Trans-national benchmarking

TNBM
Background
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 then 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
# IT resources and management

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

<table>
<thead>
<tr>
<th>Critical it-services</th>
<th>Three most mission critical IT-services for the institution at the moment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
<td>Three most pressing challenges for IT at the moment?</td>
</tr>
<tr>
<td>IT Governance</td>
<td>What are the mechanism for IT Governance?</td>
</tr>
</tbody>
</table>
Community
01 TNBM
Providing data on core concepts of Higher Education IT in Europe. Both as basis for research but also for reference.

02 ERAI
Conducting analysis and research. Assembling content and other work from around Europe.

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
Putting the CHEITA Global Complexity Index to the test
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

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students (EFTSL)</td>
<td>0</td>
<td>45,000</td>
</tr>
<tr>
<td>Number of staff (FTE)</td>
<td>0</td>
<td>18,000</td>
</tr>
<tr>
<td>Research income ($)</td>
<td>0</td>
<td>$750,000,000</td>
</tr>
</tbody>
</table>

\[
eftsl\_ind = \min(10,1+9*(\text{student EFTSL}/45,000))
\]

\[
fte\_ind = \min(10,1+9*(\text{staff FTE}/18,000))
\]

\[
res\_ind = \min(10,1+9*(\text{research income}/750,000,000))
\]

\[
\text{comp\_ind} = eftsl\_ind*.35 + fte\_ind*.35 + res\_ind*.30
\]
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
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
<table>
<thead>
<tr>
<th>Institution</th>
<th>CI</th>
<th>IT Spend ($ PPP)</th>
<th>Staff (FTE)</th>
<th>Students (FTE)</th>
<th>Research Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>US182</td>
<td>3.43</td>
<td>45 393 804</td>
<td>4260</td>
<td>25 586</td>
<td>84 302 232</td>
</tr>
<tr>
<td>US167</td>
<td>3.52</td>
<td>21 692 378</td>
<td>3558</td>
<td>28 623</td>
<td>52 302 490</td>
</tr>
<tr>
<td>AUS9</td>
<td>3.32</td>
<td>24 702 252</td>
<td>3114</td>
<td>23 205</td>
<td>40 646 611</td>
</tr>
<tr>
<td>AUS32</td>
<td>3.50</td>
<td>35 736 698</td>
<td>3110</td>
<td>26 634</td>
<td>26 733 097</td>
</tr>
<tr>
<td>Canada10</td>
<td>3.44</td>
<td>13 953 388</td>
<td>5403</td>
<td>16 090</td>
<td>102 252 800</td>
</tr>
<tr>
<td>UK9</td>
<td>3.63</td>
<td>28 248 587</td>
<td>4738</td>
<td>19 639</td>
<td>118 156 780</td>
</tr>
<tr>
<td>Norway2</td>
<td>3.57</td>
<td>19 594 865</td>
<td>3566</td>
<td>14 830</td>
<td>252 063 492</td>
</tr>
<tr>
<td>NZ4</td>
<td>3.33</td>
<td>33 649 306</td>
<td>3838</td>
<td>18 896</td>
<td>92 913 137</td>
</tr>
</tbody>
</table>
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