Reimagining IT at University of Oslo –Transforming IT services to the needs in the 21th century

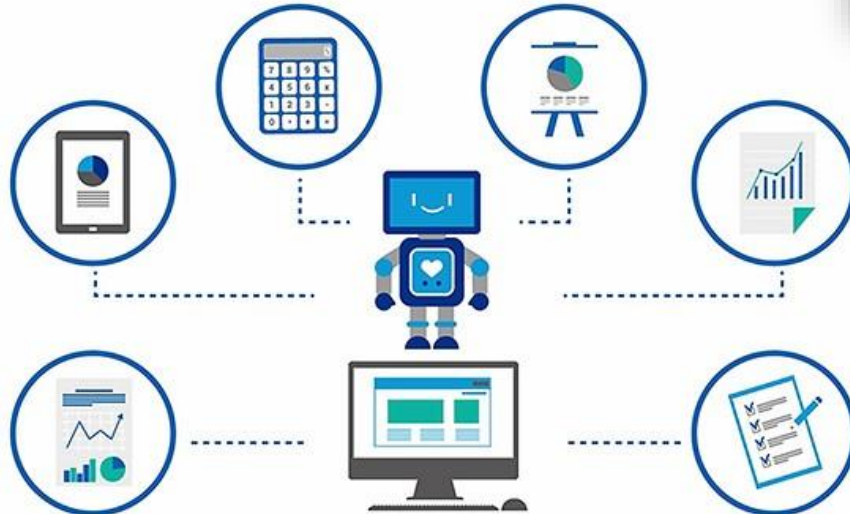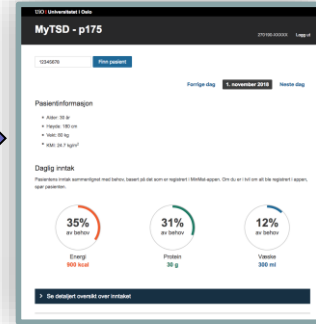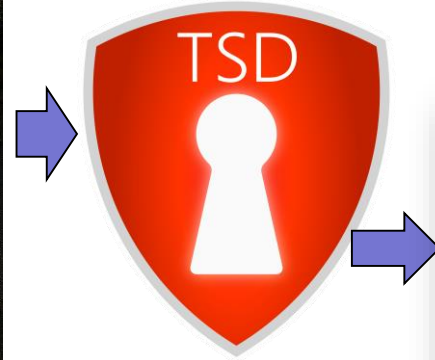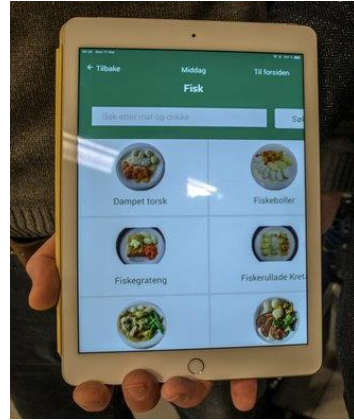Lars Oftedal, IT-director, University of Oslo

University of Oslo (and me)

- Best research university in Norway
  - Ranking Shanghai: 62
- Budget 8 billion (NOK)
- Students: 28.000
- Staff: 6600 FTEs

- IT-director 2007 – today
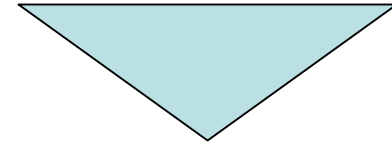 - USIT – University Centre for Information Technol

Why reimagining IT

Develop a digitalization plan

- Workgroup
  - Dean, researchers,
- IT in science
- IT in education
- Masterplan for IT – digitalization plan
  - Needs from researchers
  - Survey from the faculties
  - Resource analyses
  - IT trends
  - Research on IT in organizations

Content of the digitalization plan

- A summary of the current situation for UiO's use of IT
- An overview of the most important trends
- Vision
- Challenges and user needs
- Financing needs and relevant financing models
- Recommendations

Survey result

- UiO's ambitions – larger investments are absolutely crucial
  - Dilemma: Who pays for what?
- Problem analysis from the faculties
  - Gap between IT and educators/researchers
    - Technology and services offered
    - Support offered
- Research and education: domain-dependent and domain-specific
- Good IT infrastructure and basic IT services, secure

Recommendations

- Strategic alignment of IT with business
- IT competence and skills development
- Domain-near IT support for research and education
- Coordination and prioritization for the university's IT
- Organization of IT at UiO
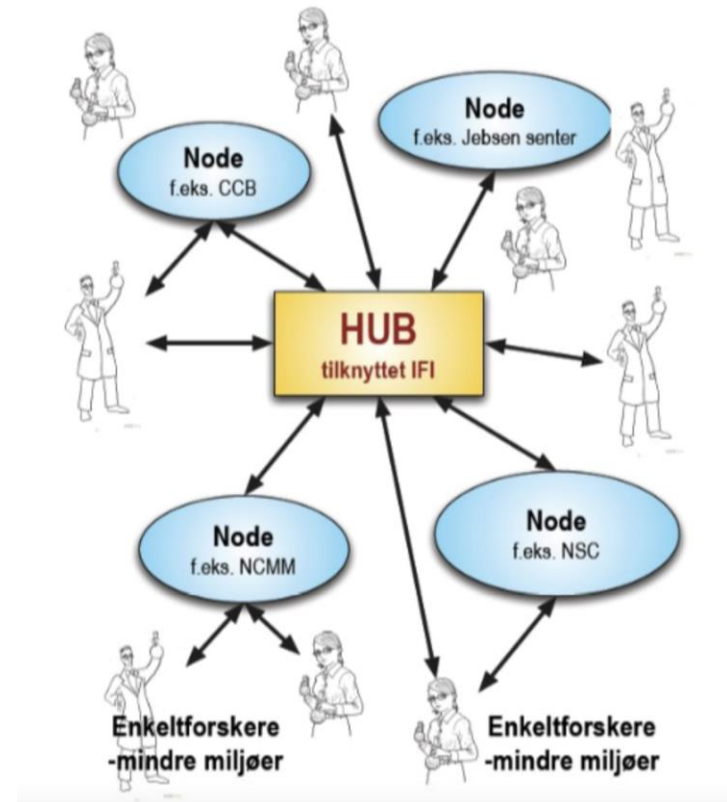- Financing and financing models

IT in Research

Hub/node for research and education

- Hub/node
  - Research needs
  - eInfrastructure
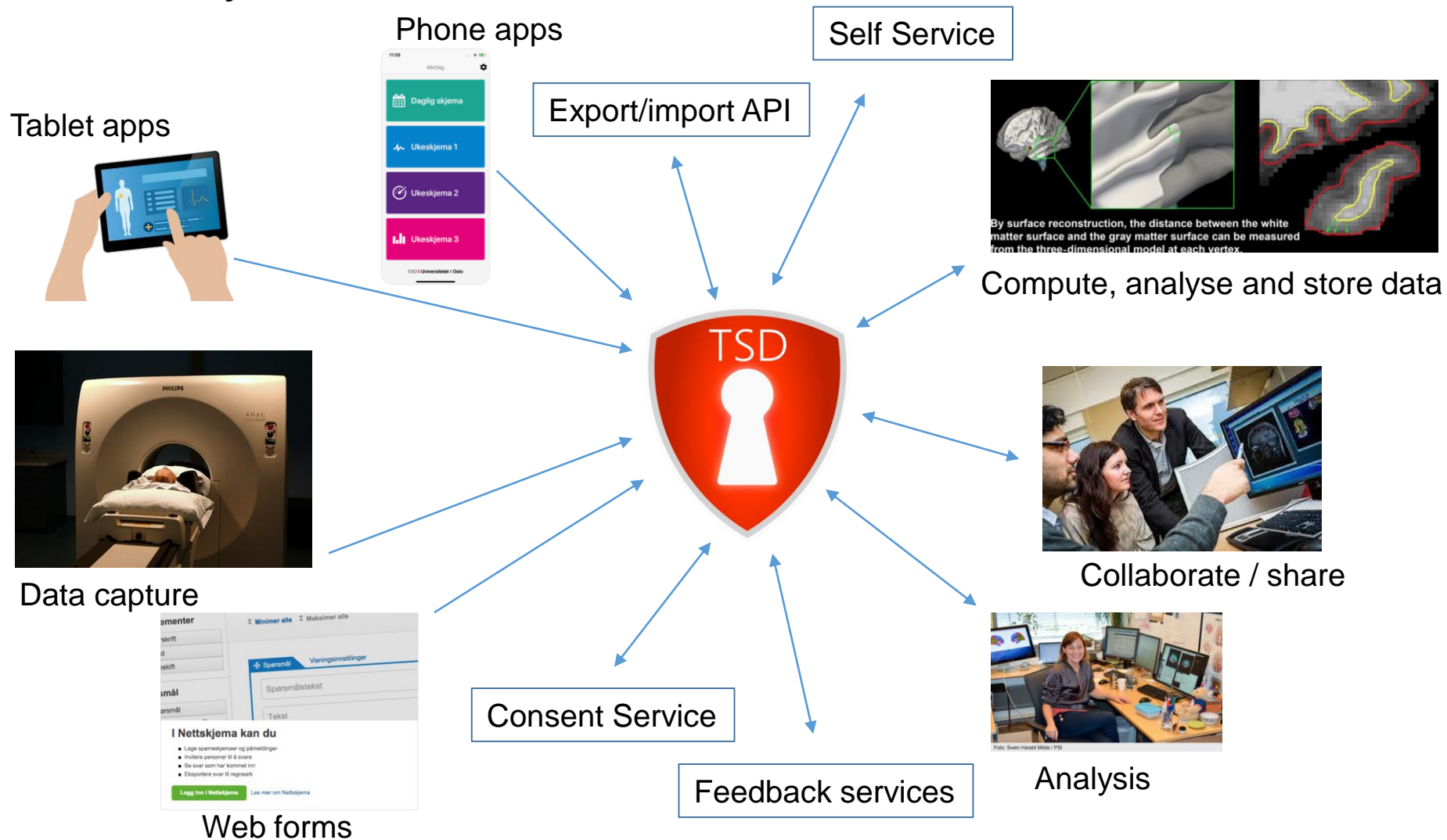
- 7 Hubs already

Platforms for IT in research

- Services for sensitive data (TSD)
- Research platform

- GDPR

Services for Sensitive Data (TSD)

- What is TSD?
  - provides a platform for researchers at UiO and other public research institutions
  - can collect, store and analyze sensitive research data in a secure environment
  - secure project area
  - integrated solution for collecting sensitive data (Nettskjema)
  - access from anywhere in the world
- https://www.uio.no/english/services/it/research/sensitive-data/
- Video about TSD
  - https://www.uio.no/english/services/it/research/sensitive-data/tsd-video/

Phone apps

Self Service

Export/import API

Tablet apps

Compute, analyse and store data

Data capture

Collaborate / share

Consent Service

Feedback services

Analysis

Web forms

Recommendations IT in research

- Platforms
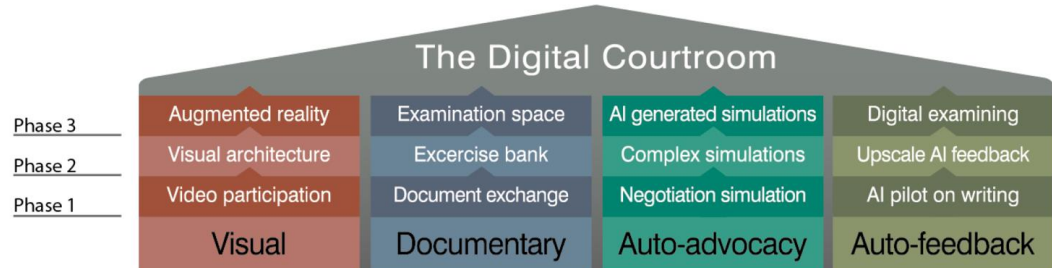- Hub/node
- Competence and skills
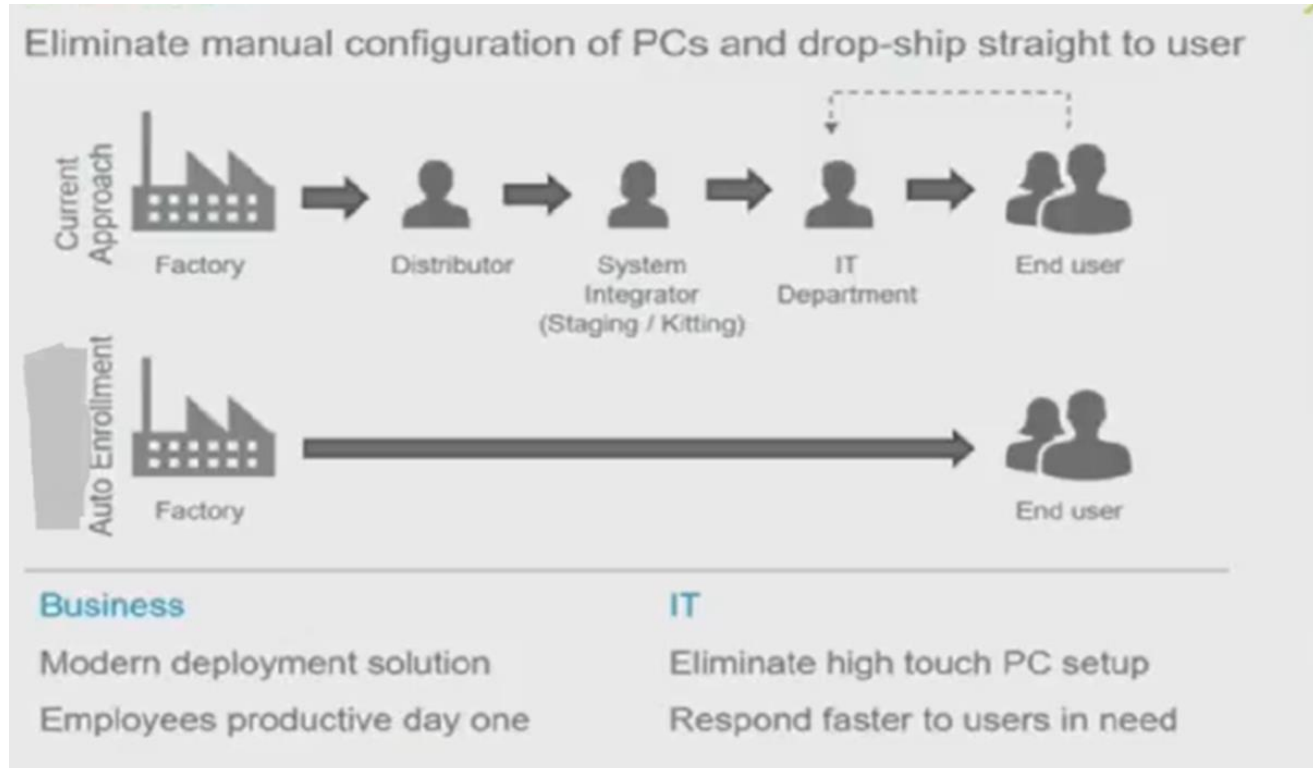- Joint national services
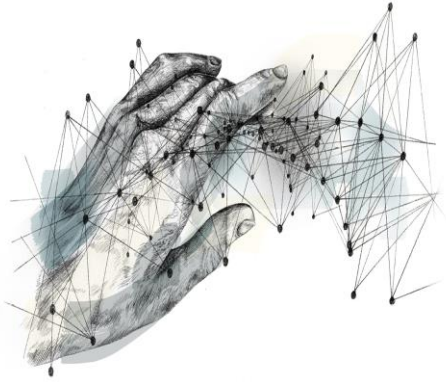
IT in Education

IT in education

- "The goal of CCSE is to integrate computing as a natural tool in basic educations, to make the education research near and to prepare students for an interdisciplinary workplace"

The Digital Courtroom

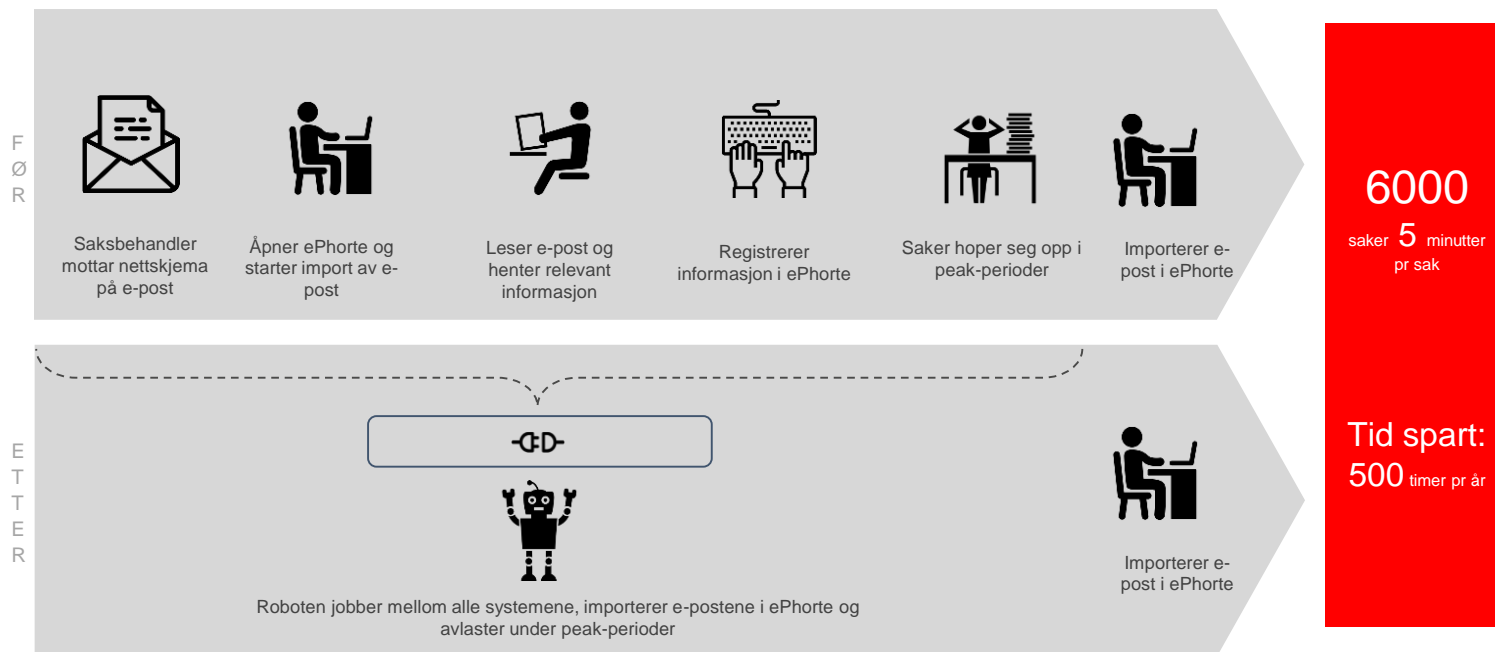|	Visual	Documentary	Auto-advocacy	Auto-feedback
Phase 3	Augmented reality	Examination space	AI generated simulations	Digital examining
Phase 2	Visual architecture	Excercise bank	Complex simulations	Upscale AI feedback
Phase 1	Video participation	Document exchange	Negotiation simulation	AI pilot on writing

Recommendations IT in education

- Promote innovation in digitalisation and IT in all education and studies

- Strengthen employees and students digital competence and skills

- Develop students' learning and study environments

- Increased emphasis on connecting digital and physical learning environment

- Improve support for evaluation and feedback along the way, learning analytics and educational leadership

IT infrastructure and basic IT services

Eliminate manual configuration of PCs and drop-ship straight to user

Current Approach: Factory → Distributor → System Integrator (Staging / Kitting) → IT Department → End user

Auto Enrollment: Factory → End user

Business

Modern deployment solution

Employees productive day one

IT

Eliminate high touch PC setup

Respond faster to users in need

Administrative IT

FØR

Saksbehandler mottar nettskjema på e-post

Åpner ePhorte og starter import av e-post

Leser e-post og henter relevant informasjon

Registrerer informasjon i ePhorte

Saker hoper seg opp i peak-perioder

Importerer e-post i ePhorte

6000
saker **5** minutter pr sak

ETTER

Roboten jobber mellom alle systemene, importerer e-postene i ePhorte og avlaster under peak-perioder

Importerer e-post i ePhorte

Tid spart:
500 timer pr år

IT Governance
– coordinating, prioritizing, portfolio management

- Governance challenges:
  - Competence
  - Focus
  - Transparency
- Changes in Governance in higher education
  - «New» strategy from the Ministry of Education and Research
  - Directorate for ICT and joint services in higher education and research

New IT Governance

- Strategic coordinating group for IT
- Subgroups
  - IT in research
  - IT in education
  - Administrative IT
- IT part of the responsibility for the director
- National services

Organizing of IT

- Status
- Technology trends
- Competence
- Challenges
- One:IT
  - Project

Financing of IT

- Cost IT on UiO
  - ~500 million NOK (Bencheit)
- Invest in IT!
- Financial models
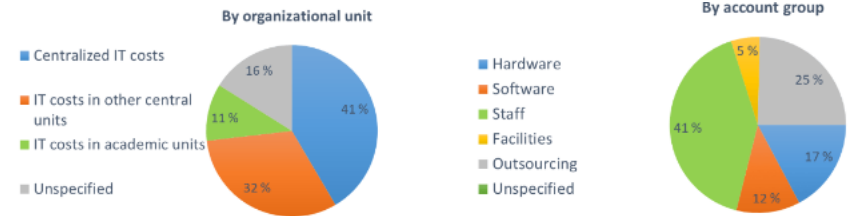
Comparison

You can also compare your organization against your peers. In the BM analysis, you can pick up four of your fellow organizations and put them in comparison by all indicators.
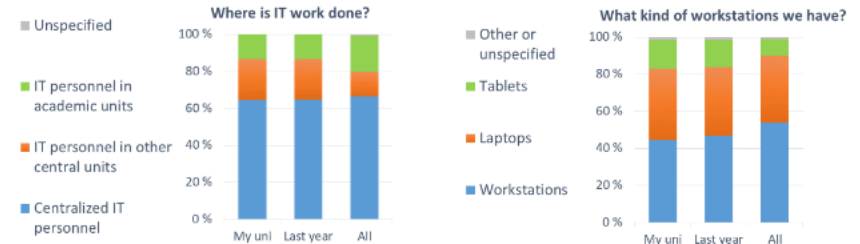
Status digitalization plan

- Approved by the board

- Project for a new IT organization

- Implementing governance structure

- Plans for IT in research and education

- Focus on IT
  - Executive leadership

Thanks!

- https://www.usit.uio.no/om/it-dir/strategi/masterplan/