


ERA


EUNIS Research and Analysis initiative

[HOME](#) [CURRENT ISSUE](#) [JOURNAL ARCHIVE](#) [BLOG](#) [ABOUT THE JOURNAL](#) [ABOUT ERA](#) [TO EUNIS.ORG](#)



A VERY REAL CLOUD

Best Practices for Cloud Adoption
in Higher Education





CONTENT

REPORTS


Issue 2016:1

ISSN 2409-1340

European Journal
of Higher Education IT



EUNIS 2016: Crossroads where the past meets the future EUNIS 22nd Annual Congress



Published by Eunis through ERAI

Full papers

Content

26 Full papers from the
2016 EUNIS Congress

Leadership and management
OpenX and Interoperability
Software development
ICT Infrastructure and interoperability
Teaching and learning

Trans-national benchmarking

TNBM

Background

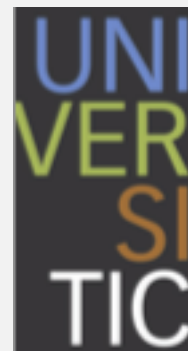


EUNIS BencHEIT Workshop

Nov 13
Pompeu Fabra
Barcelona, Spain
2015



BencHEIT survey 2016



BENCHMARK HBO 2015

The challenges

1. Determine the indexes
2. Identify questions that is required to get to these indexes
3. find a way (tool, nomenclature etc) to make sure we can retrieve comparable data across Europe.

- No obvious overlapping indices
- Rather than looking for a cross-section – what do we want to know?
- Challenge – definitions
- Low barrier of entry
- A number of content groups:
 - General Information
 - Context information
 - IT resources, management and strategy



GENERAL

CONTEXTUAL



IT MANAGEMENT

IT resources and management

Total IT budget (centralized)	What is the total IT budget of the institution (centralized IT!)?
Estimate percentage	What is the percentage of the centralized IT from the total IT spending of the institutions?
IT FTE Personnel	What is the number of IT Staff (FTE) employed in central IT
Classification of staff	Management Software dev Infrastructure/operations Help desk Security Other

Critical it-services	Three most mission critical IT-services for the institution at the moment?
Challenges	Three most pressing challenges for IT at the moment?
IT Governance	What are the mechanism for IT Governance?

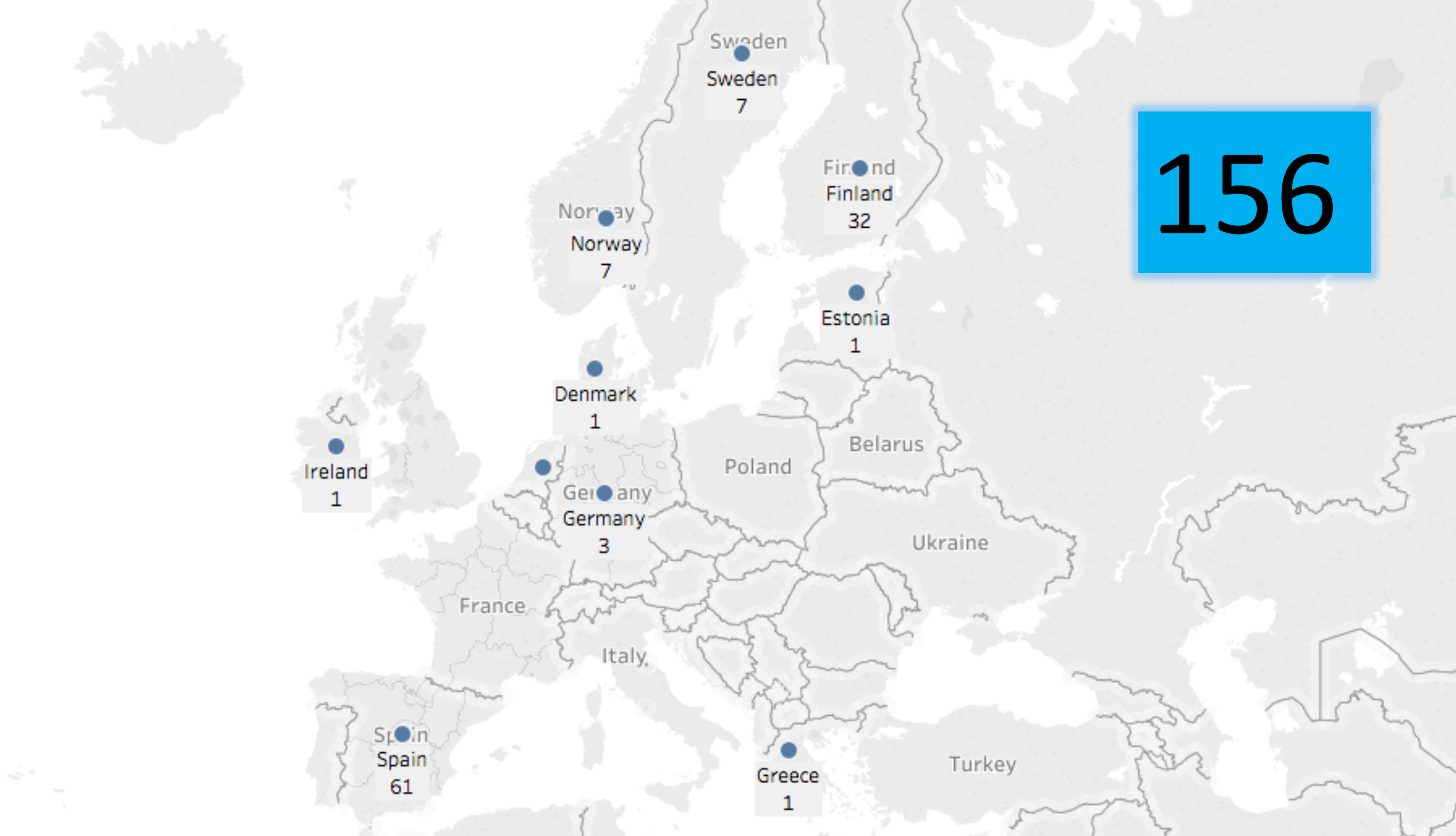


TNB

PARANTION



156



A large, diverse crowd of people is shown from a high angle, filling the frame. The individuals are of various ages, ethnicities, and are dressed in casual attire. Many are looking towards the left side of the image, suggesting they are attending an event or performance. The word "Community" is superimposed in a large, white, sans-serif font across the center of the image. The overall color palette is a monochromatic brown or sepia tone.

Community

01

TNBM

Providing data on core concepts of Higher Education IT in Europe. Both as basis for reserach but also for reference.

ERAI

Conducting analysis and research.
Assembling content and other work from around Europee.

02

03

EJHEIT

European Journal of Higher
Education IT

IT-costs

As per the set of questions we have for the

Topics of choice

Delivered to a subset or the whole community.
Driven by individuals from the community.

Context

Institutional data.
Preferably collected from other resources

IT-challenges

Top 3 challenges.
Top three priorities, etc





CHEITA

Putting the CHEITA Global
Complexity Index to the test



CHEITA membership





CHEITA Benchmarking Project Goals

- Provide a method or process to identify international peer institutions
 - Explore the Complexity Index as a possible approach to comparing institutions internationally
 - Develop an international Complexity Index for benchmarking
- Develop a small set of metrics which can be used to benchmark internationally (to be confirmed).



The CHEITA Global Complexity Index



The CHEITA Global Complexity Index

	Min	Max
Number of students (EFTSL)	0	45,000
Number of staff (FTE)	0	18,000
Research income (\$)	0	\$750,000,000

$$\text{eftsl_ind} = \min(10, 1 + 9 * (\text{student EFTSL} / 45,000))$$

$$\text{fte_ind} = \min(10, 1 + 9 * (\text{staff FTE} / 18,000))$$

$$\text{res_ind} = \min(10, 1 + 9 * (\text{research income} / 750,000,000))$$

$$\text{comp_ind} = \text{eftsl_ind} * .35 + \text{fte_ind} * .35 + \text{res_ind} * .30$$



Calculation method

1. Obtain the raw measurement
2. Scale the raw measurement (using a linear algorithm) between 1 and 10 based on the max and min values for the “international” higher education sector
3. Apply a weighting to the scaled measurement based on the relative importance of the underlying measure (35% for students, 35% for staff, and 30% for research income).
4. Add up the 3 weighted measurements to get the final result



Initial proof of concept



Total IT Spend (USD)

\$50 000 000
\$45 000 000
\$40 000 000
\$35 000 000
\$30 000 000
\$25 000 000
\$20 000 000
\$15 000 000
\$10 000 000
\$5 000 000
\$-



Complexity Index



Proof of concept (ii)



- Identify a set of comparator institutions and through participation in a virtual workshop investigate data quality, appropriateness of the model, etc.
- Based on the outcome of these discussions possible next steps include
 - refining the methodology and the model
 - encouraging broader participation
 - developing a small set of metrics for additional international benchmarking



Proof of concept (ii)



- to further prove the concept of the complexity index as a basis for international comparison (i.e. to verify that it actually does identify institutions that are broadly similar)
- to identify if there are differences related to the educational systems in each country (for example, should we expect that countries that have a high degree of state funding/involvement spend less on their ICT? Is that what the different slopes of the lines reflect?)
- are there any differences due to the maturity of service development/operational differences



Total IT Spend (USD)

\$-

\$300 000 000

\$250 000 000

\$200 000 000

\$150 000 000

\$100 000 000

\$50 000 000

1

2

3

4

5

6

7

8

9

10

Selected institutions

Complexity Index



Institution	CI	IT Spend (\$ PPP)	Staff (FTE)	Students (FTE)	Research Income
US182	3.43	45 393 804	4260	25 586	84 302 232
US167	3.52	21 692 378	3558	28 623	52 302 490
AUS9	3.32	24 702 252	3114	23 205	40 646 611
AUS32	3.50	35 736 698	3110	26 634	26 733 097
Canada10	3.44	13 953 388	5403	16 090	102 252 800
UK9	3.63	28 248 587	4738	19 639	118 156 780
Norway2	3.57	19 594 865	3566	14 830	252 063 492
NZ4	3.33	33 649 306	3838	18 896	92 913 137



Data to be gathered (i)

- **IT spend** - total, breakdown by 4-6 categories, spending profile, run/grow/transform, compensation/noncompensation/capital, spend per staff member, spend per student, spend by revenue,
- **IT staff size** - total, \$ associated with staffing, numbers and levels
- **Relative maturity of services?**
- Progression into the **cloud**
- How well they're going with **mobility support**



Data to be gathered (ii)

- help desk information
- quality measures that may be different across institutions, for example:
- national survey results
- satisfaction survey results
- identify what the institutions are doing differently



Questions?



- CHEITA website:
www.cheita.org
- Benchmarking IT: A Global approach
<http://tinyurl.com/nrz42bk>