

BencHEIT survey

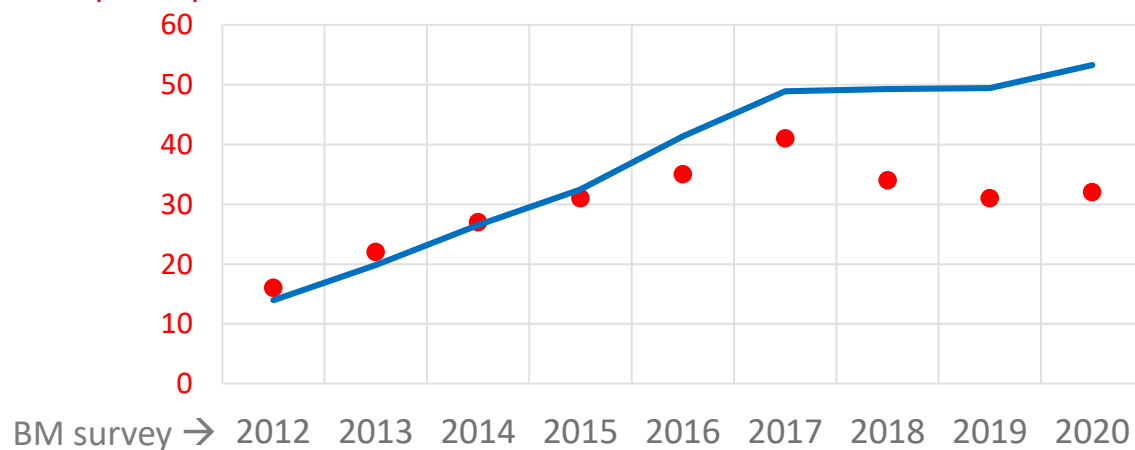
What is BM-survey and some findings from BM2020

bm-pg@eunis.org

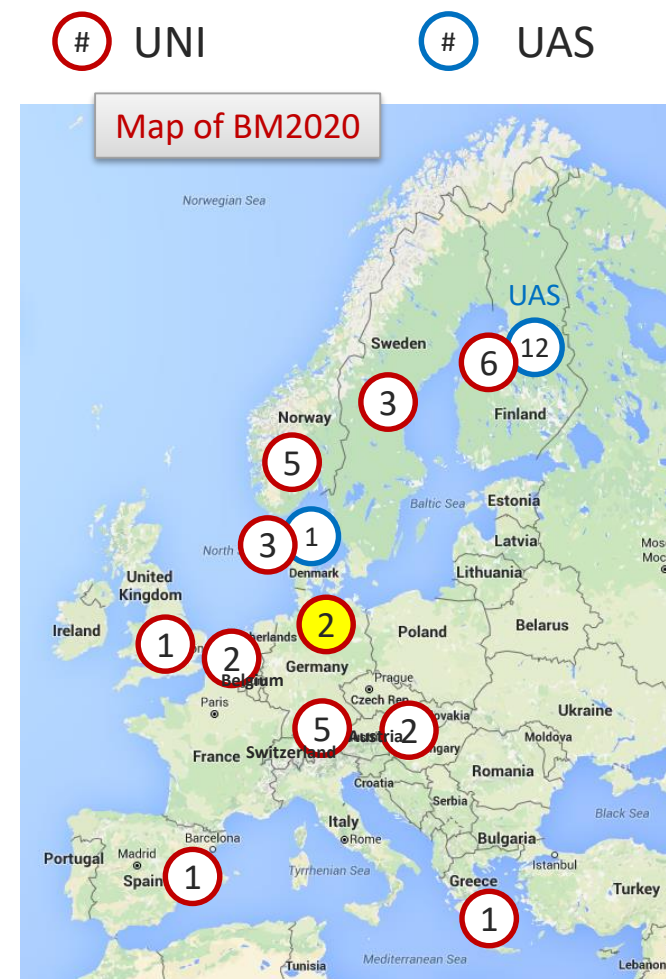
BencHEIT Survey / Survey statistics

VAT not included	2019	2020
Participation UNI	31	32
Average IT cost (€)	31,6 M€	32,2 M€
Participation UAS	13	13
Average IT cost (€)	4,1 M€	4,3 M€

University (UNI)
participants



IT costs
in million €
ex-VAT



BencHEIT survey 2020

Content of these slides

- 4 Principles, participation and process of the survey
- 17 BM2020 Analysis / Some examples of findings
- 24 BencHEIT contact info
- 25 BM2020 participant list

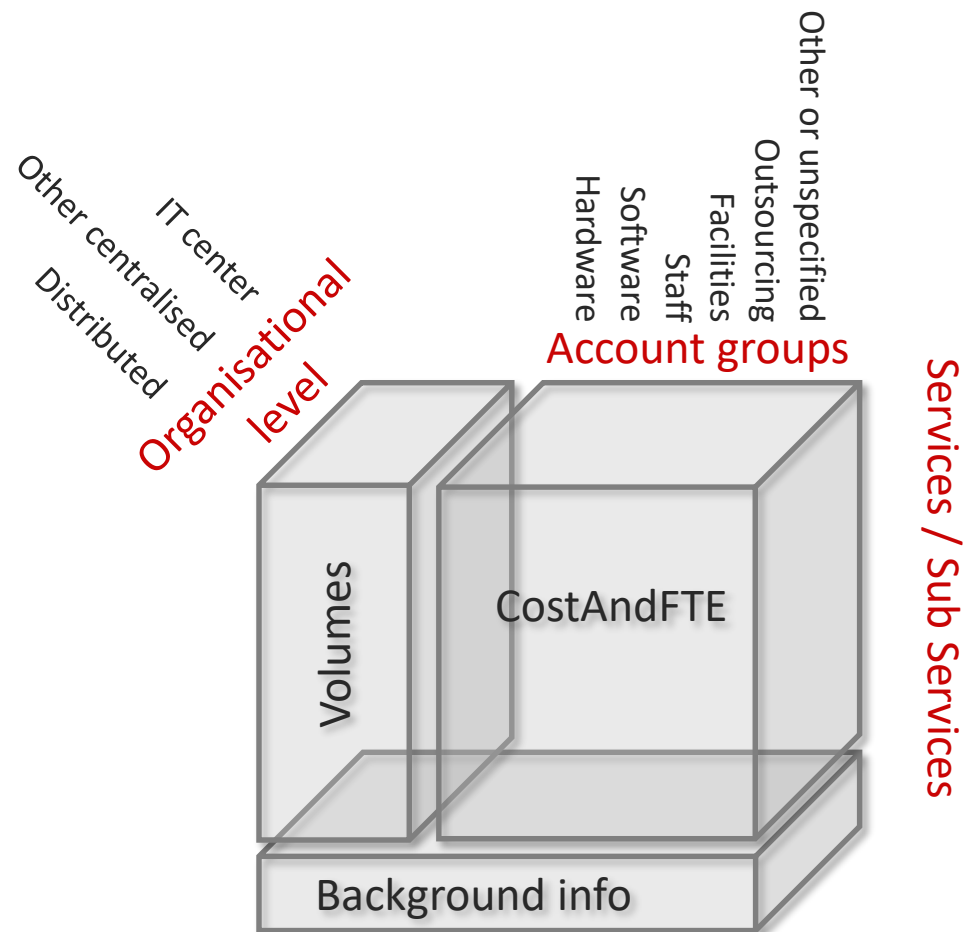
BM Task Force

- Mr. Ilkka Siissalo, University of Helsinki, Chairman
- Mrs. Yvonne Kivi, University of Helsinki, Secretary
- Mr. Martijn De Keere, Ghent Univeristy
- Mr. Kari Kataja, Häme University of Applied Sciences
- Mr. Ole Langfeldt, Norwegian University of Science and Technology
- Mr. Peter Bruun Nielsen, Aarhus University Denmark
- Mr. Jussi-Pekka Pispä, Tampere University of Technology
- Mr. Teemu Seesto, FUCIO - Network of Finnish Universities' CIOs
- Mr. Thomas Sutter, University of Zürich
- Mr. Raimund Vogl, University of Münster
- Mr. Hans Wohlfarth, KTH Royal Institute of Technology

BencHEIT Survey / The survey

- Free of charge
- A survey on IT costs and volumes of higher education institutes.
- Invented, developed and managed by CIOs (within EUNIS community)
- Transparency: Participants see the analysis and each others complete data.
- Cash flow based → fluctuation between years especially for one organisation.

BencHEIT Survey / Dimensions



Infrastructure

- Operative
- HPC

Workstations

- Workstations
- Printing

IT Service Desk

Data networks: LAN & WAN

Voice services

- Telephony
- Phone calls

Business applications

- Finance
- Human resources
- Facilities
- Communications
- Student administration systems
- Teaching
- Research administration
- Research
- Library
- Other
- Unspecified

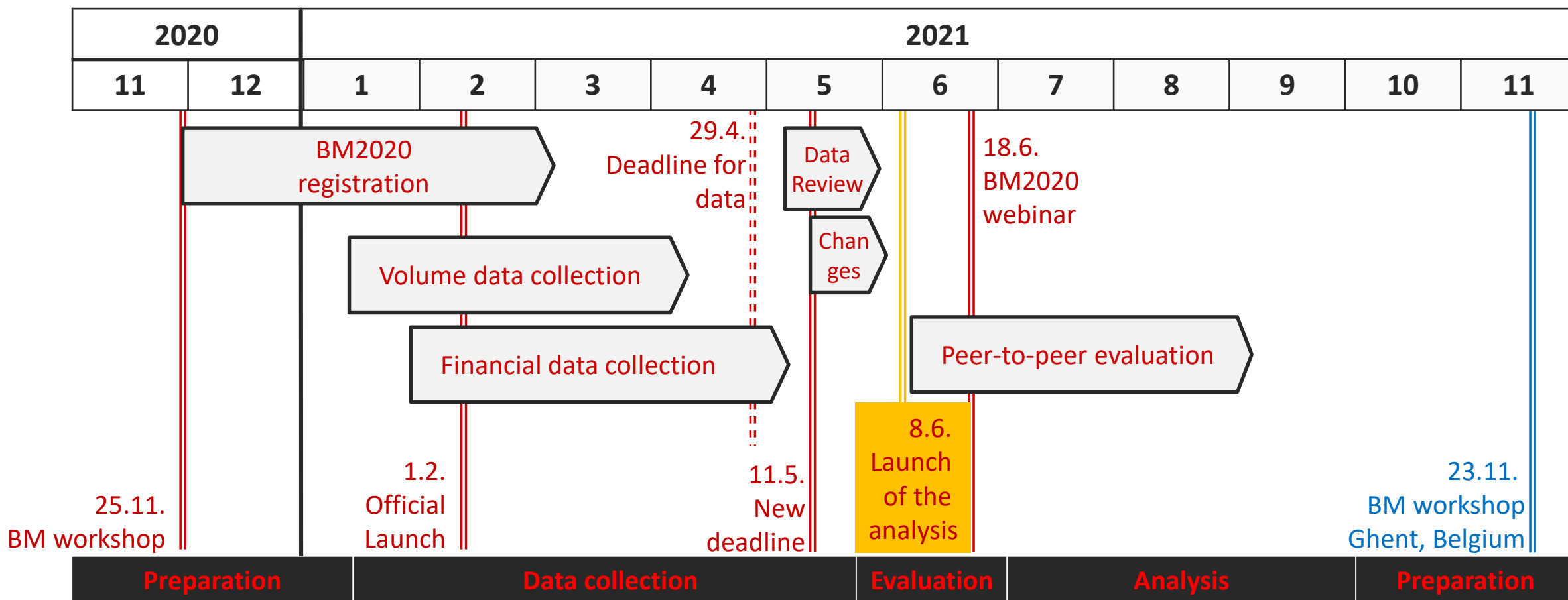
IT management

- Management
- Information security

Audio visual services

Other or unspecified

BM2020 Survey / Timetable

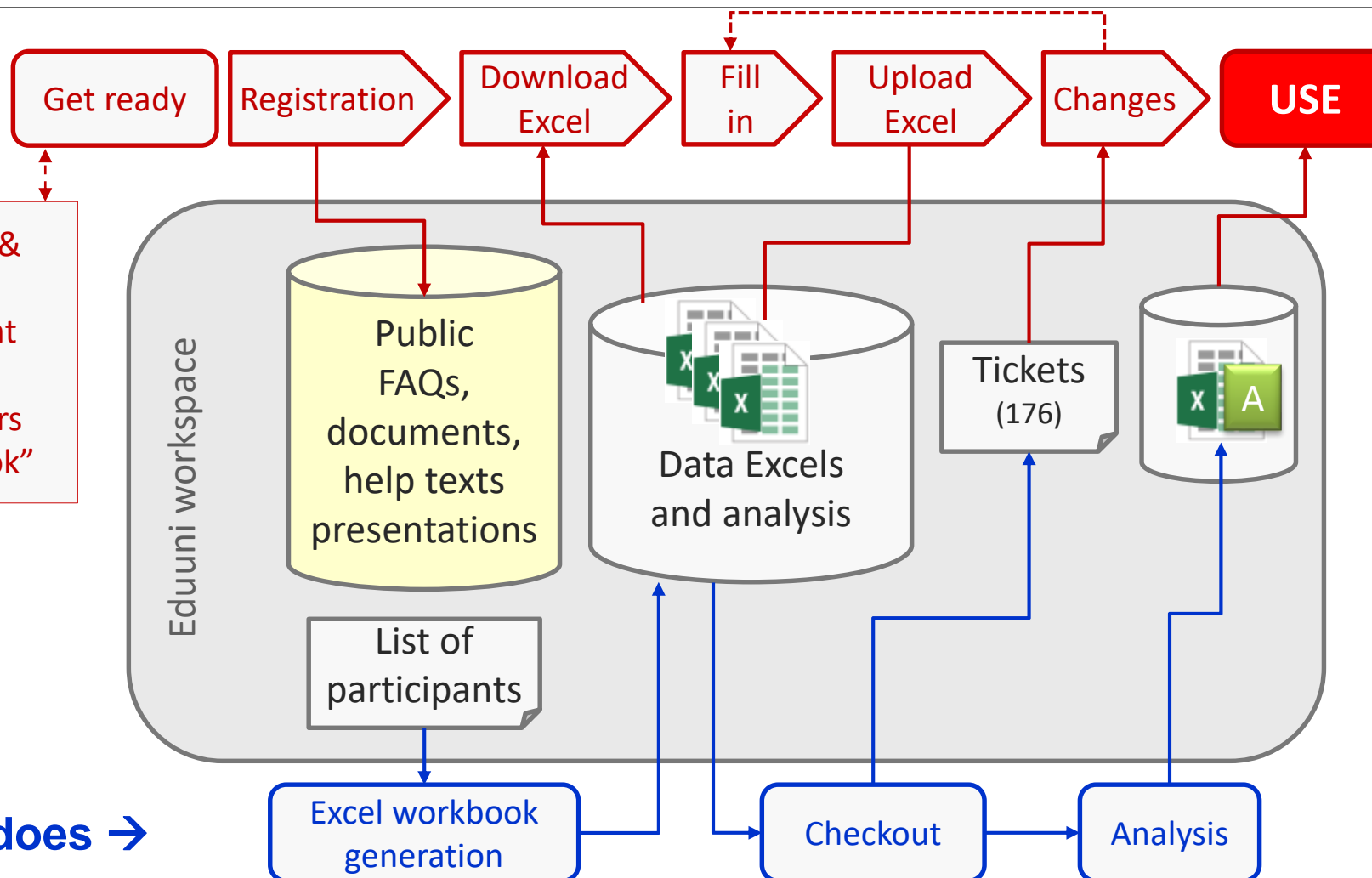


BM2020 Survey / How did it work?

You do →

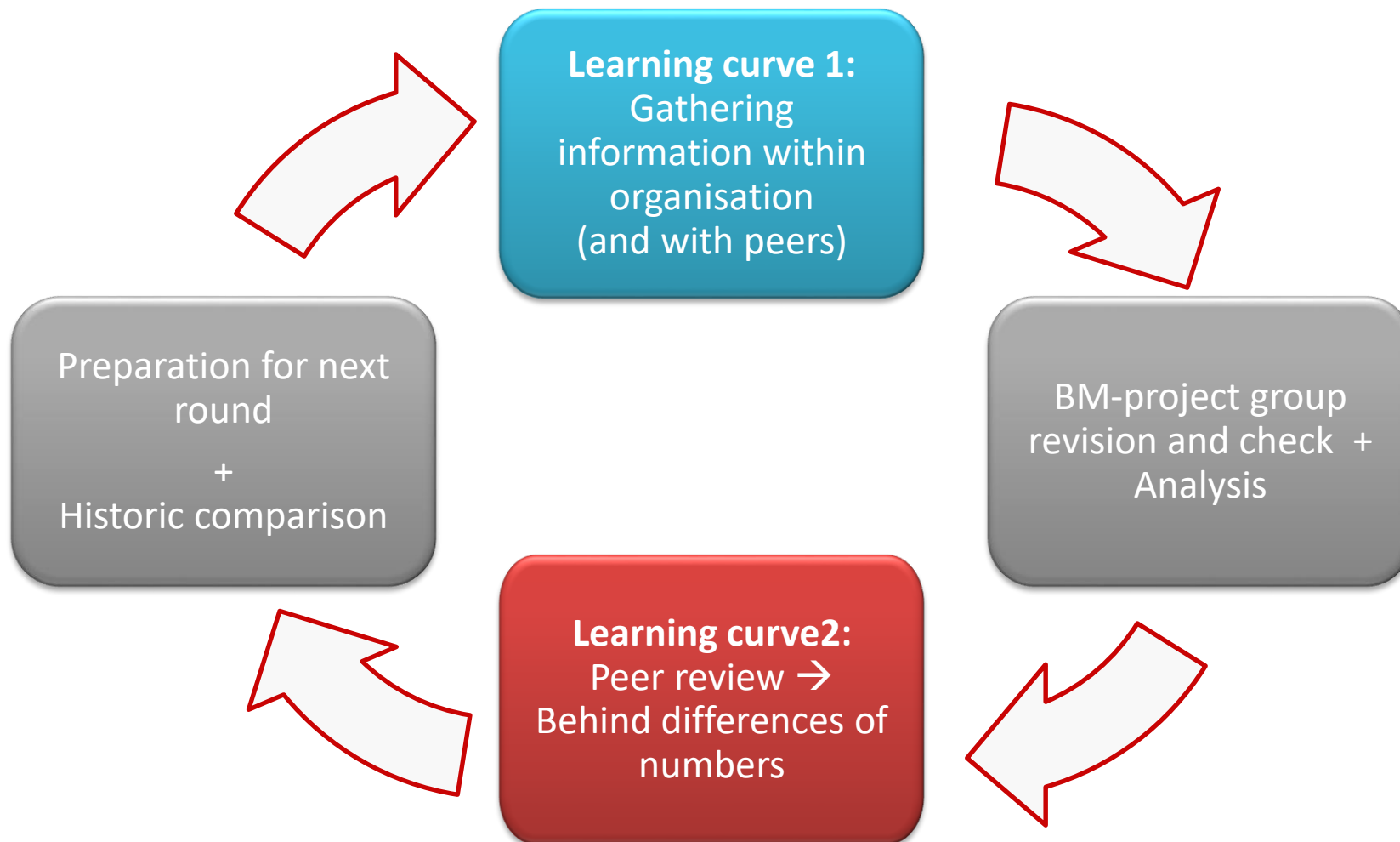
circa 10 working days

- permission & promotion
- commitment
- objectives
- if with others
→ “playbook”



Project group does →

BencHEIT Survey / The process



BM2020 Analysis – Sheet: CIO summary

You can change

- VAT calculation
- Reporting currency

Filter by

- Organizational level
- Account groups
- Country

Review View Developer PDF-XChange Tell me what you want to do...

Connections Refresh All Edit Links Properties Connections Sort & Filter Sort Filter Clear Reapply Advanced Text to Columns Flash Fill Remove Duplicates Validation Data Consolidate Relationships Manage Data Model What-If Analysis Forecast Sheet Group Ungroup Subtotal Outline

EUNIS © 2021 Reported: 4.6.2021

HEI against Total and same HEI-group within Finland

Choose reporting currency: **EURO**

Choose if value added tax (VAT) is: **excluded from** costs

Choose HEI: **(FI) Tampere University**

* Currently included account group(s): Hardware Software Staff Outsourcing Unspec and

* Organisational level(s): IT-centre Other centralized Distributed .

Choose from Pivot slicers (AccountGroup, OrgLevel and Country)

Orglevel

- L1-IT-centre
- L2-Other centralized
- L3-Distributed
- L9-Unspecified

Account...

- A01-Hardware
- A02-Software
- A03-Staff
- A04-Facilities
- A05-Outsourci...
- A90-Unspec

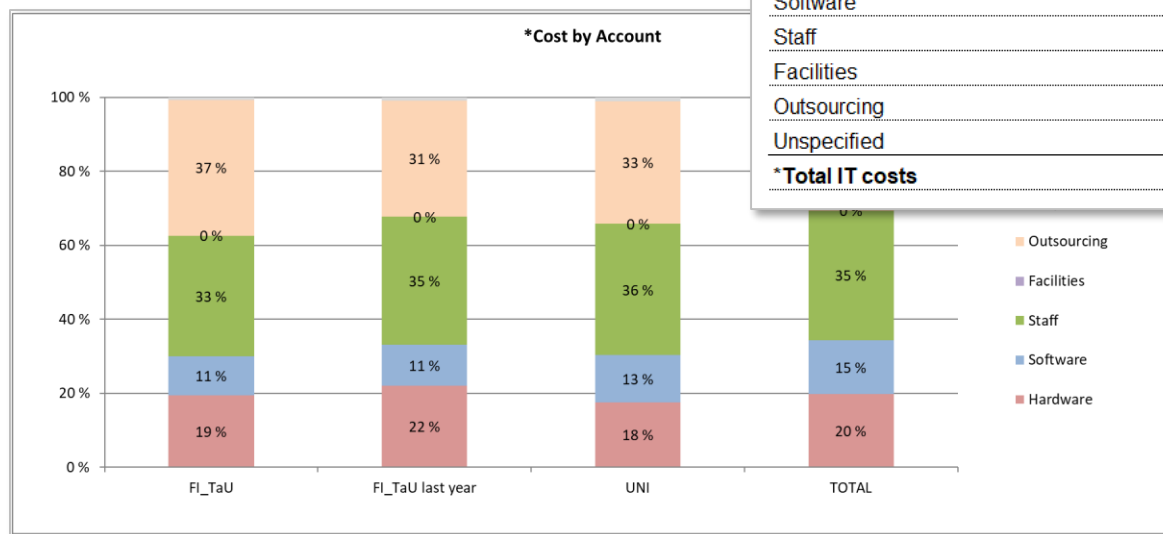
Country

- Austria
- Belgium
- Denmark
- Finland
- Germany
- Greece
- Norway
- Spain
- Sweden
- Switzerland
- United Kingdom

	2020 My HEI FI_TaU	2019 My HEI year	2020 (Finland) UNI	2020 (Finland) TOTAL	2020 (per org.group)	2020 (per org.group)	2020 (per org.group)
*IT costs (1000 EURO)							
Centralized IT costs	15 732 k	13 512 k	67 875 k	104 887 k	58,1 %	56,9 %	62,5 %
IT costs in other central units	8 005 k	6 411 k	30 286 k	37 413 k	29,5 %	25,4 %	22,3 %
IT costs in academic units	3 353 k	2 382 k	21 211 k	25 510 k	12,4 %	17,8 %	15,2 %
Unspecified	0 k	0 k	0 k	0 k	0,0 %	0,0 %	0,0 %
*Total IT costs	27 090 k	22 305 k	119 371 k	167 810 k	100,0 %	100,0 %	100,0 %
IT share of institution budget	8,2 %	6,8 %	7,0 %	7,4 %			
Income from IT services ...	2 398 k	477 k	3 530 k	6 458 k			
IT net share from university costs	7,5 %	6,6 %	6,8 %	7,2 %			

BM2020 Analysis – Sheet: CIO summary

Me and my sector
(in my chosen currency, VAT,
filters)



EUNIS © 2021

HEI against Total and same HEI-group within Finland

Choose reporting currency: **EURO**

Choose if value added tax (VAT) is: **excluded from** costs

Choose HEI: **(FI) Tampere University**

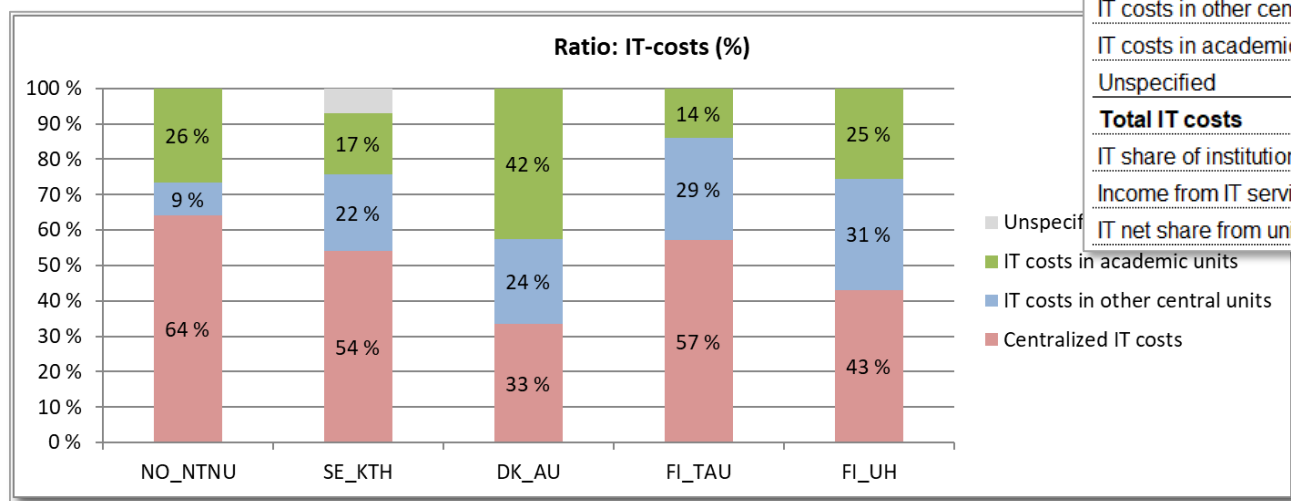
Reported: 4.6.2021

* Currently included account group(s): Hardware Software Staff Outsourcing Unspec and
* Organisational level(s): IT-centre Other centralized Distributed .

	2020 My HEI	2019 My HEI	2020 (Finland)	2020 (Finland)	2020	2020	
	FI_TaU	FI_TaU last year	UNI	TOTAL	FI_TaU% (per acc.group)	UNI% (per acc.group)	Total% (per acc.group)
*Costs by account (1000 EURO)							
Hardware	5 256 k	4 923 k	21 012 k	33 128 k	19 %	18 %	20 %
Software	2 876 k	2 472 k	15 161 k	24 609 k	11 %	13 %	15 %
Staff	8 833 k	7 707 k	42 377 k	58 721 k	33 %	36 %	35 %
Facilities							
Outsourcing	9 945 k	7 022 k	39 598 k	49 182 k	37 %	33 %	29 %
Unspecified	179 k	182 k	1 223 k	2 170 k	1 %	1 %	1 %
*Total IT costs	27 090 k	22 305 k	119 371 k	167 810 k	100 %	100 %	100 %

BM2020 Analysis – Sheet: Choose 5

Me and my mates
 (in my chosen currency, VAT,
 filters)



EUNIS © 2021 Reported: 4.6.2021

Summary of 5 chosen HEIs. Bencheit survey 2020
 Reporting currency: EURO, VAT is excluded from costs

* All account groups included and All organisational levels.

CHOOSE 5 HEIs below

(FI) University of Helsinki
 (FI) Tampere University
 (DK) Aarhus University Denmark
 (SE) Royal Institute of Technology
 (NO) Norwegian University of Science and Technology

	NO_NTNU	SE_KTH	DK_AU	FI_TAU	FI_UH
Total IT costs (1000 EURO)					
Centralized IT costs	34 507 k	18 499 k	18 453 k	16 805 k	17 823 k
IT costs in other central units	5 118 k	7 396 k	13 348 k	8 444 k	13 016 k
IT costs in academic units	14 256 k	5 884 k	23 464 k	4 087 k	10 522 k
Unspecified	0 k	2 402 k	0 k	0 k	0 k
Total IT costs	53 881 k	34 182 k	55 265 k	29 337 k	41 360 k
IT share of institution budget	6,2 %	7,1 %	6,2 %	8,9 %	5,9 %
Income from IT services ...	414 k	95 k	48 k	2 398 k	468 k
IT net share from university costs	6,1 %	7,1 %	6,1 %	8,1 %	5,8 %

BM2020 Analysis – Sheet: HEIgroup

My type and size

Staff FTE size:

14 0 - 1000
17 1001 - 4000
14 4001-

HEI Budget size:


0 0 - 100M€
4 100 - 300M€
41 300M€ -

Type of

2 UniMed = medical
1 Business = business schools
22 UniMulti = multidisciplinary university
4 UniTech = technical university
14 UAS = univeristy of applied sciences
2 UniGroup = univeristy&UAS concern

EUNIS © 2021

Reported: 4.6.2021



Comparison: Organisation type and size 2020

Reporting currency: NOK-Norwegian krone

University sector for comparison:

UNI

Choose your university:

(NO) Norwegian University of Science and Technology

Numbers in group columns are average

	University sector	HEI type	Total personnel FTE	Institution budget	
Breakdown by use of workstation *	NO_NTNU	UNI	UniMulti	4001-	300M€ -
Personal use	57 %	71 %	73 %	73 %	71 %
Student classrooms	14 %	13 %	12 %	8 %	13 %
Research laboratories	5 %	10 %	8 %	12 %	10 %
Other or unspecified	25 %	17 %	20 %	16 %	17 %
Average # of workstations	19 691	1 520	2 070	2 070	1 520

Group

Number of HEIs

University sector

UNI

31

Total personnel FTE (UNI)

4001-

14

Institution budget (UNI)

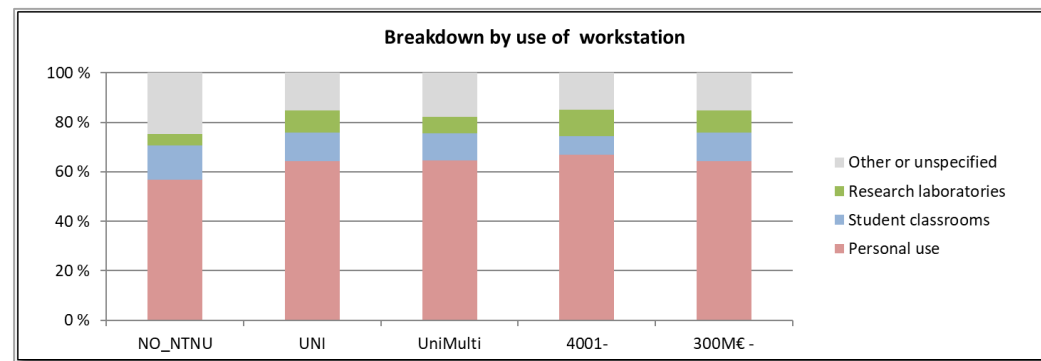
300M€ -

31

HEI type:

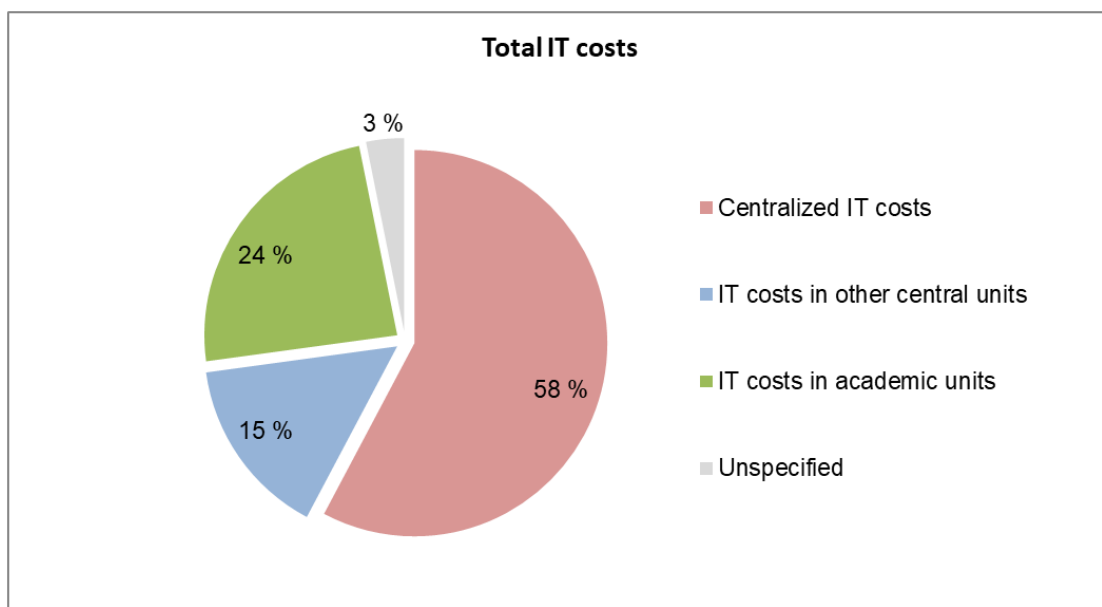
UniMulti

22

<

BM2020 Analysis – Sheet: SurveyStatistics

All data added together



IT costs	1000 EURO	% *
Centralized IT costs	611 689 k	57,8 %
IT costs in other central units	159 661 k	15,1 %
IT costs in academic units	253 983 k	24,0 %
Unspecified	33 595 k	3,2 %
Total IT costs	1 058 928 k	100,0 %
IT share of institution budget	6,1 %	*
Income from IT services ...	20 590 k	

Calculation method is SurveyStatistics differs from other tables, as this sums all data up (Choose5 and CIOsummary use average of averages in group indicators)

BM2020 Analysis – Sheets: Background, CostAndFTE, Volumes

The actual data as given by HEI.
Same format as in survey.

- It may help you to understand WHY there is some differences between you and your peer.
- There may be HEI's comments on individual data set

Teemu_Analysis_v01 - Excel

File Home Insert Page Layout Formulas Data Review View Developer PDF-XChange Tell me what you want to do...

Normal Page Break Page Custom Gridlines Headings Zoom 100% Zoom to Selection New Arrange Freeze Split View Side by Side Synchronous Scrolling Switch Windows Macros

Workbook Views Show Zoom Window

H5 (NO) Norwegian University of Science and Technology

EUNIS 2021 IT-costs and personnel data as entered by organisation Reporting currency: EURO, VAT is excluded from costs Reported: 4.4.2021

CHOOSE HEI: (NO) Norwegian University of Science and Technology

Service Sub Service	Help texts	Grand total	Hardware (EURO)	Software (EURO)	Staff (EURO)	Facilities (EURO)	Outsourcing (EURO)	Other acc. group	Staff FTE	Comments	'Salary' in EURO
Infrastructure		7 046 716	1 353 732	175 994	3 684 759	377 414	94 487	1 360 330	50.8		66457
Operational infrastructure costs	Mainframes, servers, grid computing, storage and backup, system management, middleware etc.	5 889 932	1 353 732	175 994	2 371 821	339 339	34 487	954 569	40.6		72535
IT Center		4 342 635	338 293	166 180	2 627 732	245 771	94 487	870 172	35.9		73198
Other centralised		11639				3 884		7 754			73198
Distributed	Excluding HPC costs (= separate subservice)	1535 597	1015 438	9 813	344 029	89 684		76 634	4.7		73198
Unspecified org level											
High Performance Computing	Cost from high performance computing (HPC)	1 156 784			712 938	38 075		405 770	10.2		69896
IT Center		328 535			496 261	26 504		405 770	7.1	National service	69896
Other centralised											69896
Distributed		228 249			216 677	11 572			3.1		69896
Unspecified org level											
Unspecified infrastructure costs (sum. level)	If you cannot divide costs within 'Infrastructure' Subservices, use these 'Unspecified' cells										
IT Center											
Other centralised											
Distributed											
Unspecified org level											
Workstations, client and peripherals	Look at subservices below	12 886 187	8 084 512	2 407 593	1 718 450	99 668	26 419	549 544	26.7		64361
Workstations	Costs and FTEs related to PCs, other workstations, tablets, thin clients, virtual desktop clients etc.	11 482 642	7 437 133	2 404 475	1 488 642	83 617	25 638	43 137	22.4		66457
IT Center		5 159 741	2 248 941	1635 222	1 176 293	66 072	20 459	12 754	17.7		66457
Other centralised		348 236	281 367	58 246			431	8 192			66457
Distributed		5 974 665	4 906 825	711 007	312 349	17 545	4 748	22 131	4.7		66457
Unspecified org level											
Printing and other peripherals	Costs and FTEs related to printers, multifunctional printer/fax/copier devices, papers, printer maintenance etc.	1 323 498	647 380	3 117	154 987	10 825	782	506 407	2.9		53444
IT Center		1 178 333	613 522	1090	144 298	10 079	782	408 562	2.7		53444
Other centralised		106 120	14 108	1696				90 317			53444
Distributed		39 045	19 750	331	10 689	747		7 529	0.2		53444
Unspecified org level											
Unspecified peripherals (sum. level)	If you cannot divide costs within 'Workstations, client and peripherals' Subservices, use these 'Unspecified' cells	80 047			74 821	5 226			1.4		53444
IT Center											
Other centralised											
Distributed		80 047			74 821	5 226			1.4		53444
Unspecified org level											
IT Service Desk / Helpdesk (incl. Service P	IT service desk as specified in 'Background' sheet. Costs and FTEs	3 082 444	1 128		2 847 113	192 990		41 213	51.7		55070
IT Center		2 706 106	1 128		2 494 665	169 100		41 213	45.3		55070

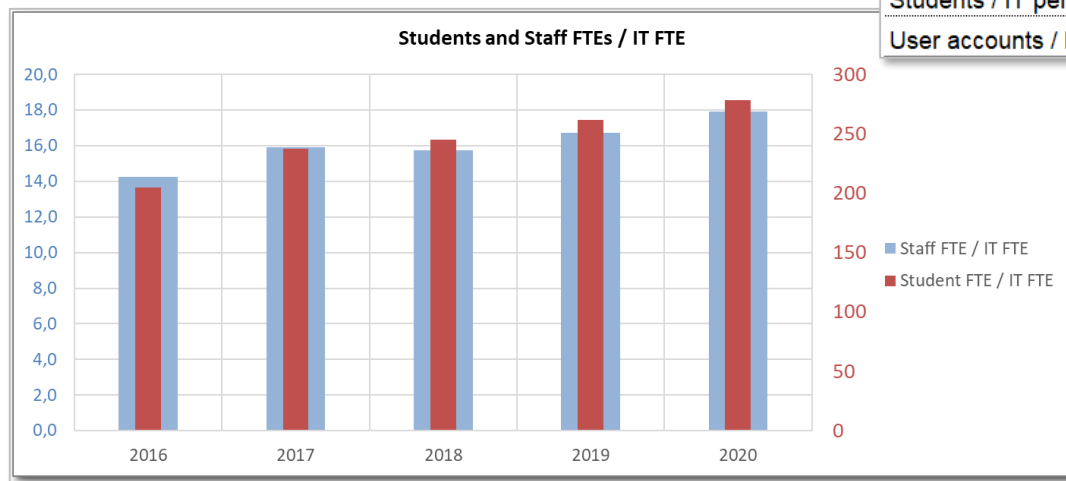
Ready

Forewords SurveyStatistics CIOsummary CIOchoose5 HEIGroups Background CostsAndFTE Volumes SizeVolume

BM2020 Longitudinal analysis – Last 5 years

My development over the years, also with peers.

Currency choice
VAT choice



EUNIS © 2021

8.6.2021



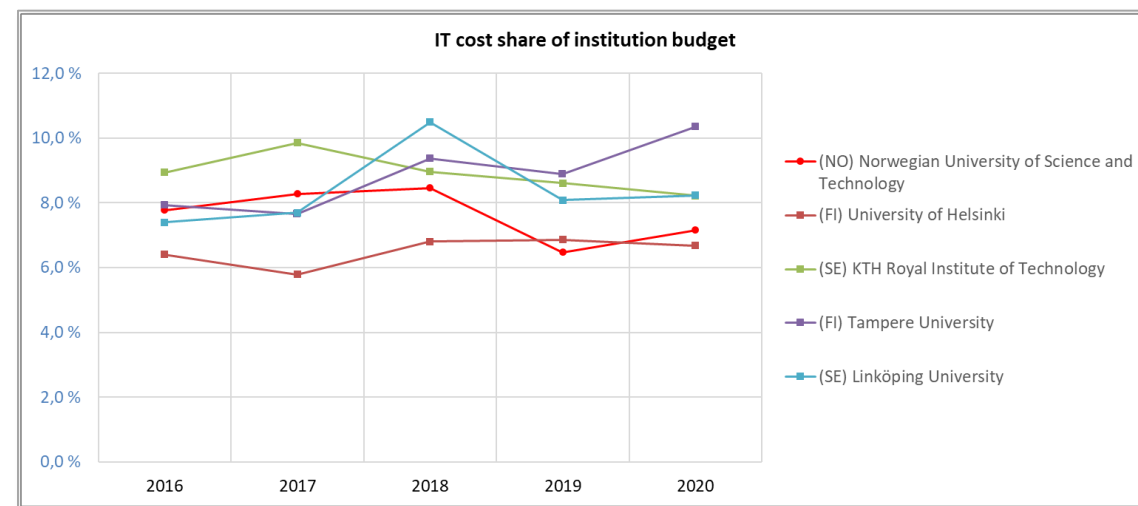
Longitudinal analysis

At least participated for last 3 years

Currency: EURO

Metropolia Ammattikorkeakoulu

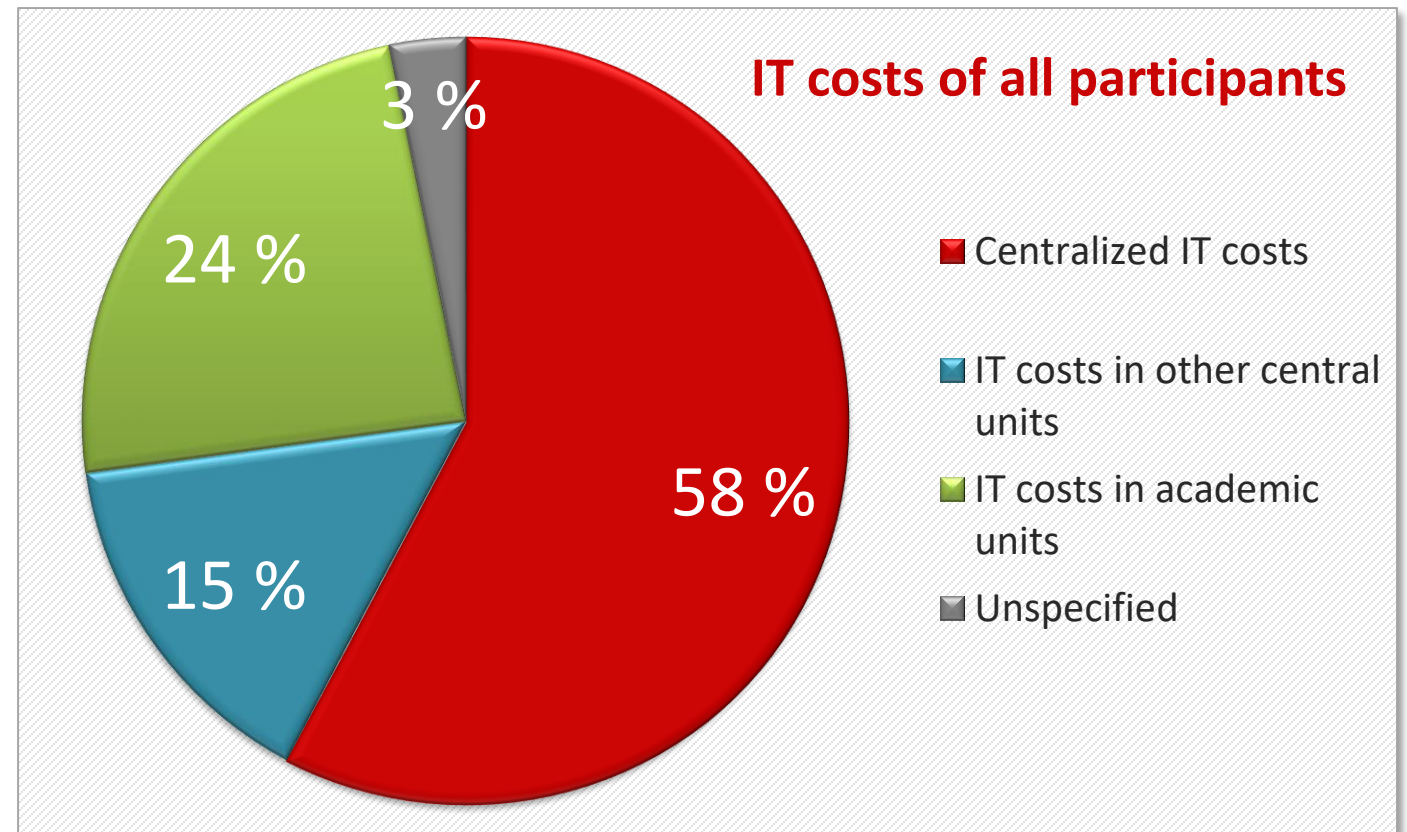
IT personnel (FTE)	2016	2017	2018	2019	2020
Total IT personnel	69	58	56	52	50
IT share of institution personnel	7,0 %	6,3 %	6,4 %	6,0 %	5,6 %
Institution staff / IT personnel (FTE)	14	16	16	17	18
Students / IT personnel (FTE)	205	238	245	262	278
User accounts / IT Personnel (FTE)	300	355	426	525	598



BM2020 – Findings

Next few slides with aggregated data by ...

- ❖ Year
- ❖ Country
- ❖ University size
- ❖ etc....

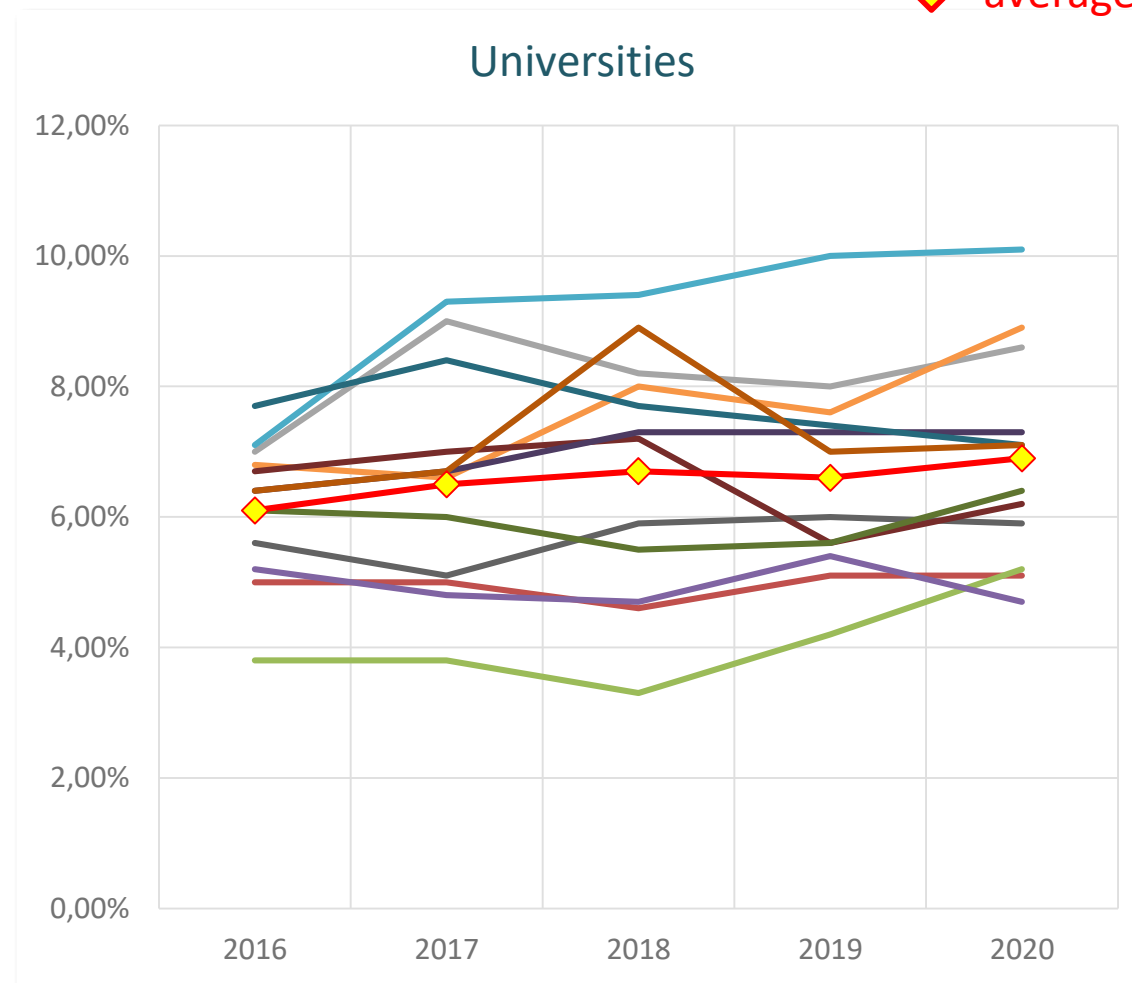
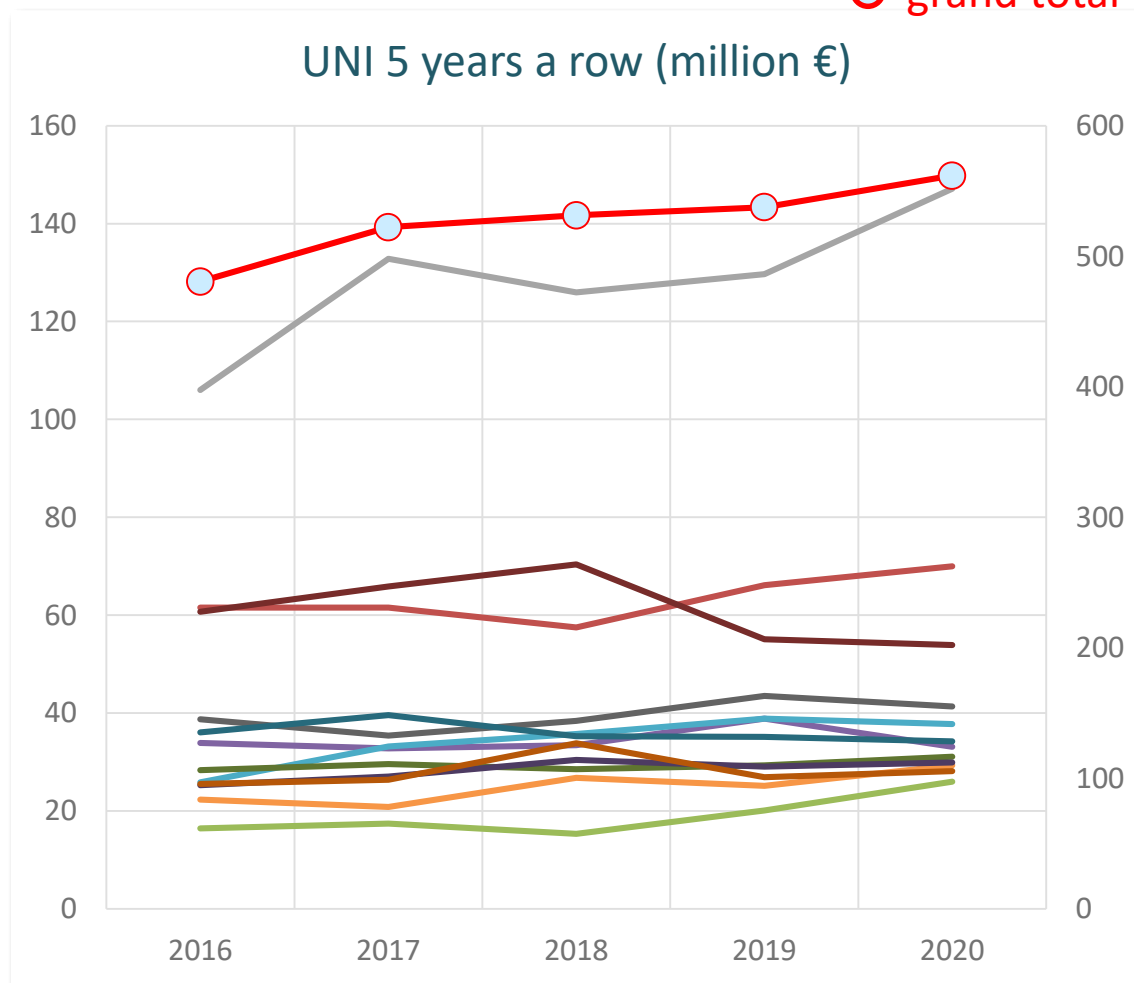


BM2020 – Covid and costs

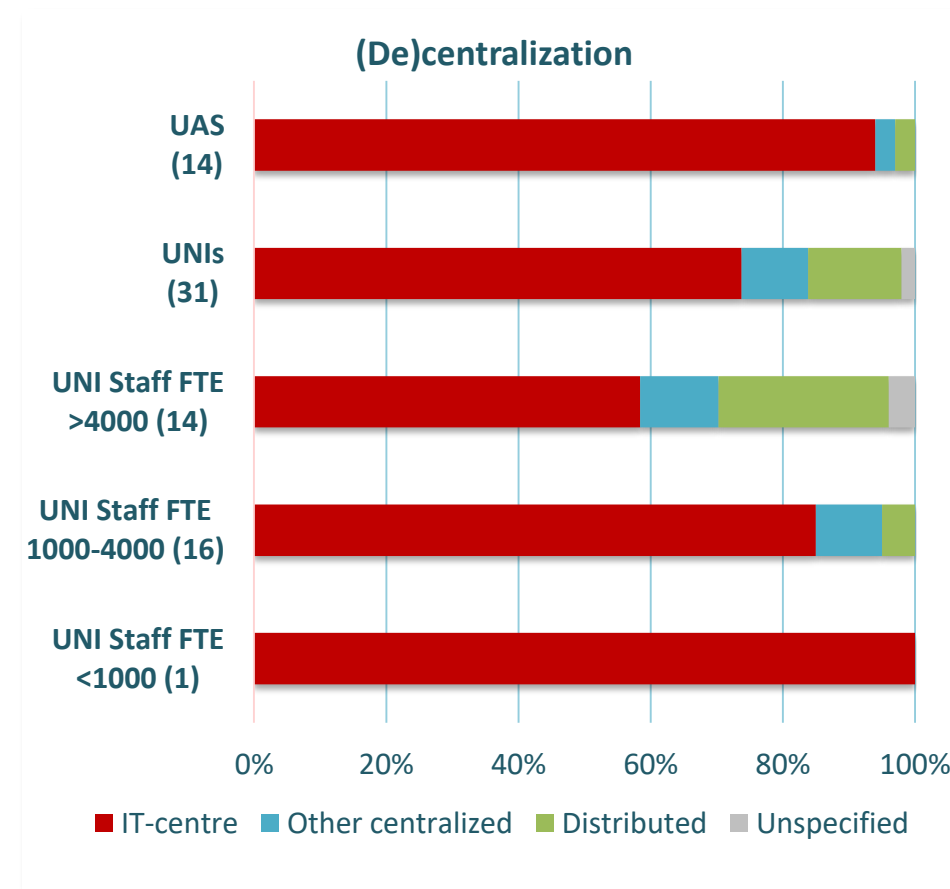
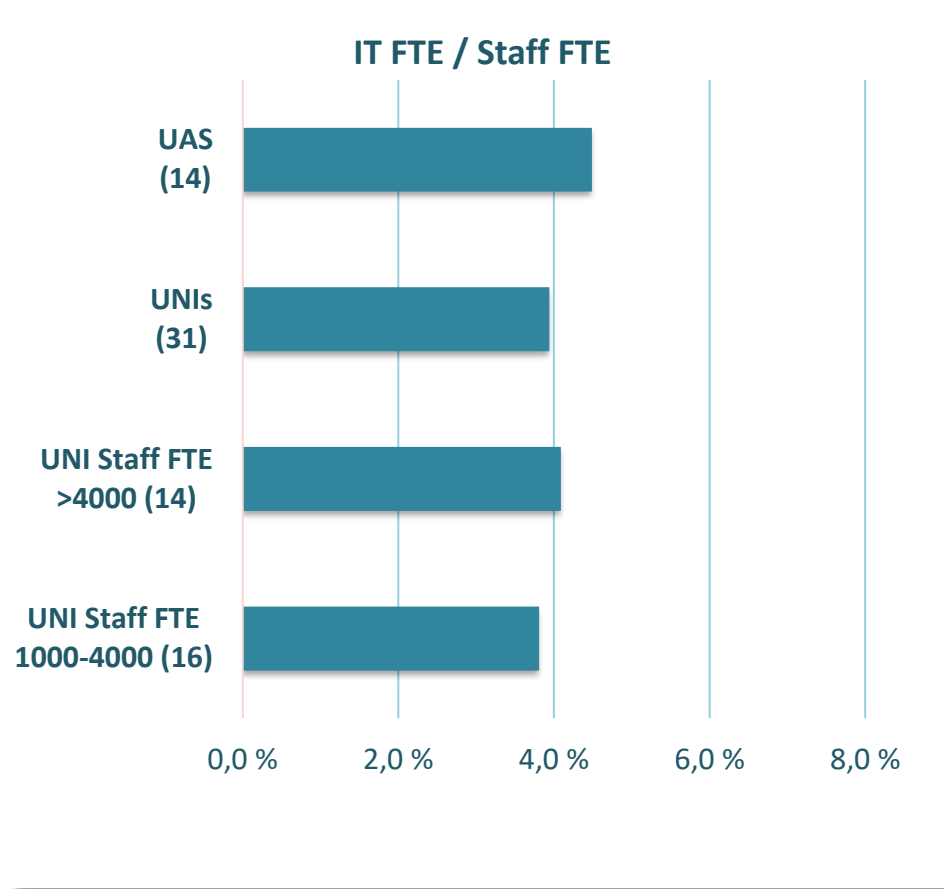
5 years a row

○ grand total

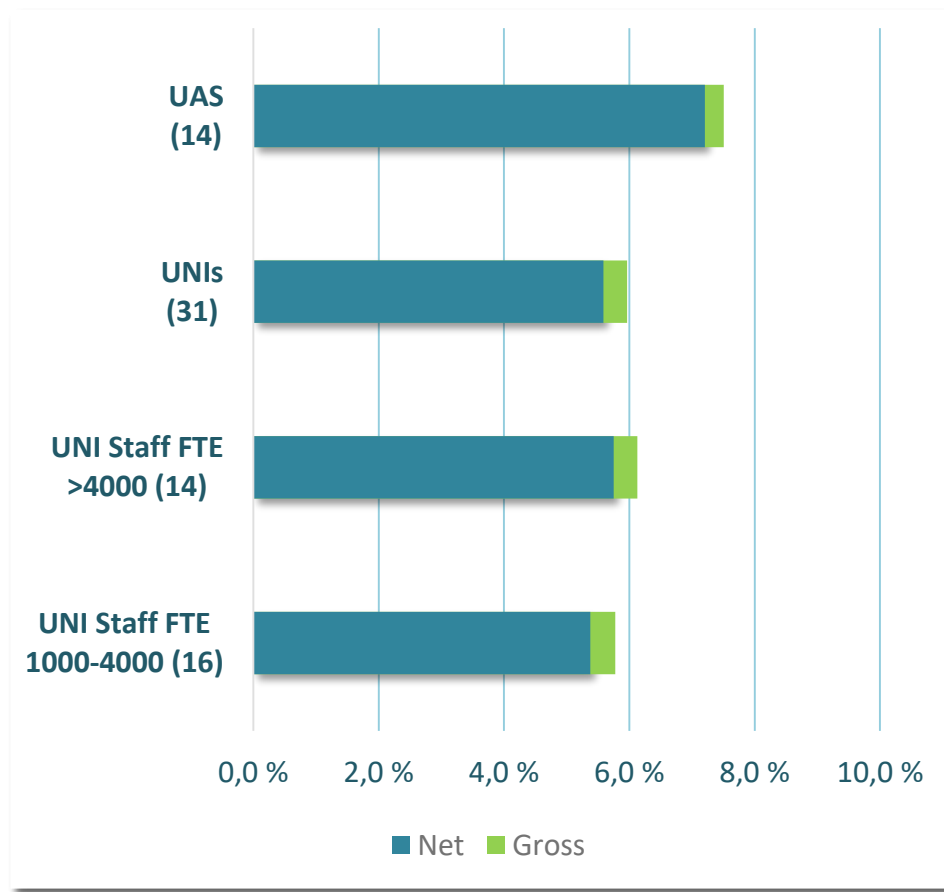
◇ average



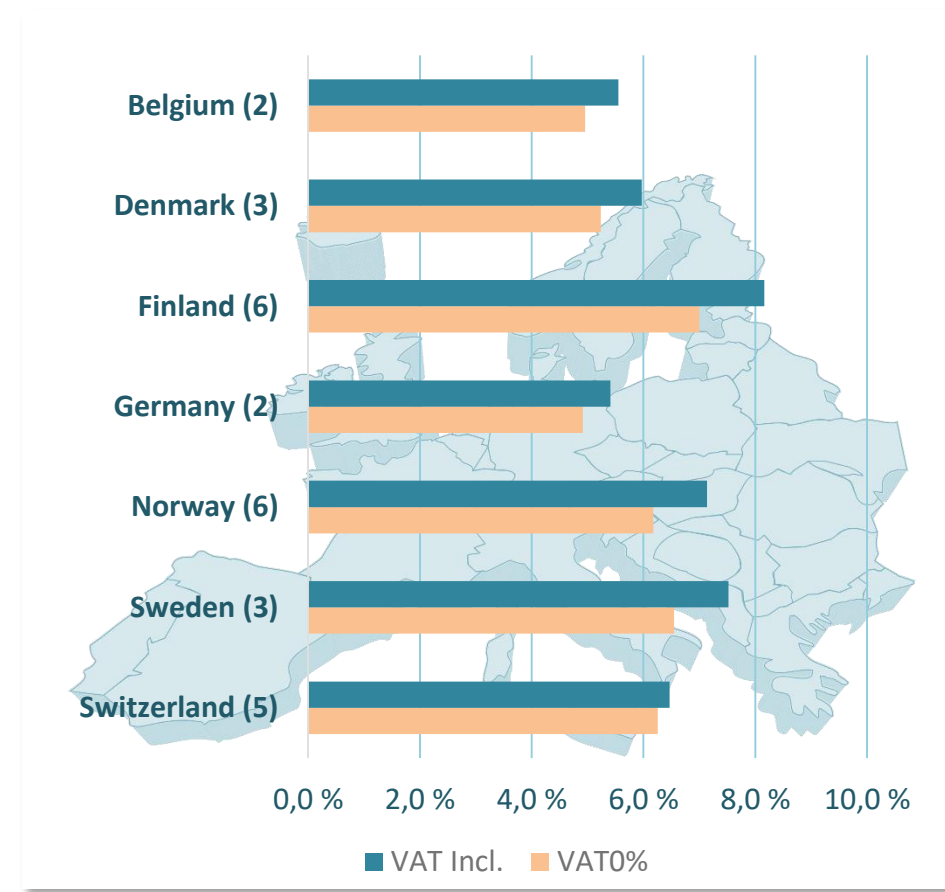
BM2020 – IT personnel



BM2020 – IT costs / Total HEI budget

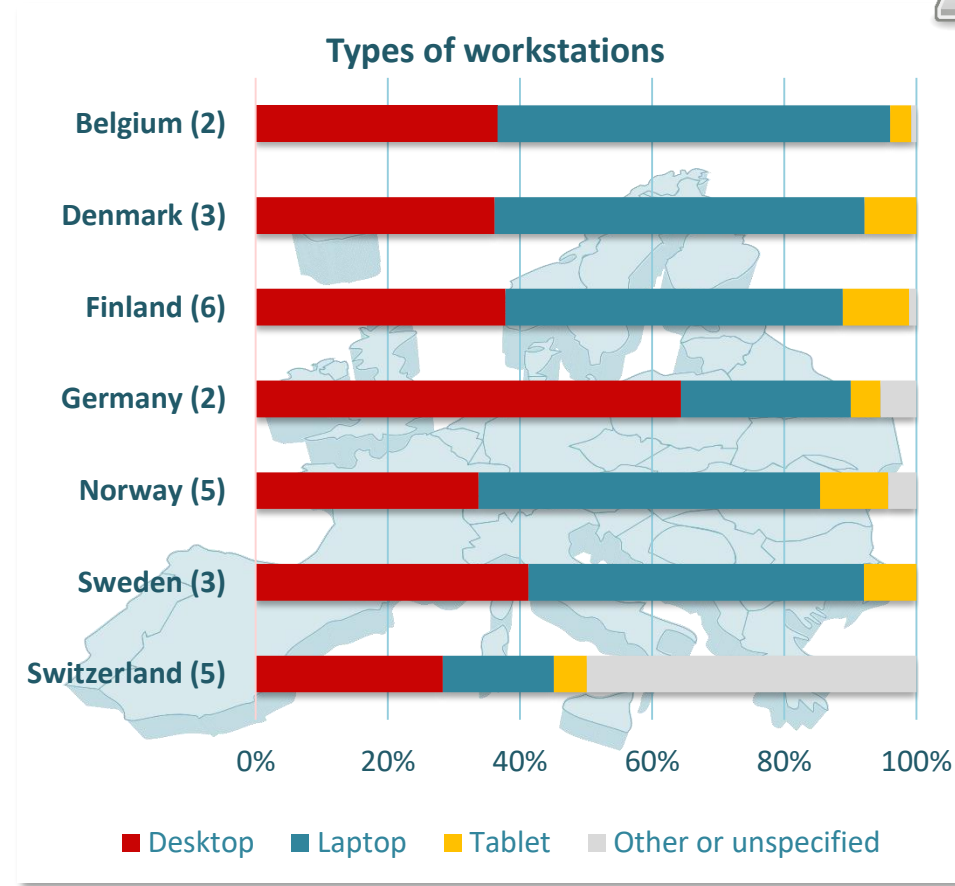
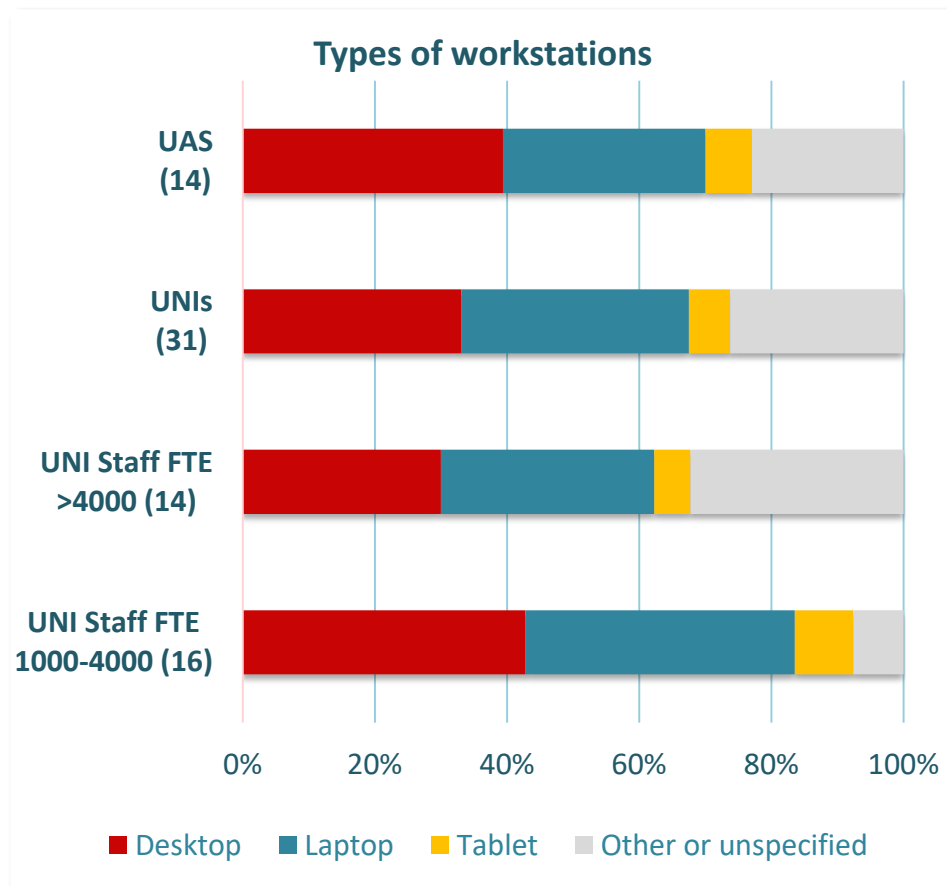


Net = Total cost – Income from IT services to other organizations



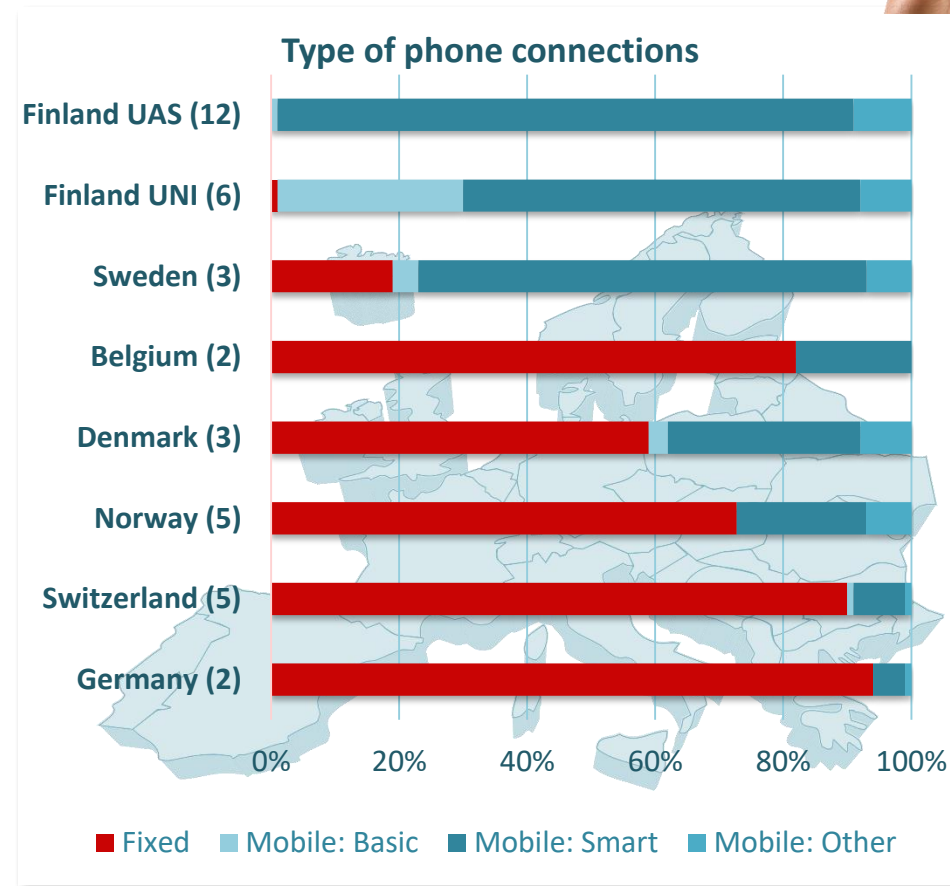
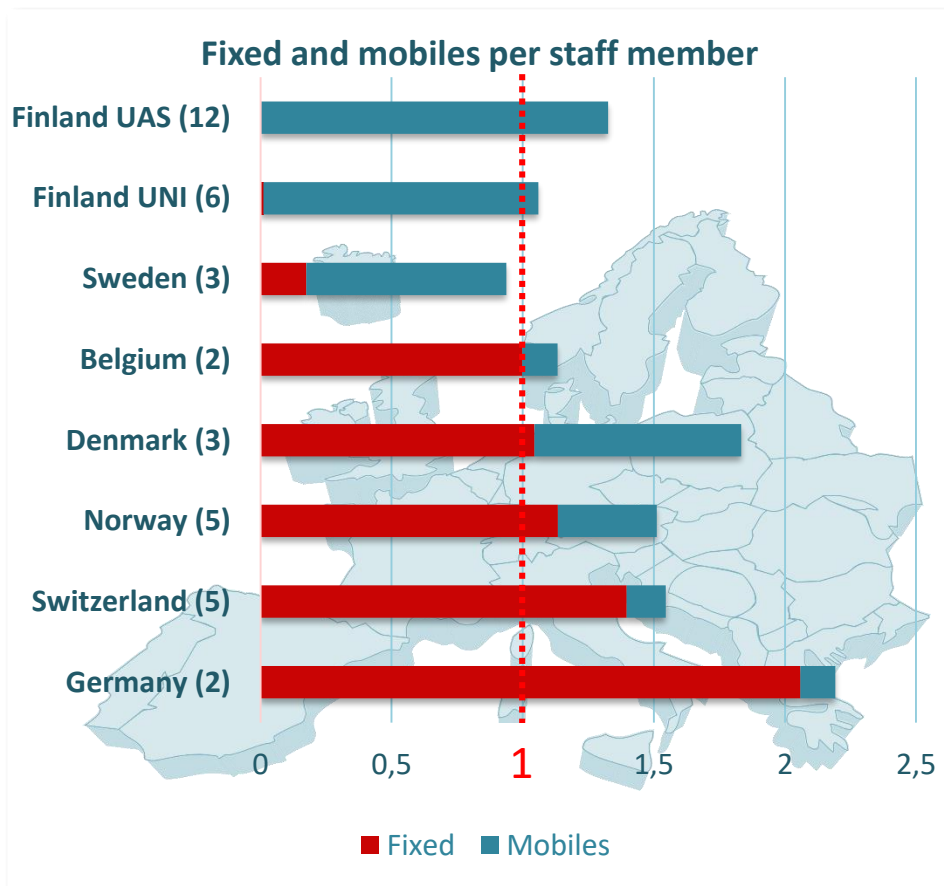
Universities only

BM2020 – Workstations by type



Universities only

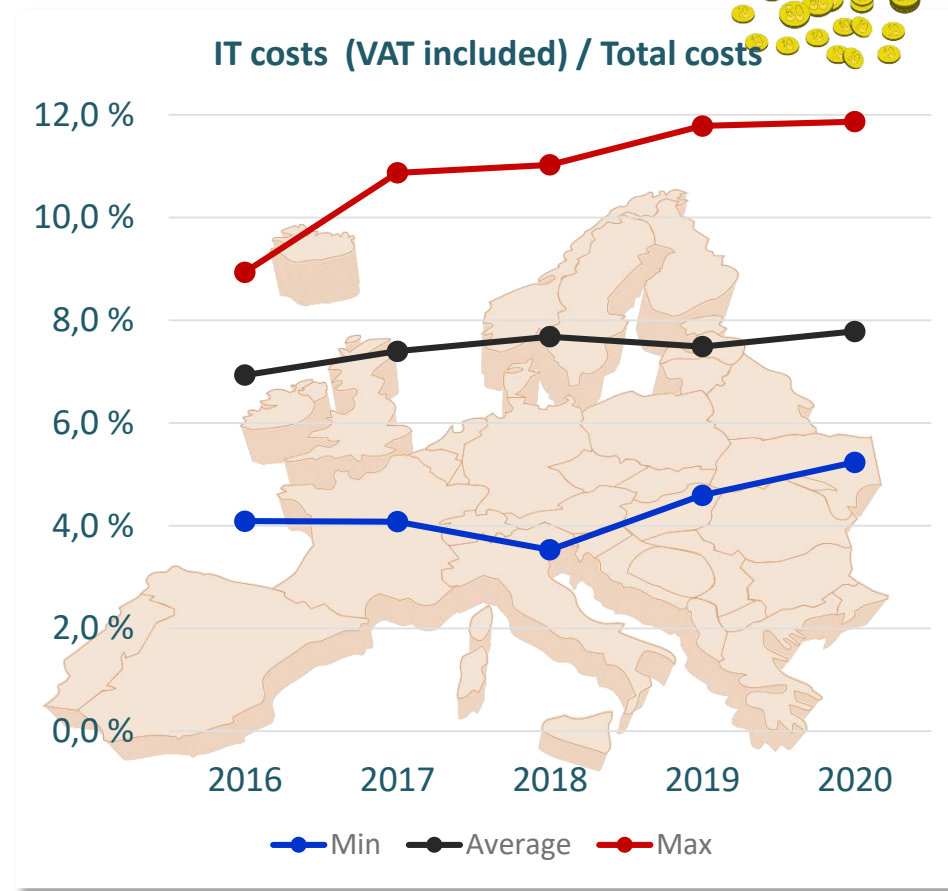
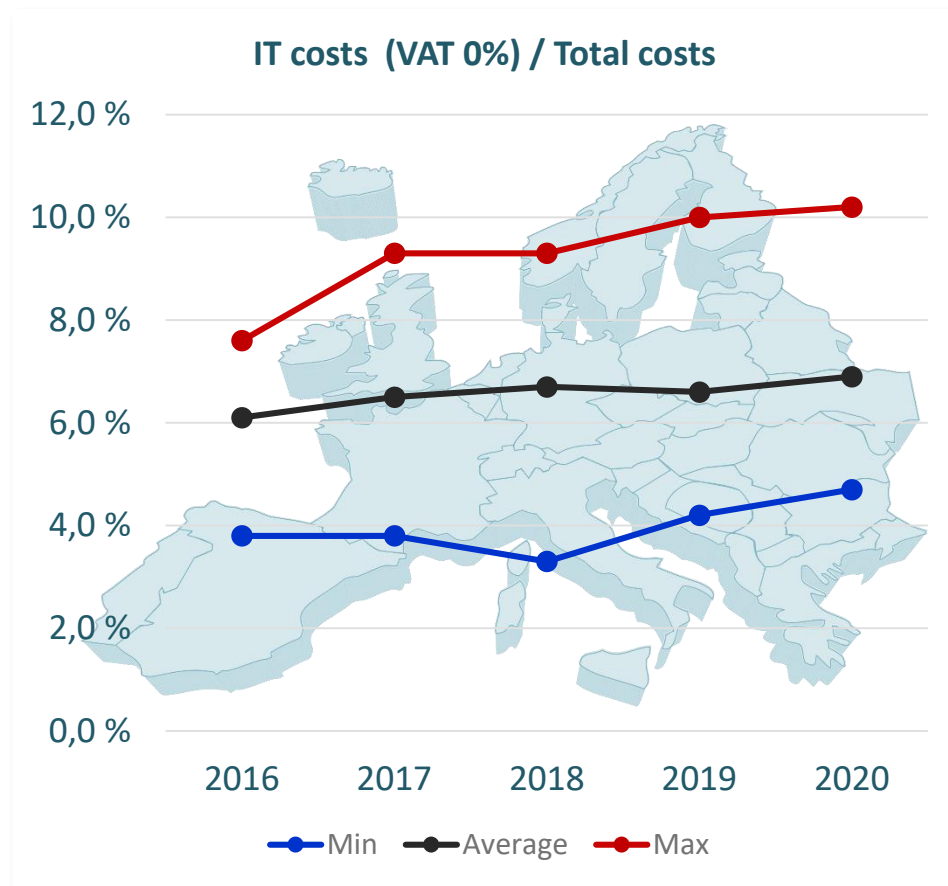
BM2020 – Staff FTE vs. Voice services and connections



Universities: 2016-2020 – IT costs / Total operational costs

Universities

Denmark: DTU
Finland: Aalto, TaU, UH
Germany: WWU
Norway: NTNU, UiB, UiT
Sweden: KTH, LiU
Switzerland: ETH, UZH



BencHEIT Survey → Know your numbers!

23.11.2021 BencHEIT Workshop in
(date subject to change)

Ghent, Belgium

Contact:

bencheit@eunis.org

<https://www.eunis.org/task-forces/benchmarking/>



BM2020 - Participants

Austria	Medical University of Innsbruck	Finland	Turku University of Applied Sciences
Austria	Vienna University of Economics and Business	Finland	University of Helsinki
Belgium	Ghent University	Finland	Vaasa University of Applied Sciences
Belgium	Vrije Universiteit Brussel	Finland	Åbo Akademi University
Denmark	Aarhus University Denmark	Germany	University of Bayreuth
Denmark	Technical University of Denmark	Germany	University of Münster
Denmark	University college Lillebælt	Greece	Aristotle University of Thessaloniki
Denmark	University of Copenhagen	Norway	Norwegian University of Life Sciences
Finland	Aalto-university	Norway	Norwegian University of Science and Technology
Finland	Haaga-Helia University of Applied Sciences	Norway	Oslo Metropolitan University
Finland	Humak University of Applied Sciences	Norway	UiT The Arctic University of Norway
Finland	Häme University of Applied Sciences	Norway	University of Bergen
Finland	Jyväskylä University of Applied Sciences	Spain	Universitat Oberta de Catalunya
Finland	Kajaani University of Applied Sciences	Sweden	Karolinska Institutet
Finland	Karelia University of Applied Sciences	Sweden	Linköping University
Finland	Lapland University Consortium	Sweden	Royal Institute of Technology
Finland	Laurea University of Applied Sciences	Switzerland	ETH Zurich
Finland	LUT universities	Switzerland	University of Bern
Finland	Metropolia University of Applied Sciences	Switzerland	University of Geneva
Finland	Savonia University of Applied Sciences	Switzerland	University of Lausanne
Finland	South-Eastern Finland University of Applied Sciences	Switzerland	University of Zürich
Finland	Tampere University	United Kingdom	Nottingham Trent University
Finland	Tampere University of Applied Sciences		