U-Multirank

Design and testing the feasibility of a Multi-dimensional Global University Ranking

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European Context

- European (supranational) policies regarding higher education and research
  - European Research Area (ERA)
  - Bologna Process
  - European Higher Education Area (EHEA)
- ‘diversity’ as a major strength
- wish to increase ‘transparency of diversity’
  - Bologna conference, Leuven, April 2009
- necessary distinction between “horizontal” and “vertical” diversity

The rise of global rankings

- Academic Ranking of World Class Universities (ARWU)
  Shanghai Jiaotong University, since 2003
- Times Higher Education Supplement World Rankings (THE) Times Higher Education, since 2004
- Higher Education Evaluation and Accreditation Council of Taiwan Ranking (HEEACT), since 2007
- The Leiden Ranking (LR) Leiden University, since 2008
- Webometrics Ranking, Cybermetrics Lab Spain
- Global Universities Ranking, ratER, Russia
- Professional Ranking by Ecole des Mines
Critique of existing rankings

- Exclusive focus on ‘whole institutions’ (ignoring internal variance)
- Focus on ‘comprehensive research universities’ ignores diversity of missions, structures,
- Concentration on ‘traditional’ research productivity and impact
- Aggregation of performance into composite overall indicators
- Use of ‘league table’ approach
- Imply cultural and language biases
- Imply bias against humanities and social sciences
- Neglect non-university research
- Do not adequately respond to stakeholder needs

Designing an alternative: the EC Call for Tender

- Development of concept and feasibility study
- Global ranking (not only European)
- Multi-dimensional
  - teaching and learning (incl. employability)
  - research
  - knowledge transfer
  - internationalisation (incl. mobility)
  - community outreach
- Institutional and field-based (disciplines)
- All types of higher education and research institutions
- Multiple stakeholders’ needs
Who needs to know what?

- ‘Transparency’ is always in the light of some information need. Examples:
  - Student: Where can I find the best study programme for me?
  - Researchers: How do I compare to others in my field of research?
  - Policy-maker: Where can I best invest research money?
  - Institutional leader: Who is a good partner for my institution?

- We need different instruments, not a single one
  - At programme and institutional levels

Basic idea

- Mapping diversity beyond the model of research excellence in large comprehensive international research universities

- Making visible excellence in teaching & learning, LLL, innovation and technology transfer, community outreach ...
Conceptual approach

- One common ranking of all higher education and research institutions worldwide does not make sense for any group of stakeholders
- Identify institutions that are comparable
- Use the U-Map classification tool to find comparable institutions (description of horizontal diversity)
- Apply ranking instrument to sets of comparable institutions or fields (assessment of vertical diversity)

- Use previous work: U-Map and CHE Ranking

U-Map: Classification of European HEIs

- A tool to create ‘transparency of diversity’ (mapping diversity)
- Descriptive, not evaluative
- Work in progress
- Six dimensions:
  - educational profile
  - student profile
  - research involvement
  - knowledge exchange
  - international orientation
  - regional engagement
- ‘Institutional profiles’, showing multiple excellences
### Make use of CHE Ranking methods

<table>
<thead>
<tr>
<th>Multi-Dimensional</th>
<th>Group approach</th>
<th>Field-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>• no composite overall indicator</td>
<td>• avoiding false impressions of exactness resp. differences between HEIs given by league tables</td>
<td>• many target groups (e.g. students, researchers) are interested in results about fields</td>
</tr>
<tr>
<td>• multi-dimensional view on profiles</td>
<td></td>
<td>• ranking as information system supporting student choice and institutional management</td>
</tr>
<tr>
<td>• personalised ranking (web tool)</td>
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</tbody>
</table>
## Individualized Rankings

### 1. Step: Personal Indicators

<table>
<thead>
<tr>
<th>Academic studies and teaching</th>
<th>Job market and career orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- M-Learning (3)</td>
<td>- Employment market related</td>
</tr>
<tr>
<td>- E-Learning (3)</td>
<td>- Programming (5)</td>
</tr>
<tr>
<td>- Contact between students (5)</td>
<td>- Specialization (5)</td>
</tr>
<tr>
<td>- Contact students-teachers (4)</td>
<td>- Overall assessment (5)</td>
</tr>
<tr>
<td>- Courses offered (5)</td>
<td>- Research (5)</td>
</tr>
<tr>
<td>- Specialist studies consultation (5)</td>
<td>- Professors' reputation (5)</td>
</tr>
<tr>
<td>- Study-organization (5)</td>
<td></td>
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<tr>
<td>- Practice Report (5)</td>
<td></td>
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<tr>
<td>- Counselling (5)</td>
<td></td>
</tr>
</tbody>
</table>

### Equipment

| - PC equipment (6)qv          | - Food (5)                        |
| - Media equipment (4)         | - Library (5)                     |
| - Workstations (6)           |                                  |
| - References (4)             |                                  |
| - Library (6)                |                                  |

### Research

- many doctorates (F)
- much third party funding (F)

### Result of study

- short duration of studies (F)

### Study location and higher education institutions

- lots of higher education spots (F)
- low rent (F)
- small college location (F)
- higher education spots (5)

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### Individualized Rankings

Please select a sort sequence:

1. RWTH Aachen
2. Uni Heidelberg
3. Uni Bonn
4. EU Berlin
5. TU Berlin
6. Uni Bielefeld
7. Uni Bochum
8. Uni Bremen
9. TU Braunschweig
10. ULM
11. Uni Kiel
12. TUM
13. TU Dresden
14. Uni Duisburg Essen
15. Uni Duisburg Essen
16. Uni Duisburg Hagen
Logic of institutional rankings

**U-Map**

- **descriptive institutional profiles on six dimensions**

**U-Multirank**

- **performance profiles of single dimensions**, no aggregated institutional rankings

**to be called: Focused Institutional Rankings**

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**Pilots focused institutional rankings (150 HEIs)**

**U-Map profile finder**

- Subset of comparable institutions (A, B, C, D)
- Subset of comparable institutions (E, F, G, C)

**Target groups**

- Main target group: National policy makers
- Main target group: HEIs/HEI managers

**Dimensions**

- **Teaching & learning**: A, B, C, D, E, F, G, C
- **Research**: A, B, C, D, E, F, G, C
- **Knowledge exchange**: A, B, C, D, E, F, G, C
- **Internationalisation**: A, B, D, E, F, G
- **Regional engagement**: A, B, D, E, F, G
**Logic of field-based rankings**

- **U-Map**
  - **descriptive** institutional profiles on six dimensions

- **U-Multirank**
  - **performance** profile of **scientific field** in institutions with **comparable profile**

To be called: Field-based Rankings

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**Pilots field-based rankings**

<table>
<thead>
<tr>
<th>Fields</th>
<th>Business</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-map profile</td>
<td>subset of comparable HEI (example: many MA, internationally oriented, research intens.)</td>
<td>subset of comparable HEI (example: regionally oriented, innovation-oriented, many BA)</td>
</tr>
<tr>
<td>Target groups</td>
<td>Main target group: MA/PhD students</td>
<td>Main target group: HEIs/HEI managers</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Teaching &amp; learning, incl. employability</td>
<td>Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge exchange</td>
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<td></td>
<td></td>
<td>Internationalisation</td>
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<td></td>
<td></td>
<td>Regional engagement</td>
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</tbody>
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### U-Multirank Project: Work packages

<table>
<thead>
<tr>
<th>Design Phase</th>
<th>Test Phase</th>
</tr>
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<tbody>
<tr>
<td>WP1 Stock-taking</td>
<td>WP9 Consultation and Dissemination</td>
</tr>
<tr>
<td>WP2 Dimensions and</td>
<td></td>
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<tr>
<td>Indicators</td>
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<td>WP3 Instrument Design</td>
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<td>WP4 Selection of</td>
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<tr>
<td>Pilot Institutions</td>
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<tr>
<td>+ Pre-test</td>
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<tr>
<td>WP5 Data base</td>
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<tr>
<td>construction</td>
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<td>WP6 Data collection</td>
<td></td>
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<tr>
<td>+ Data handling</td>
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<td>WP7 Data and</td>
<td></td>
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<td>feasibility analysis</td>
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<tr>
<td>WP8 Implementation</td>
<td></td>
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<tr>
<td>plan</td>
<td></td>
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<tr>
<td>Project planning,</td>
<td></td>
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<tr>
<td>management, quality</td>
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<tr>
<td>assurance</td>
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### Challenges (I)

Conceptual challenges:

- how to clearly define separate tools (U-Map and U-Multirank)?
- how to combine Focused Institutional Rankings and Field-based Rankings?
  - how to avoid ‘one-dimensional’ dominance?
  - how to avoid dominance of the profile of excellence in basic research and guarantee multiple excellence?
- how to create stakeholders driven approach?
Challenges (II)

Methodological challenges:

- how to select indicators and produce data elements?
- how to define global testing sample (150 pilot institutions worldwide)?
- how to create a relevant and reliable data base?
- how to organise the quality assurance of the data collection?
- feasibility on world-wide level vs. regional (European)?

Challenges (III)

Implementation challenges:

- how to organise the sustainable future operation of U-Multirank?
- how to organise stakeholders involvement?
Thank you for your attention!