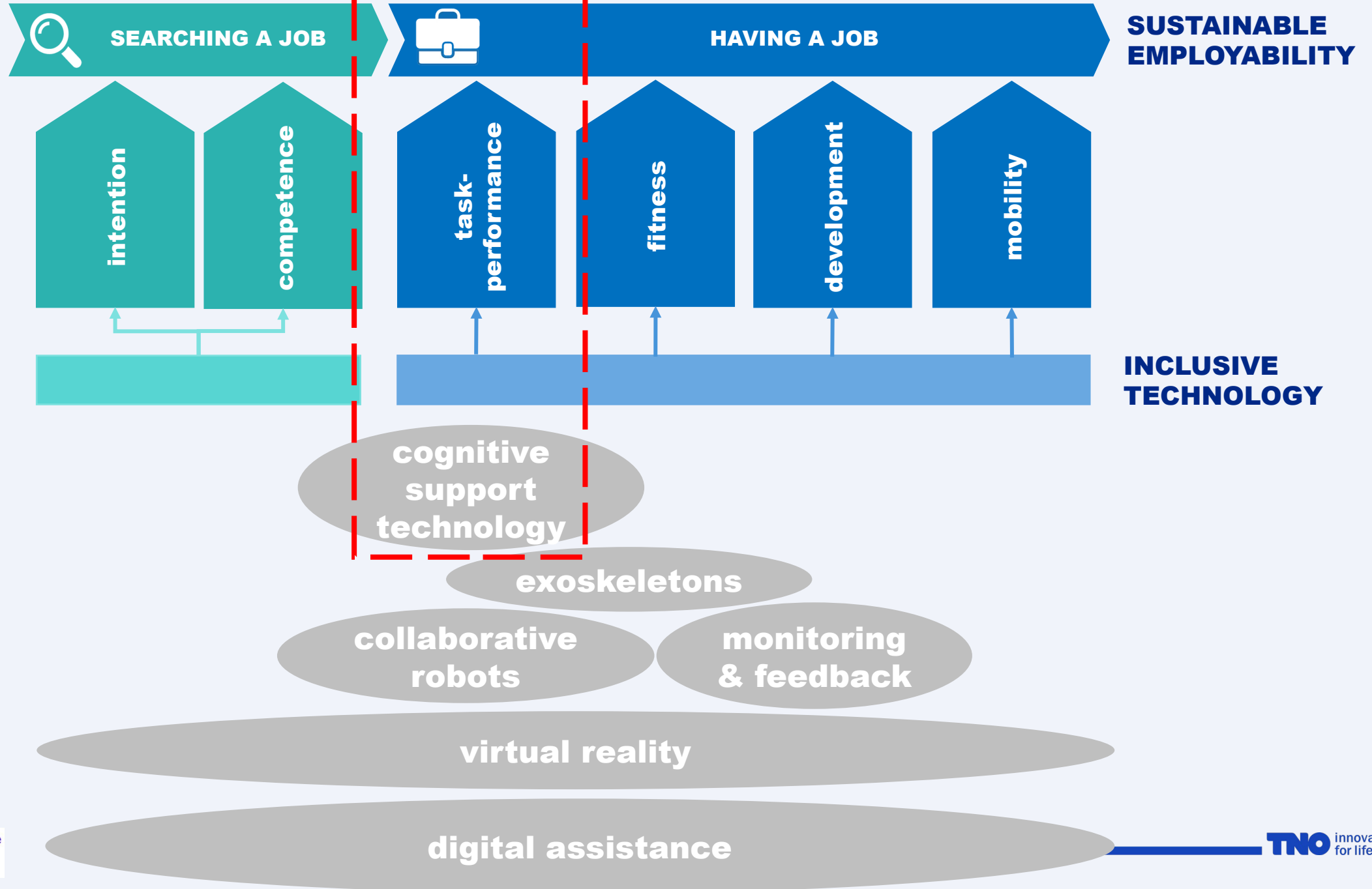
Harry de Boer

**Start
presentation**

Agenda



1. Inclusive Technology
2. Example Smart Glass in Order Picking
3. Cognitive Support Technology
4. Factors for Success
5. Upscaling & Impact
6. Take Aways



SMART GLASS in ORDER PICKING

CURRENT PROBLEMS

- only a few workers can perform the task
- much walking and standing is physically stressful
- order lines are mixed up → wrong items picked
- counting the items to pick is difficult
- insecurity, fear to make mistakes
- dependency from supervisor



SMART GLASS in ORDER PICKING

CONCLUSIONS

- most people can learn the order picking task within a relatively short period of time
- this holds also for 50% of the people who cannot perform the order picking task without smart glass
- use of smart glass helps the supervisor: less time needed for helping and recovering of errors
- significant amount of people can move from simple to more complex work

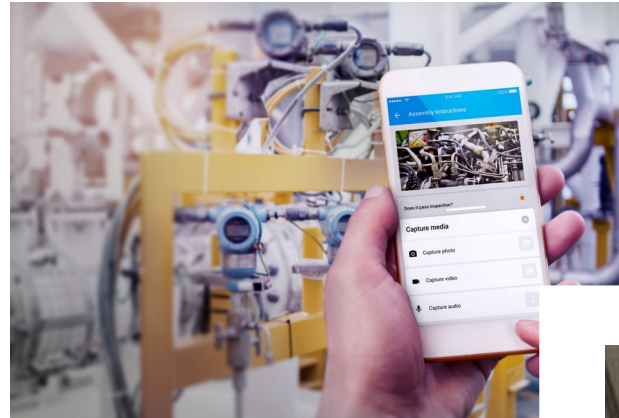


Cognitive Support Technology

1 remote assistance



2 digital work instructions

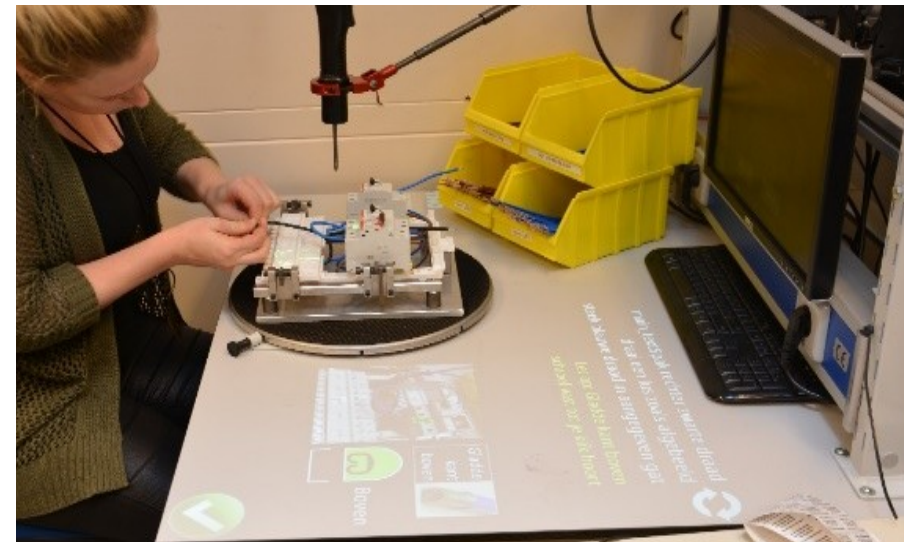
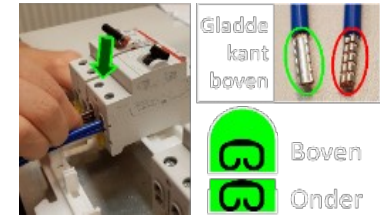


3 augmented reality



Examples Cognitive Support Technology

DIGITAL AND PROJECTED WORK INSTRUCTIONS



Factors for Success

selection

understanding of the work process, human tasks and needs for support

transparent decision-making on common understanding of aims, target group, needs, pros and cons of technologies

commitment of decision-makers throughout the process

development

active involvement of workers in developing work instructions

application of iterative cycles of developing and testing the work instructions

optimal and balanced attention for all form and content aspects of the interface

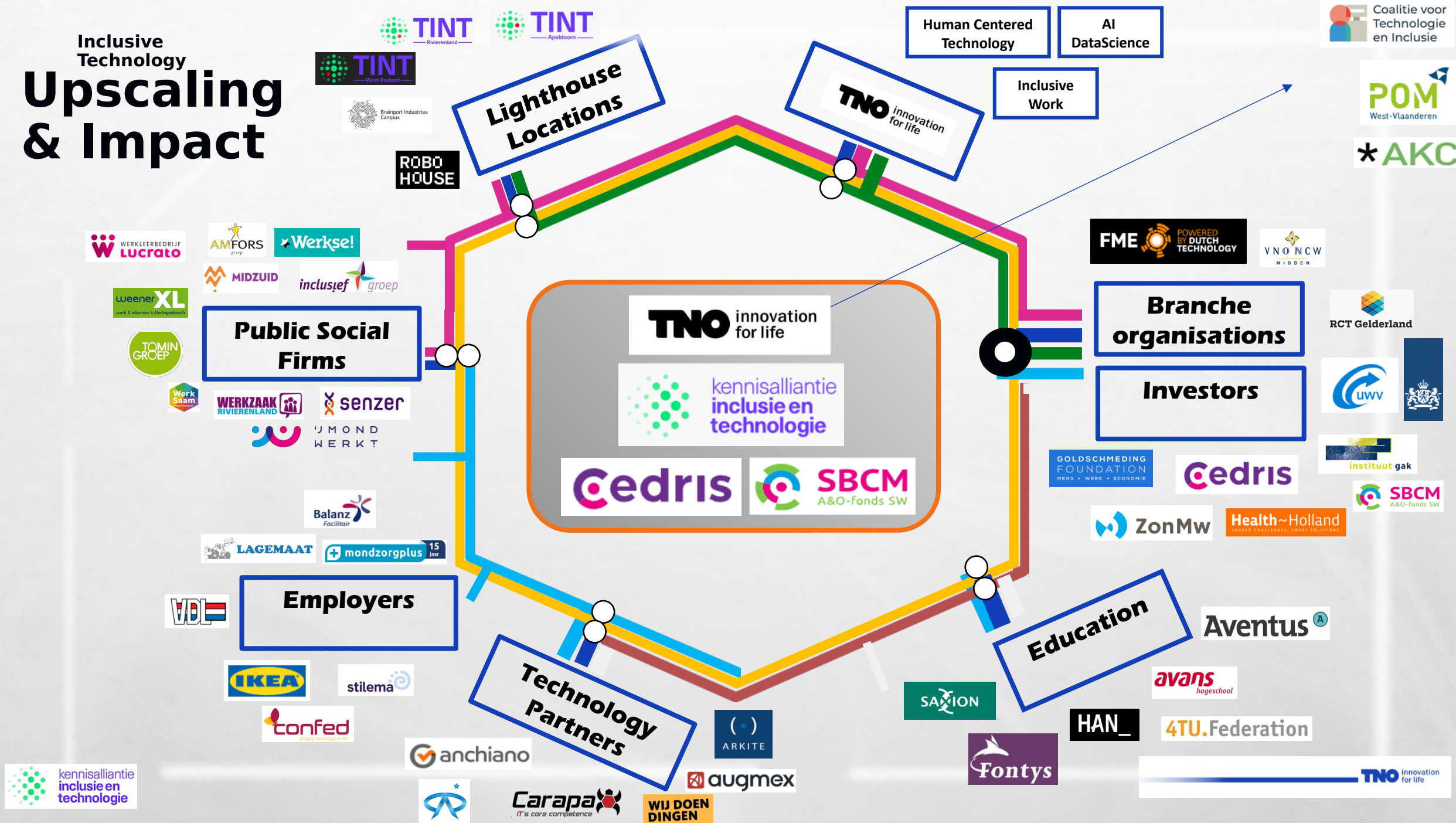
implementation

technical integration in information and management systems

shared understanding of the modified role of the human supervisor

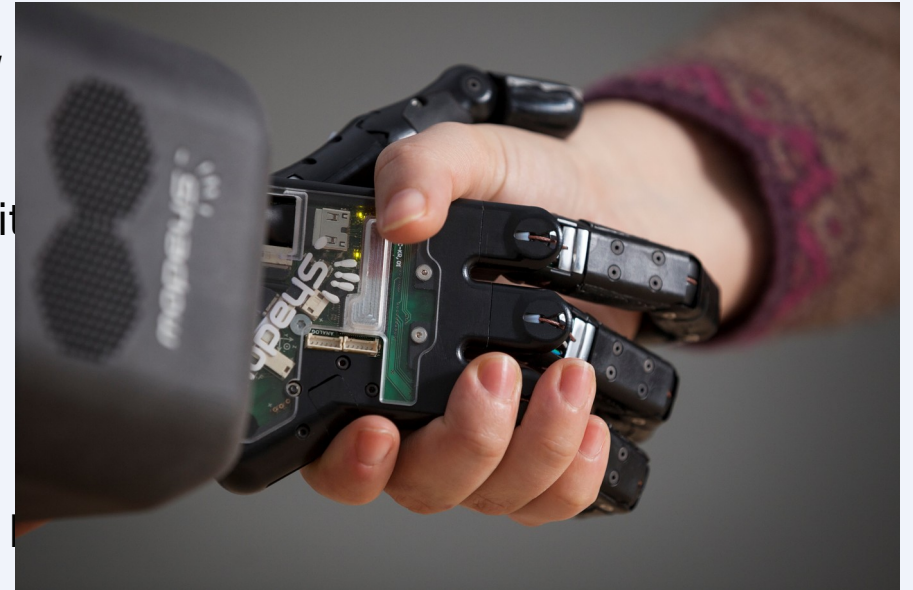
optimal transfer from (learning) work station to real production environment

Inclusive Technology Upscaling & Impact



Take Aways

- Start thinking from the human perspective point of view
- Inclusive Technology supports development and capabilities
- Cooperate with all stakeholders to accelerate upscaling
- Social Investors are willing to invest but think out of the box



Questions?

Thank you for your attention

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