Accreditations & Rankings

The experience of Técnnico Lisboa
Organization

• Introduction
• Accreditation
• Rankings
• Bringing two worlds together
• Conclusions
Introduction

This presentation aims at:

• providing an overall picture of the institution

• learning about internal models and their contribution to the quest for quality

• demonstrating how Accreditation and Rankings can be brought together internally
### Introduction

#### Facts and figures

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Students</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>Foundation as Instituto Superior Técnico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>Merger with the University of Lisbon; adopts the name Técnico Lisboa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11,412</td>
<td>students, among which 42% get a job before graduation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
<th>Students</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>of grads get a job within 6 months after graduation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77%</td>
<td>of grads employed in their field of study</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Rankings</th>
<th>Publications</th>
<th>Spin-off Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>All programmes accredited by the Portuguese Accreditation Agency (A3ES)</td>
<td>6th E, 28th World, Civil E. 10th E, 40th World, Mech E. 15th E, 52nd World, Math in NTU Ranking</td>
<td>10,646</td>
<td>53</td>
</tr>
</tbody>
</table>

| Source: | http://ep.tecnico.ulisboa.pt/cienciometria/ |
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Portuguese Accreditation System

LEGAL REQUIREMENTS

All HEIs must

• adopt quality assurance policies and procedures
• develop a quality culture
• promote and implement a strategy for continuous improvement of quality
The Portuguese Accreditation System

PRIORITIES

Quality Assurance should

• extend the scope of evaluation
• clarify the consequences of evaluation
• internationalize the evaluation process
• require tangible results
SIQuIIST
(IST Integrated Quality Management System)

The SIQuIIST aims at:

– constant improvement of quality within the institution
– evaluation of the level of accomplishment of the mission of Técnico Lisboa

through

Criteria and indicators
SIQuIST
(IST Integrated Quality Management System)

The SIQuIST consists of two components:
- Self evaluation
- External evaluation

SIQuIST Accredited in 2012

✓ Cyclical review of institutional results
✓ Overall evaluation of the mission and strategic objectives defined by Técnico Lisboa
SIQuIST
(IST Integrated Quality Management System)

The SIQuIST comprises:
• Progress and
• Quality indicators

that apply to all 11 strategic areas defined in the Strategic Plan of Tecnico Lisboa
Challenges of SIQuIST

The SIQuIST should

• ensure updated information

• make quality enhancement processes have tangible effects over time
Advantages of SIQuIST

The system contributes to

• Constant monitoring/evaluation
• Transparency and communication
• Accreditation (external process)
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The importance of rankings to Técnico Lisboa

• Are part of its Strategic Options:
  – Academic Rankings Observatory

• Critical tool to help:
  – Create a world class environment
  – Attract faculty, researchers and students from all over the world
  – Make Técnico a reference institution nationally and internationally
  – Drive institutional policy towards quality
The Approaches of Técnico Lisboa to Rankings

- Monitoring of key university rankings, in particular their Sector Rankings in ST&E

- The Concept of ´Reverse Engineering´:
  - reports by Ranking
  - analysis of indicators and scores
  - hypothetical scenarios against peers
  - recommendations to the governing bodies
Técnico Lisboa Model: An example

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>Academic Reputation</th>
<th>Employer Reputation</th>
<th>Citations Per Paper</th>
<th>H-Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>University of Lisbon</td>
<td>69,7</td>
<td>63,6</td>
<td>78,2</td>
<td>80,2</td>
</tr>
<tr>
<td>10</td>
<td>RWTH Aachen University</td>
<td>86,9</td>
<td>82,8</td>
<td>82,0</td>
<td>76,6</td>
</tr>
<tr>
<td>25</td>
<td>Eindhoven University of Technology</td>
<td>82,3</td>
<td>64,8</td>
<td>85,0</td>
<td>79,0</td>
</tr>
</tbody>
</table>

Table 2: Scores by indicator obtained by ULisboa and those of the institutions ranked 10 and 25 in Europe

Source: QS Ranking, latest update: 2017
## Técnico Lisboa Model: Recommendations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Recommendation</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Reputation</td>
<td>Improve institutional communication</td>
<td>Governing bodies</td>
</tr>
<tr>
<td></td>
<td>Adopt measures to increase reputation</td>
<td>Faculty; researchers</td>
</tr>
<tr>
<td></td>
<td>Adopt a single and normalized signature</td>
<td></td>
</tr>
<tr>
<td>Employer Reputation</td>
<td>Work closely with companies/stakeholders/ to get them</td>
<td>Former faculty, researchers and alumni with business</td>
</tr>
<tr>
<td></td>
<td>involved</td>
<td>activity</td>
</tr>
<tr>
<td></td>
<td>Adopt measures to increase reputation</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** Recommendations  
**Source:** QS Report, 2017, published by Técnico Lisboa, Academic Rankings Observatory
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Bringing two worlds together

• definition of lines of action
• improved standing in rankings
• continued focus on improving quality

while

• optimizing resources and
• lining up institutions’ strategies

Common indicators
Organization

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Conclusions: Difficulties

- Different objectives of Quality Assurance and Academic Rankings
- Academic Communities vs Institutional autonomy
Conclusions: *Challenges*

- Rankings as a complementary tool for governments, accreditation authorities and independent review agencies
- Involvement of entire institution
- Long process of communication to create consolidated management models
Conclusions: Evidence

• Quality Assurance systems can learn from Academic Ranking indicators

• Definition of objective targets based on “Reverse Engineering” through the analysis of indicators in rankings
THANK YOU!


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