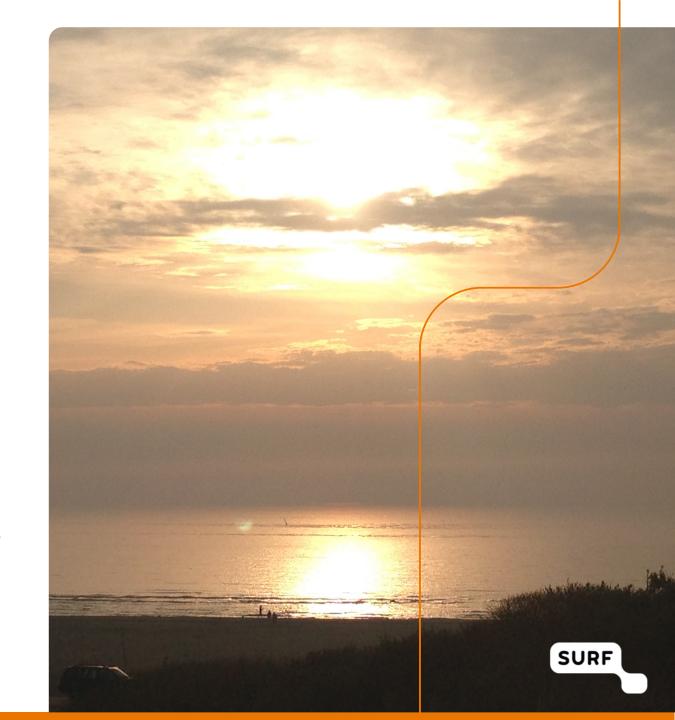


On the agenda

- SURF & our viewpoint
 - Acceleration Plan for Innovation in Education with ICT
- Topics in Education
- Consequences for NRENs
- Rise to the occasion together?



Who am I? Quick intro

SURF is 50 years old and recently merged its companies into 1

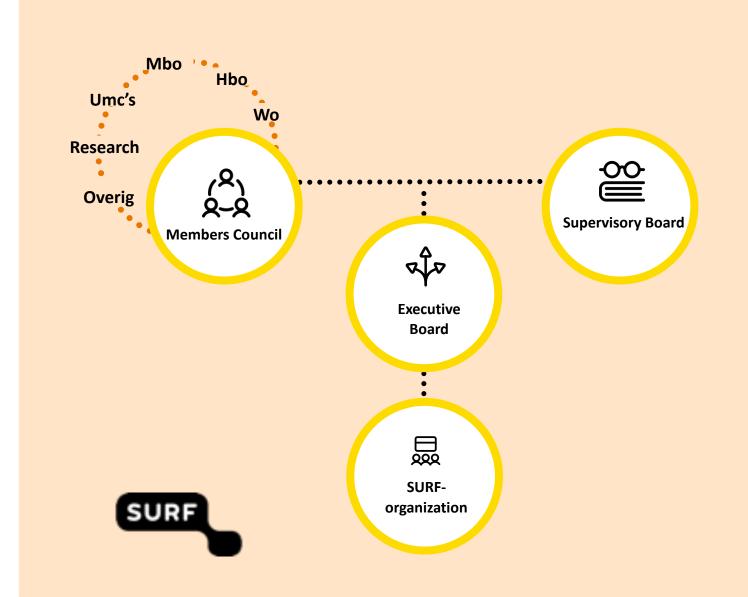
SURFnet, SURFmarket and SURFsara are now *SURF by*

We are a cooperative: members own & decide

Universities (research & applied sciences), vocational education & research institutes

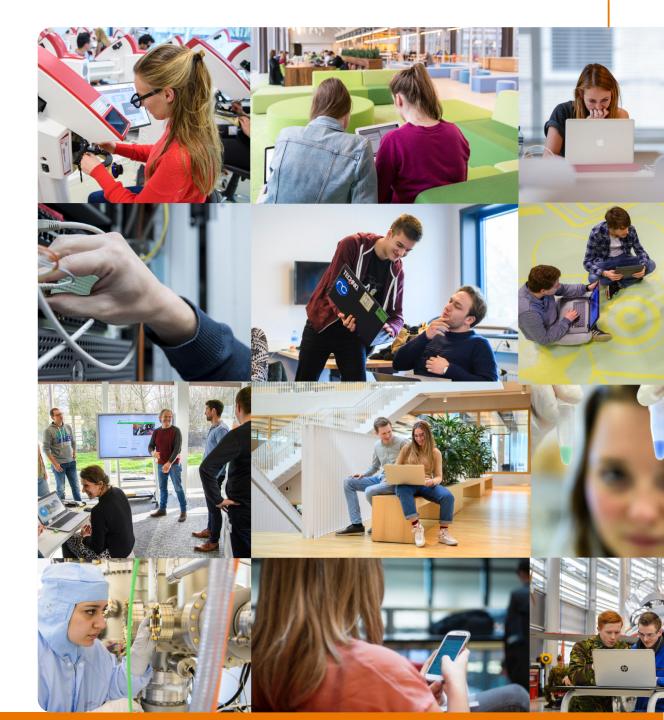
Since 2020 we have a new Executive Board

I serve as the CEO; I have a history in universities as Board Chair (CEO)



Complex challenges require a new approach

- Digitalization is everywhere & disruptive
 - ICT is now moving into the core business of universities and affects how we educate and how we do research
 - It also affects everything else: all the professions members teach to the students, as well as all the topics they research: it's a game of double jeopardy!
- The great societal challenges (that education and research want to help solve) are complex and require international and cross-disciplinary collaboration



The Dutch Acceleration Plan



- Co-creation of relevant stakeholders
 - Teachers, students and experts
 - Support of Board members & Ministry
 - SURF, Association of universities in NL (VSNU), Association of universities of applied sciences in NL (VH)
- Overall aim: enhance quality of education with ICT for students, faculty and staff
 - Develop & learn together (reduce cost)
 - Develop skills & practice in use of ICT









Main objectives

- 1. Improve **job market** connection
- 2. Facilitate mobility
- 3. Provide & use open educational resources
- 4. Improve quality through data driven& evidence informed interventions



Covid19 digitalized education 100%

Positive effects

- Adoption of ICT tools increased enormously
- Continuity was safeguarded
- Some students even performed better
- Boost for innovation with ICT and for learning together (active community sharing)

Negative effects

- Existing barriers increased: many students could not connect and became literally invisible
- Lack of engagement and connection
- Lack of pedagogy and didactical skills for ICTedu
- Conclusion: this was NOT what we call digital education. Our goals remain equally urgent

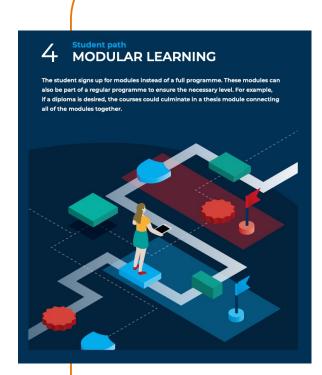


Successful examples – flexible education (facilitate mobility & better tuning to job market)









Components for flexible education

- Policy on microcredentialing
 - High potential for use in Life Long Learning
 - Agreeing on standards for description of microcredentials
 - Quality assurance
- ICT-infrastructure for studentmobility
 - Exchange of educational data (OOAPI)
 - EduBadges: digital certificates
 - Identity that can be used across institutions (EduID)



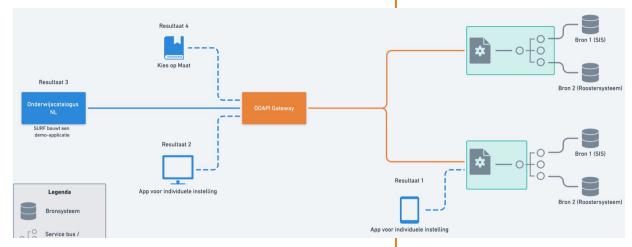




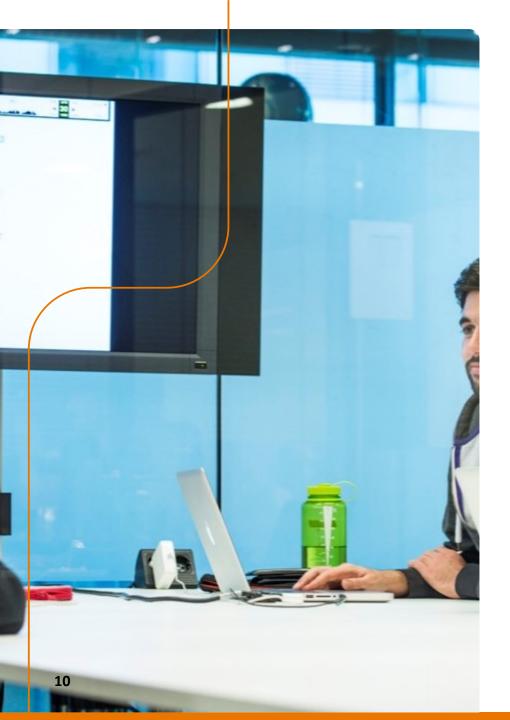








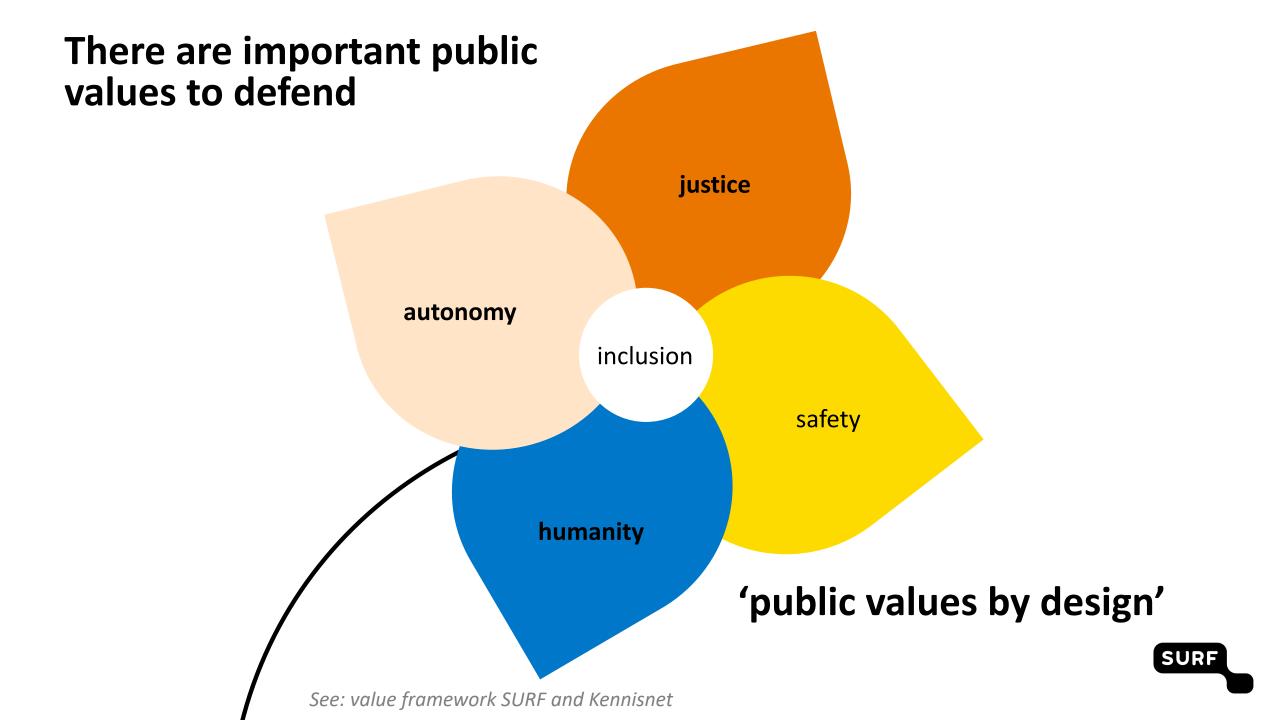




So how does this affect us as NREN?

- 1. Infrastructure is not enough anymore
- 2. ICT is part of education and research strategy
 - →We need to be part of the strategic debate
 - →Influence choices by presenting technological opportunities & solutions
 - →Explore with institutions (students, faculty and staff) what they need & adapt thereto
- 3. New technical spaces to fill: IoT, AI, data, etc.
- 4. As well as new ways of collaborating with members and other stakeholders (co-create)

SURF



Who are better placed than us?

- Higher ed needs to collaborate internationally to reap the profits of digitalization as well as defend itself against threats.
- We as NRENs already have this collaboration
 - We have the knowledge
 - We have trust and build on that
 - Together, we also have capability
- You do the math!

