



UNIVERSITY OF TARTU



Digital transformation of University of Tartu at the time of emergency



Erkki Leego

CHIEF DIGITAL OFFICER

14.05.2020



University of Tartu

- 17 000+ persons at UT
 - 13 395 students, 12% international students
 - 3635 employees, 52% academic staff (1920)
 - Largest organization in Estonia
- Digital environment was ready for distance work and learning
 - 100+ IS applications web-based and well usable from distance
 - 3 stars for e-learning - Moodle, Panopto, BigBlueButton
 - Teamwork - MS Teams ja MS O365
 - All 17 000+ users in one „address-book“
- Challenges
 - Shortage of digital skills and digital learning methods
 - Freedom to choose own applications



Digital transformation - 1. month of COVID-19

- Panopto (video lectures)
 - 2019 – in all 1500 recordings
 - First week 500 new recordings
 - **First month 1750 new recordings**
- BigBlueButton (BBB, webinars)
 - 2019 – in all 99 BBB enabled e-courses
 - First week 503 BBB enabled e-courses
 - **First month 647 BBB enabled e-courses**
- Moodle (e-courses)
 - **78%** of 2892 courses have e-course module
 - First week 88 new e-courses
 - **First month 171 new e-courses**

**In 1 month yearly amount
of video recordings**

**99 -> 647 courses
w. BBB webinar
module**

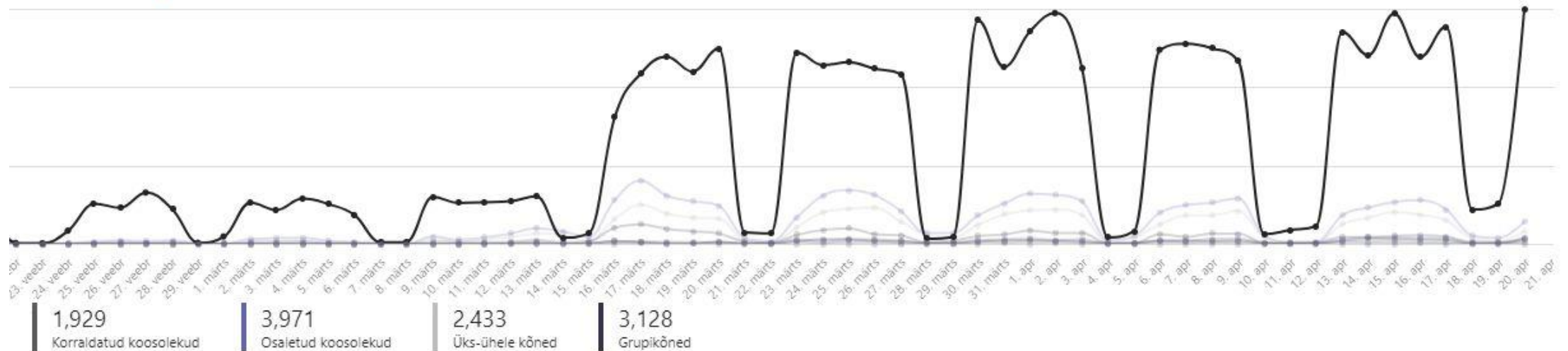
**171 new
e-courses at Moodle**

Teamwork – MS Teams

09.03.20 -> 23.03.20 -> 20.04.2020 (per day)

- Active users 645 -> 1489 -> 1847 (3500 employees at UT)
- Messages 1489 -> 6084 -> 7461
- Meetings 2 -> 233 -> 272

MS Teams Tartu Ülikoolis Märts - aprill 2020



Supporting swift digital transformation

- **Guidance**

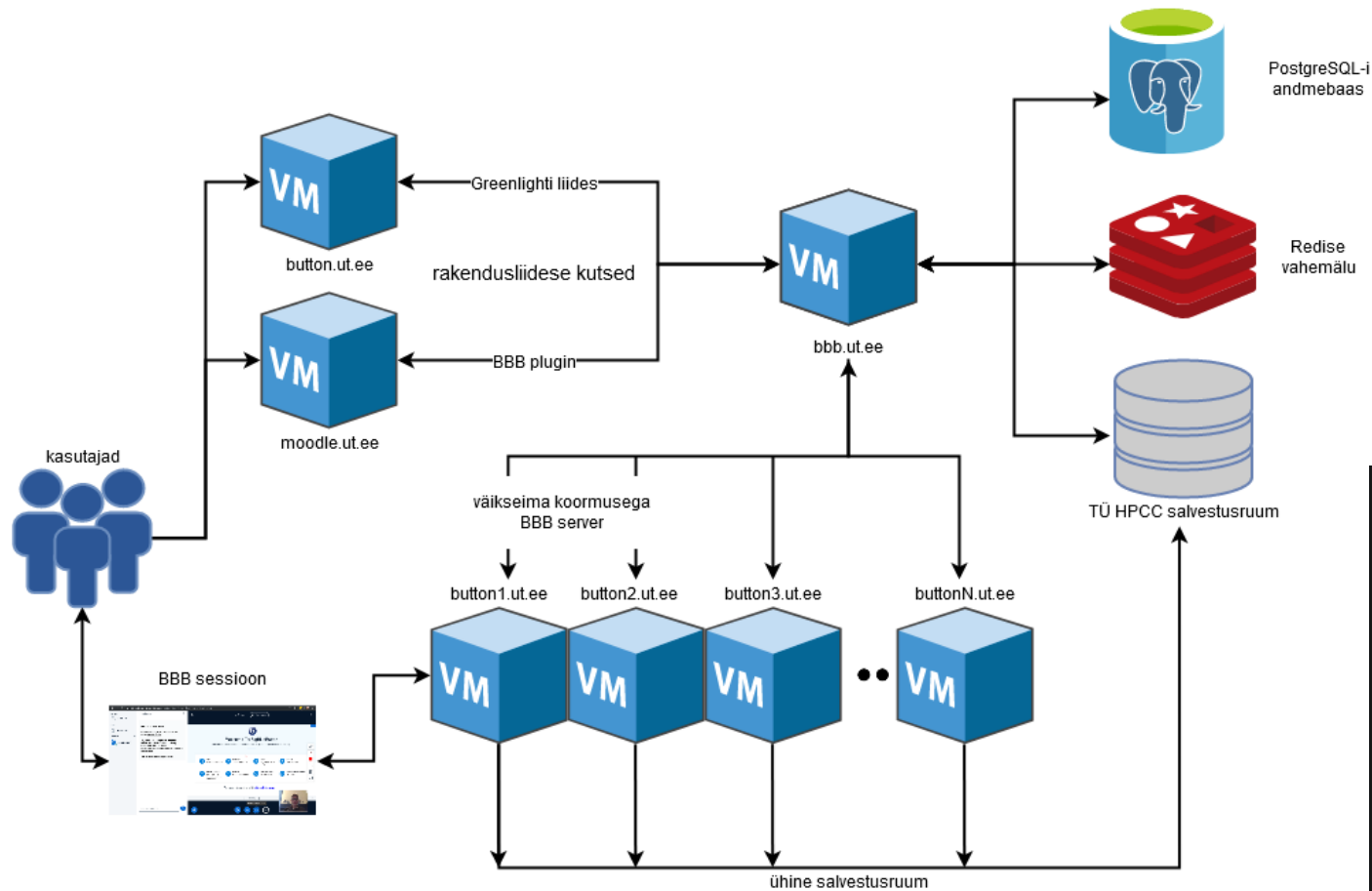
- First week-end 14.-15.03.2020
 - Frequently asked questions
 - Recommendations to replace classroom teaching with e-learning
 - Thorough set of MS Teams instructions
- Next weeks – every day couple of new guides
- Active counselling
- IT operational information
- Forum for e-learning practices

- **Upgrade of capabilities**

- **Invention of best practices**

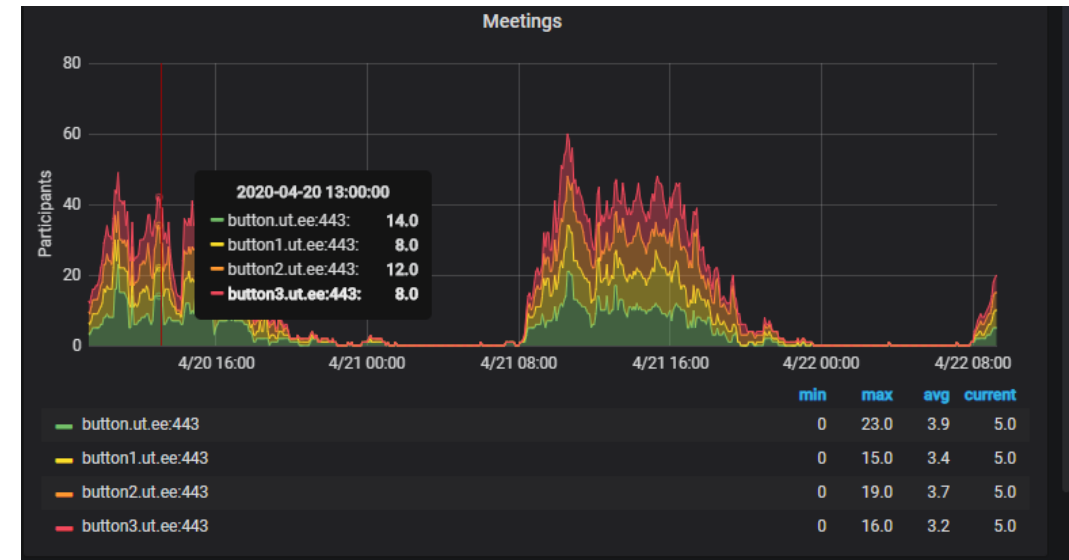
- Scientific defenses – three different practices
 - MS Teams, Zoom, Teams Event Live
- Council meetings
 - Zoom or MS Teams
- Live broadcasting – Teams Event Live
- Workshops and conferences
- Online exams and tests
- Online commencements

BigBlueButton - webinars



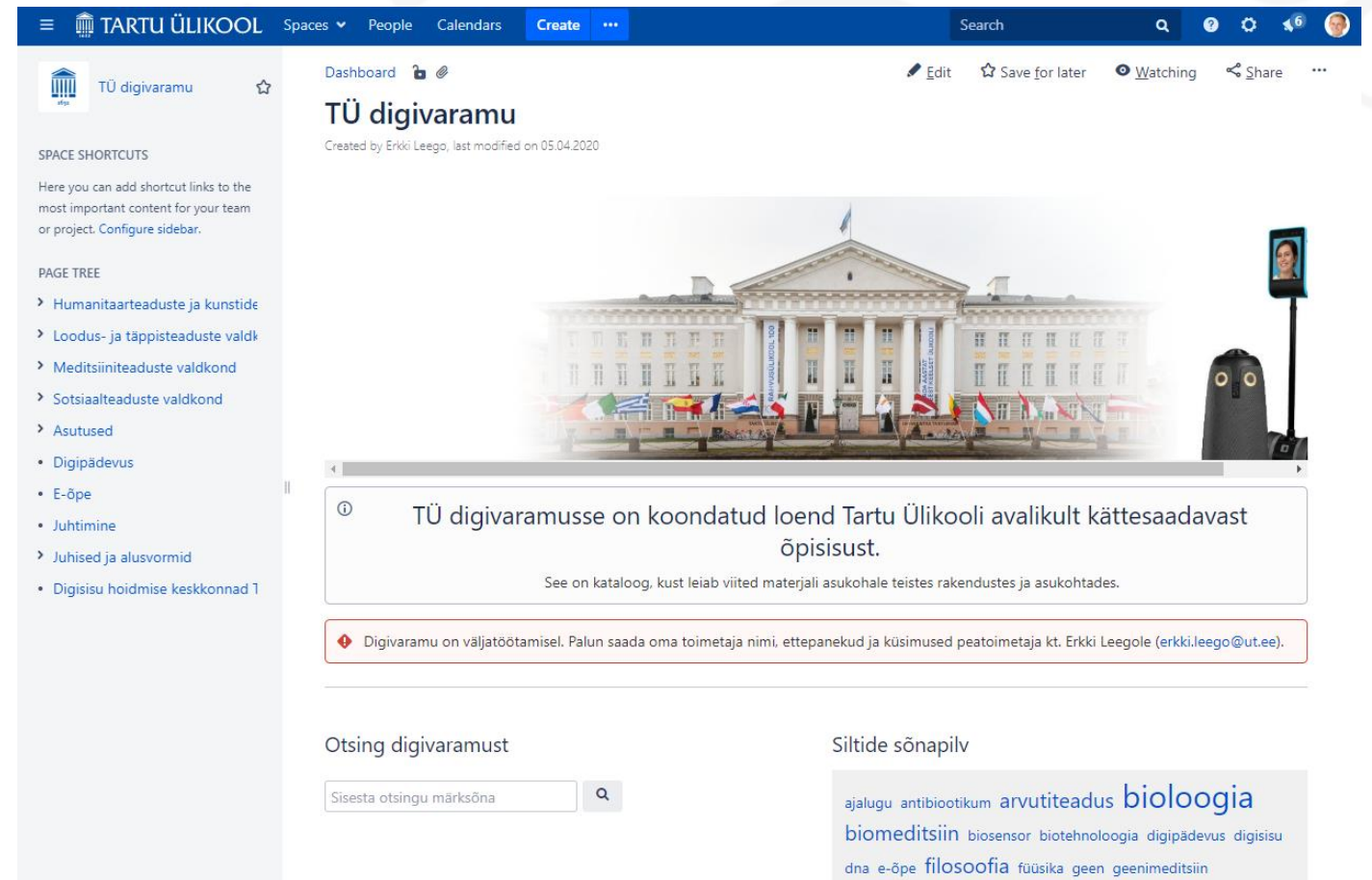
Swift transformation of architecture (within 1 week)

- From 1 server to N servers
- Per day 50 parallel webinars with ~600 participants
- Used in 647-s e-courses



UT digital repository – fruit of time of emergency

- Collection of selected e-learning materials
- Service to society
- As there is enormous rise of digital content, there is great opportunity to choose from
- One of the goals is to raise awareness how to produce good quality digital recording



The screenshot shows the Tü digivaramu digital repository interface. The top navigation bar includes the TARTU ÜLIKOOL logo, menu items for Spaces, People, and Calendars, a 'Create' button, and a search bar. The main content area features a dashboard for 'TÜ digivaramu', created by Erkki Leego, with a last modified date of 05.04.2020. A large image of the Tartu University building is displayed, accompanied by a small robot icon. Below the image, a text box states: 'TÜ digivaramusse on koondatud loend Tartu Ülikooli avalikult kättesaadavast õpisisust. See on kataloog, kust leiab viited materjali asukohale teistes rakendustes ja asukohtades.' A red warning box indicates that the repository is offline and provides contact information for Erkki Leego (erkki.leego@ut.ee). At the bottom, there is a search bar for 'Otsing digivaramust' and a 'Siltide sõnapilv' (tag cloud) containing terms like 'ajalugu', 'antibiootikum', 'arvutiteadus', 'bioloogia', 'biomeditsiin', 'biosensor', 'biotehnoloogia', 'digipädevus', 'digisisu', 'dna', 'e-õpe', 'filosoofia', 'füüsika', 'geen', and 'geenimeditsiin'.

Learnings

- If you haven't experienced yourself, you can't really understand
- Confirmation of benefits of digital - independence from time and space
- Time of emergency accelerates creativity
- Smaller number of IT applications accelerate digital transformation
- People need a lot of guidance and support
- Ethical and data protection issues need to be addressed
- Online meetings are more efficient
 - Meetings are shorter, easy to share screen, easy to video record and share/reuse
- Chat is another important communication form

Expectations for future

- There will be thousands of clever people who smartly implement digital in their everyday lives and innovate new practices
- Hybrid meetings will be new normality
 - Some participants in physical room and some in virtual room
- Empowerment of teachers
 - New teaching methods, reuse of materials and recordings, flexible choice of location, automation of tests
- Empowerment of students
 - Flexible learning with no time, space, mentors and institution restrictions. AI supported personal learning path
- International cooperation necessities
 - Accessible digital repositories
 - International digital identity and authentication
 - Model for fair access to courses and teachers
 - Standardized learning marks



**Where there is a
will, there is a way!**

Stay healthy!



Erkki Leego

erkki.leego@ut.ee, twitter: @erkkileego, LinkedIn: erkkileego