International Workshop/Seminar

Tools for Data Management - Data Driven Decision
Making for Internationalization of Higher Education

14 April 2016

What is HEIDA?

Erasmus+ Key Action 2: Cooperation and Innovation for Good Practices – Strategic Partnerships

- *Data driven decision making for internationalization of higher education: Bridging the gap between faculty and admin using effective communication platforms*

24 months (December 2014 – October 2016)

Who is HEIDA?

Partner	Department	Contact people	Website
Koç University, Istanbul, TURKEY **PROJECT COORDINATOR**	Office of International Programs	Melissa Abache Adıl Atılgan	www.ku.edu.tr
Universidad Autonoma de Barcelona Barcelona, Spain **Project Partner**	Office of International Relations	Marta Vilalta Xavier Biarnes Prof. Georgeta Ion	www.uab.cat
International School for Social and Business Studies (ISSBS) Celje, Slovenia **Project Partner**	Research Department	Dr. Nada Trunk Sirca Dr. Valentina Jost Leser	http://www.mfdps.si/en

Why?

*"Universities are expected to become key players in the global knowledge economy, and internationalization is identified as a key response to globalization. This has radically altered the understanding of **internationalization in universities, as it shifts from being a marginal to mainstream activity, no longer located exclusively in the international offices, but an integral part of University strategy**".*

Hans de Witt (2014)"Europe's 25 years of internationalization"

Why HEIDA?

Today	Challenge
HEIs are more complex	Valid information on a HEI internationalization activities beyond mobility or other basic indicators
Institutional strategic goal of internationalization	What faculty and staff are prepared or able to do with limited time and awareness of past, current and future efforts
Institutions work to identify and develop their strengths.	Develop better analysis of performance in a user-friendly way and tell our story in a better way

"You can't manage what you don't measure." (either W. Edwards Deming or Peter Drucker)

How does it impact our work?

Strategic drivers

- giving our students the best possible preparation for global careers and lives

- co-creating solutions to global challenges and problems

- growing our expertise in enterprise and innovation

- growing our profile to reflect our achievements and engage more effectively.

What do we expect from the project?

- Get better at 'mapping' and sharing information about our existing international activities that could lead to:
  - Develop a finite set of strategic international partners
  - Use our alumni networks overseas better
  - Give more of our students the experience of a period of studying abroad
  - Influence government research/access/immigration policy

What do we expect from the project?

– A web-based **tool** for HEIs to **choose relevant indicators** and data, **compare and visualize across time and query** their internationalization data (for marketing, reporting, benchmarking, budgeting, etc)

  • Open access software
  • Adaptable to institutional needs (user profiles, login modes, number of indicators)
  • Easy to input data, search data, export and visualize data

– An online training resource for managers and staff:

  • Internationalization data
  • Data management practices
  • **Effective decision making for internationalization**

The project

- 1st Phase (Dec 2014-May 2016)
  - Literature review
  - Stakeholder consultations
  - Design HEIs survey of data and processes for internationalization
  - Run survey across partners and EU HEIs
- 2nd Phase (May 2016-Nov 2016)
  - **Refine web-based tool**
  - **Training module**
- 3rd Phase (until end of 2016)
  - Dissemination in each partner country
  - **Launch conference** and other promotional activities for the tool and training module

Why are you here?

- Higher Education Institutions:
  - Senior Management (Presidents/Rectors/Vice Presidents or Vice-Provosts)
  - Directors of Administrative Units
  - Senior Faculty with international cooperation responsibilities
  - Staff at Office of International Activities/Relations
  - Higher Education researchers

Aims of today

- **Learn** from case studies and other colleagues
- **Give feedback** on our beta tool: functions, users, format
- **Reflect** on your institutional practice, training needs, strategies for better decision making

Next steps for HEIDA

- Refine web-based tool

- Refine online training module

- Share with you at **«Launch Conference» in September 22-23 in Istanbul**

Join the HEIDA community

- Follow us on **Twitter:** @HEIDAProject

- Join the **LinkedIn** group:Data Driven Decision Making for Internationalization of Higher Education (HEIDA) Project

- Email the team heida@ku.edu.tr

- Check the project website https://heida.ku.edu.tr/

Challenges of internationalisation - Case Study in use of indicators of internationalisation of HE

Prof. Dr. Nada Trunk Širca, Asist. Dr. Valentina Jošt Lešer

Celje, Slovenia, 14th April 2016

- Publicly funded private higher education institution founded in 2006.
- 2015/2016: 400 students, 50 lecturers and researchers, 10 staff.
- Young, dynamic and internationally oriented.
- Main areas: **BUSINESS, MANAGEMENT, ECONOMICS, EDUCATION, KNOWLEDGE MANAGEMENT.**
- Study programmes on all three cycles (BA, MA, PhD).

Degree Study Programmes

Full degree study programmes at all levels :

BACHELOR (3 years, 180 ECTS)

- Economy in Contemporary Society
- Business in Contemporary Society

MASTER (2 years, 120 ECTS)

- Knowledge Management
- Human Resource Management

MASTER (1 year, 60 ECTS)

- Management and Quality in Education

DOCTORAL (3 years, 180 ECTS)

- Knowledge Management

- Research Areas : ECONOMICS, LABOUR MARKET, LAW, HRM, MAREKTING COMPTENCES, KNOWLEDGE MANAGEMENT, EUROPEAN INTEGRATION, QUALITY IN HIGHER EDUCATION

Academic Publishing

- Monographs

- Study Literature.

- [International Journal of Management, Knowledge and Learning](#)

- [International Academic Publisher ToKnowPress](#)
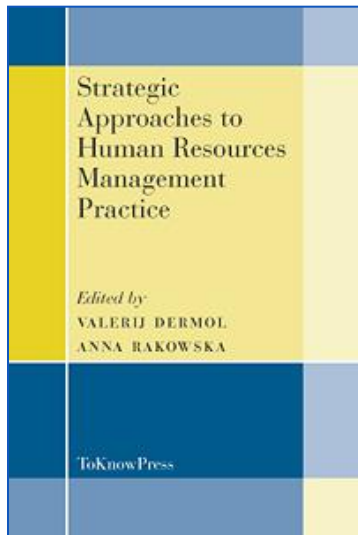
MakeLearn & TIIM conference

International Scientific Conference MakeLearn & TIIM

- 2015: 308 participants from 44 countries
- Rectors' Forum
- Editors' Panel with Exhibition of Journals
- Research-Education-Practice Forum
- Doctoral Students' Workshop on Academic Writing

Management, Knowledge and Learning
Joint International Conference 2016
Technology, Innovation and Industrial Management

CASE STUDY METHODOLOGY – ISSBS

1. Desk research
2. Informing ISSBS co-workers about the HEIDA project and our case study
3. Selection of 25 IMPI indicators
4. HEIDA Case Study Indicator Data Collection
5. Focus group
6. Interview
7. Best practices

ABOUT ISSBS

- International School for Social and Business Studies (ISSBS) was founded in **2006**. It has been established in Celje as independent, private HEI, public funded. ISSBS is a flexible and **relative small HEI**.

- ISSBS develops curricula in the fields of **economics, business and social sciences** at all three levels of studies (**bachelor, masters and doctoral**). It is also active in related fields of the **research** and **international cooperation**.

- All **six study programmes** were developed in accordance with the Bologna guidelines and accredited in Slovenia. Master's programme KM is accredited by FIBAA, both bachelors are accreditated by AQA, the istitution is accreditated by AZVO.

RESULTS OF THE DESK RESEARCH

ISSBS **does not have independent/separate strategy for internationalization.** ISSBS has institutional development strategy in which internationalization indicators are integrated.

For the purpose of this research we have reviewed the following sources related on internationalization data:
- **2014-2018 ISSBS development strategy,**
- **self-evaluation reports,**
- **an overview of available international data.**

Internationalization is sited as a **transversal activity** in the four core activities of the institutions, namely:
- education,
- research,
- collaboration with the environment and social responsibility
- and ensuring operating conditions at ISSBS.

FINDINGS:

- A **mix of central and faculty/department level offices** are carry out the main function of coordinating international activities, dimensions and processes at ISSBS. Therefore, is sometimes **hard to keep the track on all the internationalization data** that is collected and where it is available (faculty/department offices).

- Most admin and academic staff don't know where to find the internationalization data.

- Internationalization data is not always kept up to date.

- Internationalization data is not available in a format that is easy to query and extract for reporting.

HOW WERE THE 25 IMPI INDICATORS SELECTED

We have **selected 25 indicators** (5 from each IMPI group - indicators of the year), which are important for the ISSBS (see Table 1). The **methodology of selection** was as is followed:

Firstly, we informed ISSBS co-workers about HEIDA project and case study. The schedule and methodology of data gathering was presented. Due to desk research, the decision was made that the best way of selecting the indicators is by survey.

Secondly, we designed an online survey, for the ISSBS co-workers to select 5 indicators among each IMPI group. They choose which indicator is relevant for internationalization strategy at ISSBS.

HOW WERE THE 25 IMPI INDICATORS SELECTED

GROUP	SELECTED INDICATORS
ENHANCING THE QUALITY OF EDUCATION	01-009 What proportion of students from the institution participates in outgoing exchange or mobility programmes in a given year?
	01-010 Out of all courses offered by the institution in a given year, what is the proportion of courses taught in a foreign language?
	01-005 Out of all degree programmes offered by the unit in a given year, what proportion are international joint/double/multiple degree programmes?
	01-001 Out of all students in the institution, what proportion studies abroad in a given year?
	01-002 In a given year, out of all international students in the institution, what proportion is in programmes taught in the national language?
ENHANCING THE QUALITY OF RESEARCH	06-016 In a given year, what proportion of researchers in the institution is involved in at least one research project with an international partner?
	06-021 In a given year, what proportion of research projects with which the institution is formally associated is internationally funded?
	03-012 Does the institution participate in international networks and organisations in the field of internationalization?
	06-029 In a given year, what proportion of researchers in the institution author (or co-author) pieces (books, journal issues, articles, etc) that are published internationally?
	06-032 In a given year, what proportion of articles authored (or co-authored) by the researchers in the institution is published in internationally refereed journals?

HOW WERE THE 25 IMPI INDICATORS SELECTED

WELL PREPARİNG STUDENTS FOR LİFE AND WORK İN AN İNTERCULTURAL AND GLOBALİZİNG WORLD	**01-003 What proportion of students from the institution participates in outgoing exchange or mobility programmes in a given year?**
	01-004 Out of all students in the institution, what proportion studies abroad in a given year?
	01-010 Out of all international students in the unit in a given year, what proportion are exchange or mobility programme students?
	02-047 In a given year, out of all academic staff members in the institution, what proportion are visiting staff members from abroad?
	05-030 Out of all courses offered by the institution in a given year, what is the proportion of courses taught in a foreign language?
ENHANCİNG THE İNTERNATİONAL REPUTATİON AND VİSİBİLİTY OF THE İNSTİTUTİON	07-013 Does the institution participate in national, regional or local networks supporting internationalisation?
	08-008 Does the institution provide international students with comprehensive pre-arrival information (covering such topics as visa procedures, cost of living, tuition fees, accommodation options, university services, sports and cultural activities);?
	07-002 Does the institution monitor its international visibility?
	03-009 Does the institution have a specific organisational structure to support internationalisation?
	05-023 Out of all degree programmes offered by the unit in a given year, what proportion are international joint/double/multiple degree programmes?
PROVİDİNG SERVİCE TO SOCİETY AND COMMUNİTY SOCİAL ENGAGEMENT	06-021 In a given year, what proportion of research projects with which the institution is formally associated is internationally funded?
	02-030 In a given year, out of all of the institution's academic staff members, what is the proportion that attends at least one international conference or seminar?
	07-013 Does the institution participate in national, regional or local networks supporting internationalisation?
	01-004 Out of all students in the institution, what proportion studies abroad in a given year?
	02-018 In a given year, what proportion of international conferences is organised by the institution's staff members?

HOW WERE THE 25 IMPI INDICATORS SELECTED

Thirdly, chosen indicators were then sent to the international office for the HEIDA Case Study Indicator Data Collection – ISSBS. At the international office, people answered the questions on 25 selected indicators and their data management.

Findings:

- The need for an **independent International Strategy**.
- The need to **centralize the entire internationalization activities**.
- The need for a **comprehensive data management system**.

The additional questions for each indicator are very useful (indicator collection table as a tool).

FOCUS GROUP/1

The main topics: internationalisation, data management and user skill needs.

Participants: 2 administrators, 2 managers and 2 teachers.

Findings:

- ISSBS internationalization goals are in line with the 25 selected indicators.
- We are using information system **Novis**, which is integrated with data warehouse, for collecting mainly the data about students and HR.
- For the admin, documentation, tracking the education activities, we are using software application **Moodle**.
- We have to upgrade **our information system Novis**.
- Some admin are still collecting data (about students, HR, etc.) by hand (in excel sheets), which are not integrated in **Novis**.

FOCUS GROUP/2

?? We could turn educational and organizational data into actionable information to improve internationalization outcomes:

- with independent International Strategy,
- with centralization of the entire internationalization activities,
- with comprehensive data management system,
- by using the international data and analysis for action/improvement,
- with extra trainings for admins and management about data management.

INTERVIEW WITH VICE-DEAN/1

- **Internationalization data management is very complex**, because all internationalization concepts have to be individualized for specific HE (an old, research oriented, teaching oriented, small, etc.) as well as for specific situation/context.
- **Understanding of Internationalization indicators** (IMPI indicators) is sometimes bias and hard to understand/specify, because of cultural, **national and organizational specifics.**
- **Management is not always keen on the data collection.**
- Data collection is somethings seen as **unnecessary birocracy and waist of time**.

During the interview some new questions arose:

- Do we have the ability for collecting the data to calculate the specific indicator?
- Are we collecting the data to calculate the specific indicator?
- Is the collected data used for creating information?
- How or for what is the information used for?

BEST PRACTICES AT ISSBS

- Every year, we are prepareing a **self-evaluation report**, which critically evaluates the operations of ISSBS in all areas, and based on its findings we take any necessary measures for improvement.

- In a framework of a **Quality assurance project** the data warehouse was developed, which has been integrated with our information system Novis. We have acknowledge great improvements, however this work is still in progress (is not covering all activirties).

- **Internacionalisation – big or small activities?**

  ad-hoc to sistematic approach? …

  ✓ Evidences on traveling abroad (projects, conferences, seminars, meetings …)

  ✓ Support with promotion materials …

  ✓ Sharing points at conferences …

  ✓ Established contacs … evidences …

  ✓ Impact? Who is responsible?

KOÇ UNIVERSITY
Istanbul, Turkey

HEIDA Case Study

Key Facts about Koç University

heida.
Data driven decision making
for internationalization of
higher education

400+
faculty
members

6.000+
students

25%
international

English
Instruction

- **104** Research Laboratories, **16** Research Centers, **3** Research Forums

- **Schools**: Sciences and Engineering; Social Sciences and Humanities; Business and Administrative Sciences; Health Sciences; Law

- Among the top three universities in Turkey for **publications per faculty and citation record**

- **182 externally funded ongoing research projects** with a value of 40 million USD including 5 out of 8 European Research Council (ERC) grants in Turkey

- Over 500 externally funded projects between 2004-2015

- Ranked **1st in Turkey for number of awards** given to young researchers by the Turkish Academy of Sciences

Internationalization at KU

- Official university mission includes

- No official internationalization strategy (in development) or action plan – "start-up" corporate culture

- Annual strategy document for the Office of International Programs (central office)

Internationalization at KU

- Strategic aims:
  - Increase our number of joint and double degree programs at graduate level (MSc and PhD)
  - Increase our number of graduate international students particularly for PhD programs (no specific target)
  - Increase EU and other international funding sources for research
  - Obtain new international accreditations for Business and Engineering programs
  - Short term goal of increasing the % of our students that complete study abroad to 5% per year and in the mid-term to 10%
  - Support and contribute to the visibility and brand of Turkish Higher Education

Internationalization at KU

- Reporting on key internationalization activities
  - Internal annual report ("Overseer's report to Board of Trustees)
  - External annual report (to Turkish Higher Education Council and Turkish National Science Foundation)
  - Individual sections of annual reports from all other academic and administrative units and individual faculty

Internationalization indicators commonly used at KU

- English as medium of instruction
- 25% of academic staff are foreign and
- 96% obtained their PhD degrees abroad
- The student mobility program (established in 1997) receives approximately 400 foreign students and sends 300 local students in an academic year.
- In 2015-16 academic year we are hosting 294 new full time international students (50 UG, 99 Masters, 145 PhD), mostly from Iran and Pakistan in our Science and Engineering and Social Sciences and Humanities Graduate Schools
- We currently have 3 double degree Master's programs (Social Sciences and Business) and many co-tutelle PhD agreements (all graduate schools).
- Currently ranked on top 300 world universities by Times Higher Education (THE) and QS.

Office of International Programs

- Develop and advance strategic internationalization goals of the university in learning, teaching and research

  - Partnership development
  - Mobility
  - Special and short programs
  - Service learning and global civic skills
  - International student recruitment

KU Focus group findings

- Difference in the level of awareness between types of staff

- Most Academic Administration staff considered we are international, in contrast to International Office staff and faculty members

- **Most examples of indicators related to: language of instruction, international academic staff and students**

- **Low awareness of other indicators such as international partnerships, accreditations, revenue, spending and alumni**

- Uneven awareness of what systems and reporting tools are currently in place to collect and search for internationalization data in different areas.

KU Focus group findings

- **No clear relationship between the reporting of this data on an annual basis and the work plans or strategies that are then agreed with senior management for the following year**. For example, there are no set targets or objectives to increase internationalization as specific work outcomes.

- **Uneven data across academic departments in terms of frequency and format for some indicators** (eg number of co-tutelle supervision agreements not existing in some departments)

- There was **low awareness about the internationalization data that was being collected by the International Office and its reporting**

- Key individuals at Registrars Office, Vice-President for Academic Affairs and Vice-President for Research and Development were identified as **data "hubs**»

KU Focus group findings

- Data related to numbers of international students, staff and academics is captured and managed using **existing database systems such as KUSIS (student and curriculum PeopleSoft system), SAP (human resources and budget system Oracle) and International Office internal excel tracking sheets**.

- **International Office did not have full access to the information about exchange students and staff and was not aware of existing database queries to access this data**. The main student information system (KUSIS) was rolled out late in 2014 so this might explain to some extent that it is still in the process of being adopted fully by all units.

Focus group findings

- Data related to **international activities of faculty members** is not collected because it would represent more information to report on annually – **resistance from Deans towards more reporting**

- International activities organized on campus could be incorporated into the faculty information system (KUFIS) but it would fall on the Colleges' administrative staff to monitor and report on this activity.

- There is no uniform format for the reporting process that could help compare performance year on year or between colleges or graduate schools.

- **Data collected by the Office of Research and Development is mostly used for external reporting to project funders but it was recognised that having more units such as Communications and International Office have access to this could be useful in raising the profile of the university for national and international research collaborations**.

KU Interview findings

- Need for better collection and access to internationalization data is recognised as **important for visibility, accreditation and graduate recruitment**

- For some senior managers in **non-academic work units** (eg Finance, HR, Campus Facilities management, Library) it was not clear how their units' contribute to internationalization and that **even if there was more or accessible data it would not make a significant difference in their decision making**

- **International alumni emerged as an area lacking data and was considered important for the next 10 years as development plans start to link with our alumni strategy**

- There would be natural resistance from faculty members to add more things to report as their focus is on research. This is linked with **an absence of incentives for international engagement of faculty**

Selection of indicators at KU

- Focus group participants (40 staff in total) were asked to select from the list of IMPI indicators (top 100) those that were useful and relevant to their work areas and to describe in which ways are these collected, good practices and areas for improvement

- Participants and interviewees were also asked to suggest additional indicators not on the list that would be useful

- **A total of 36 indicators** were selected from the following internationalization dimensions:
  - **Research: 7**
  - **Teaching and Learning: 11**
  - **Resources and visibility: 9**
  - **Campus and Services: 6**
  - **Alumni: 3**

heida. Internationalization of research

1. In a given year, what proportion of published pieces (books, journal issues, articles, etc) is produced through international collaborative activity involving the researchers in the unit?

2. In a given year, how many industry collaborations are established with international/multinational partners?

3. In a given year, what proportion of researchers in the unit is involved in at least one research project with an international partner?

4. In a given year, what is the ratio of conference presentations delivered abroad (or in the context of international conferences) to the number of researchers in the unit?

5. In a given year, out of all of the unit's academic staff members, what proportion is involved in international joint doctoral supervision / co-*tutelle*?

6. In a given year, what proportion of research projects with which the unit is formally associated is internationally funded?

7. In a given year, how much external funding does the unit receive for international cooperation projects?

Internationalization of teaching and learning

1. Out of all international students in the unit in a given year, what proportion are exchange or mobility programme studies?

2. In a given year, out of all academic staff members in the unit, what proportion is visiting staff members from abroad?

3. Out of all students in the unit, what proportion takes classes in intercultural skills in a given year?

4. How many of our students participate in international activities (other than exchange) in a given year?

5. How many of our students (national and international) do an internship abroad during their studies?

6. Out of the total number of students enrolled in the unit in a given year, what is the proportion taking elements/modules focused on particular countries or world regions?

7. How many international visitors do we host each year? From which countries and institutions?

8. How many of our students can speak another language other than Turkish and English?

9. How many of our library resources are in a foreign language?

10. In a given year, how many international conferences and seminars do the unit's academic staff members attend?

11. In a given year, what proportion of international conferences is organised by the unit's staff members?

Internationalization resources and visibility

1. Does the unit have a defined strategy for international communication, promotion and marketing?
2. Number of international associations' memberships (both faculty member and institutional base).
3. In a given year, out of all of the unit's academic staff members, which proportion of the academic staff members are members of at least one academic or professional association?
4. Does the unit participate in international networks and organizations in the field of internalization?
5. How much budget does the university spends each year on international activities for students?
6. How much budget does the unit spends each year on international academic activities?
7. In a given year, out of the unit's total budget for scholarships, what proportion is dedicated to scholarships for international student?
8. How much income does the university receive each year from international student tuition and fees?
9. How much income does the university receive each year from international activities hosted on campus?

Internationalization of the campus environment and services

1. Does the unit have a defined strategy to develop the participation of staff in internationalization activities?

2. Does the unit provide travel services for staff members going abroad for professional purposes?

3. Are all facilities provided by the unit to domestic students also available to international students?

4. Does the unit provide international students with comprehensive pre-arrival information (covering such topics as visa procedures, cost of living, tuition fees, accommodation options, university services, sports and cultural activities)?

5. Do we provide career services to our international students?

6. How many international companies do we engage for career opportunities for our students?

Internationalization of alumni community

1. Does the unit have a clearly defined international alumni strategy?

2. Does the unit maintain an international alumni database?

3. How many of our Alumni are studying, working or living abroad in a given year?

Good practices at KU

- Research related data is currently tracked and monitored regularly because of **external reporting requirements**

- Student and staff related data is also tracked

- There will be a full **integration of all database systems with the KUSIS (PeopleSoft) in the next two years** allowing for better access to data for all units

- **International office has begun tracking data beyond numbers to include satisfaction levels of students on mobility programs**

- **Promotional materials and new websites** produced in 2014-15 have included more indicators related to internationalization for both Turkish and international audiences

- **Annual General meeting presentations to staff and faculty** members include strategic aims of internationalization

Areas for improvement at KU
Training needs

- Having a specific **"Internationalization" section of the annual Overseer's report** that collates all the different unit's internationalization activities, outcomes, challenges and making this report accessible to all

- Increasing the **frequency and coverage of training on the existing database and CRM systems for all staff** (newcomers, existing)

- **Database management as a specific area for training**

- More awareness of how rankings, external reporting and accreditation processes work to understand one's work contribution to these for internationalization (HR induction)

- **Celebrating internationalization achievements**

HEIDA Online questionnaire

- Online questionnaire using Univerza v Ljubljani 1KA tool
- Targeting 40 European HEIs (focus on TR, SI, ES)
- Invitation to complete the questionnaire was sent from Koç University's President to partner country institutions and disseminated via social media and website
- Respondant should be academic or administrative senior manager with responsibility for internationalization at central or faculty level
- **Questionnaire was open for 1 month (15/01-15/02)**
- **117 responses from HEIs in 13 European countries analyzed** (141 valid questionnaires)

Online questionnaire

Research questions

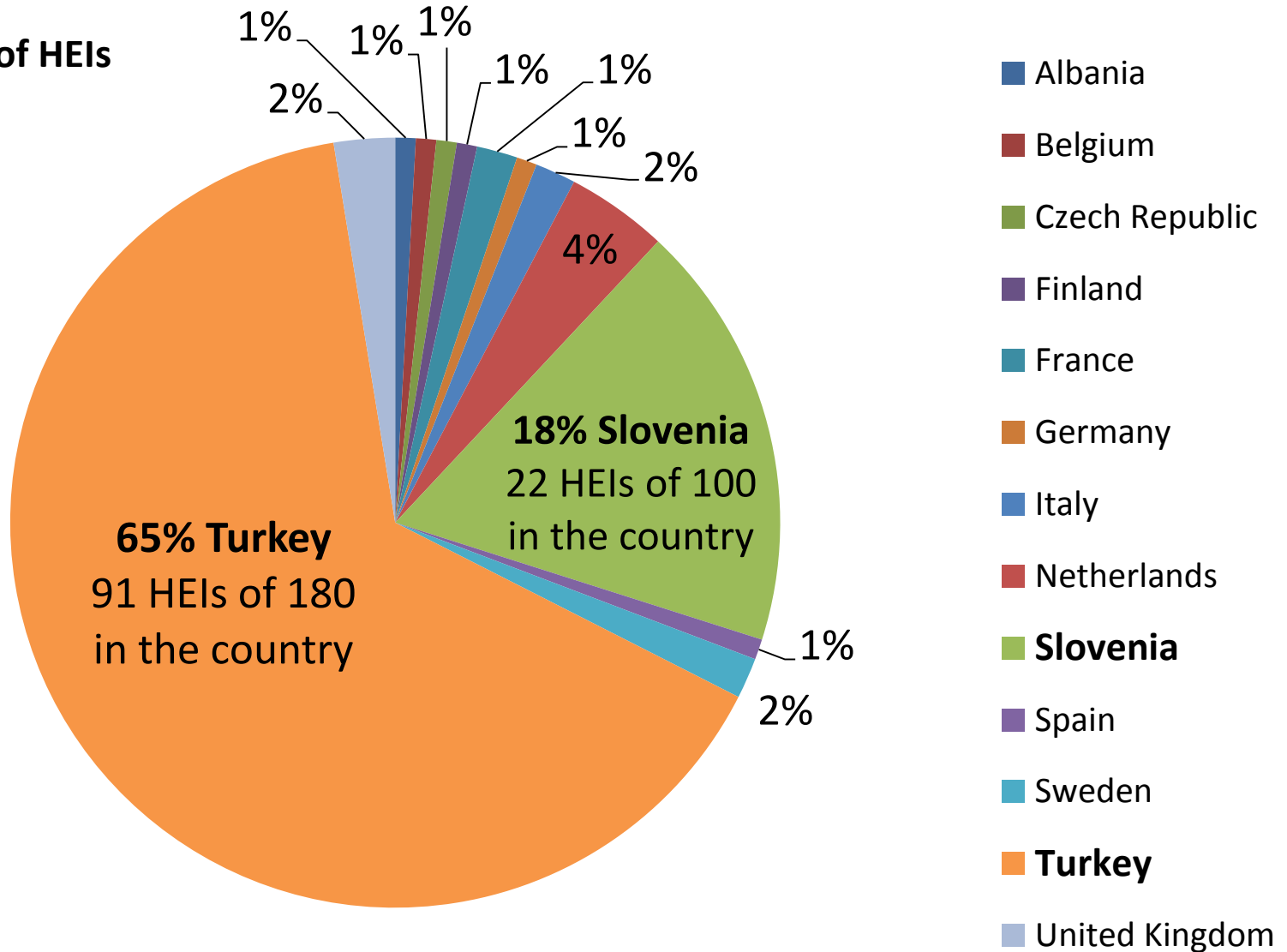| |
|---|
| What was the typical university who responded to the questionnaire? |
| What were the most common internationalization aspects or dimensions present in the universities that responded? (top 5) |
| Are they able to find internationalization data and indicators easily? |
| Are they keeping internationalization data and indicators up to date? |
| Are they using data collection formats that are easy to use for queries and reporting? |
| Are senior managers using internationalization data for strategic decisions? |
| Is staff able to collect, analyse and report internationalization data? |

Results from questionnaire

Countries of HEIs

1% 1% 1%
1% 1%
1%
2%
2%
4%

18% Slovenia
22 HEIs of 100
in the country

65% Turkey
91 HEIs of 180
in the country

1%

2%

- Albania
- Belgium
- Czech Republic
- Finland
- France
- Germany
- Italy
- Netherlands
- **Slovenia**
- Spain
- Sweden
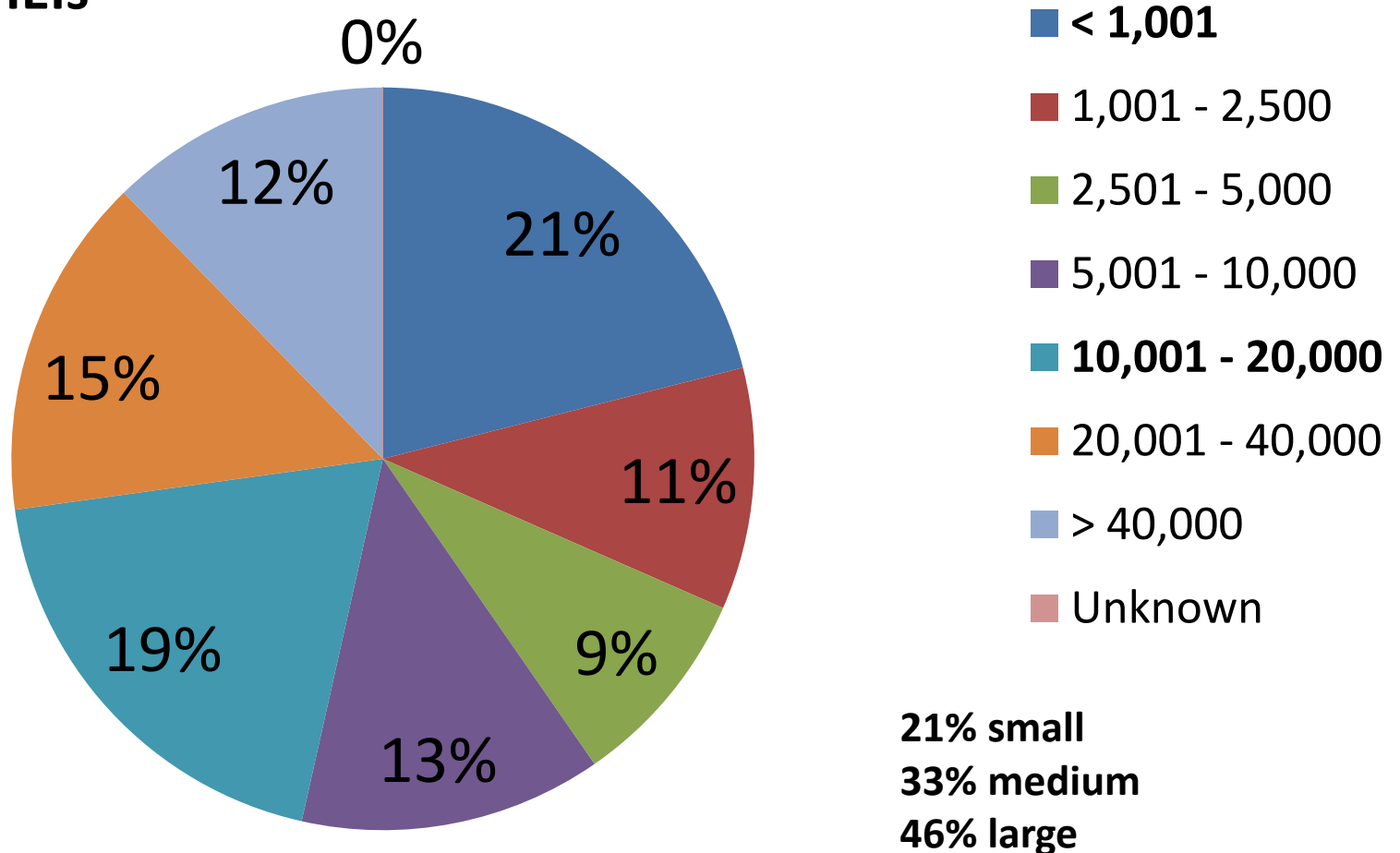- **Turkey**
- United Kingdom

Results from questionnaire

- The «average» university was:
  - Young (<10 years old)
  - Public
  - Research oriented (offering PhD degrees)
  - Medium sized (10,000-20,000 students)
  - With mixed teaching languages
  - With a central international office coordinating internationalization activities

Results from questionnaire

Size of HEIs

Legend:
- **< 1,001**
- 1,001 - 2,500
- 2,501 - 5,000
- 5,001 - 10,000
- **10,001 - 20,000**
- 20,001 - 40,000
- > 40,000
- Unknown

21% small
33% medium
46% large

Results from questionnaire

Age of HEIs

Legend:
- < 10 years old
- 10 - 50 years old
- > 50 years old

41% — < 10 years old
36% — 10 - 50 years old
23% — > 50 years old
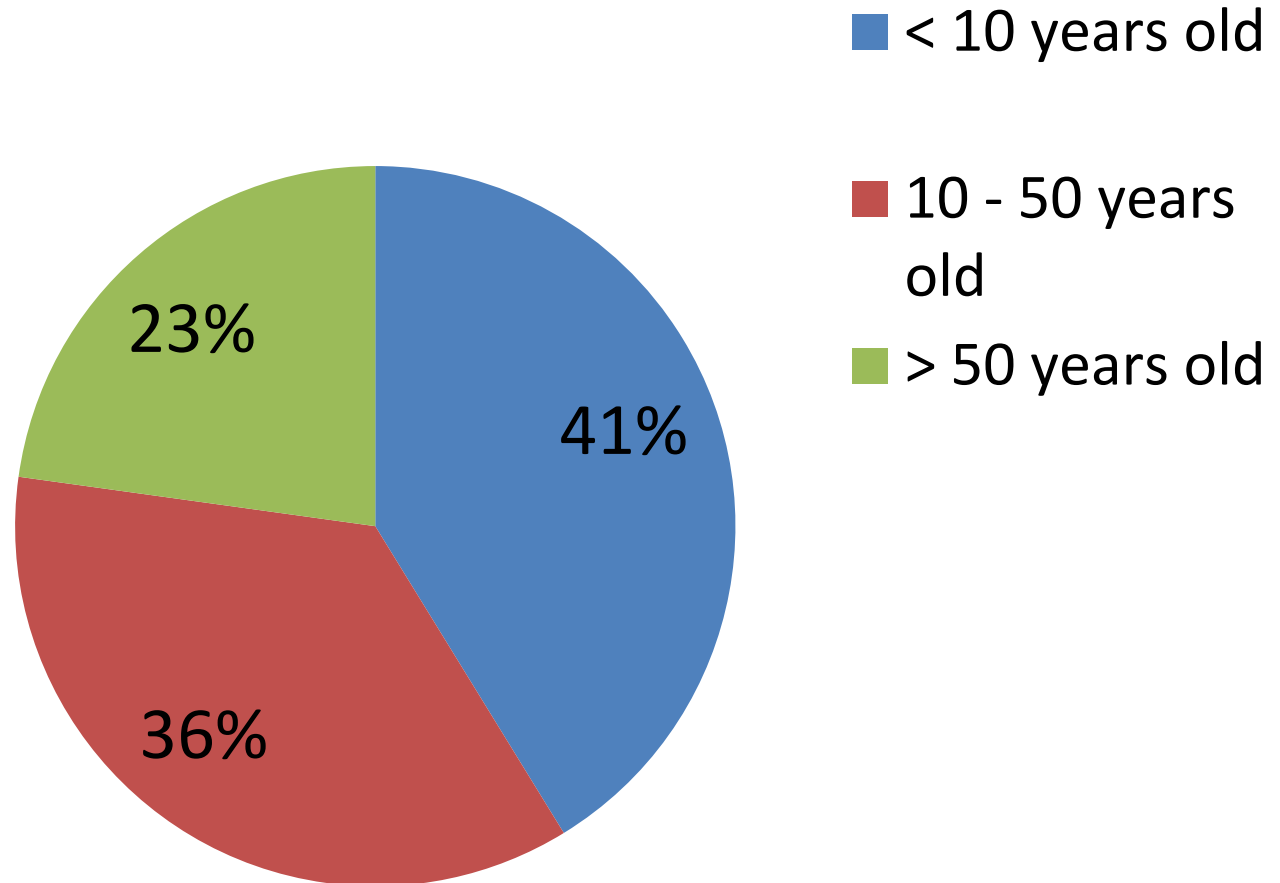
Results from questionnaire

Highest Degree offered

84%

11%

3%

2%

0%

- PhD
- Master
- Bachelor
- Graduate degrees only
- Other
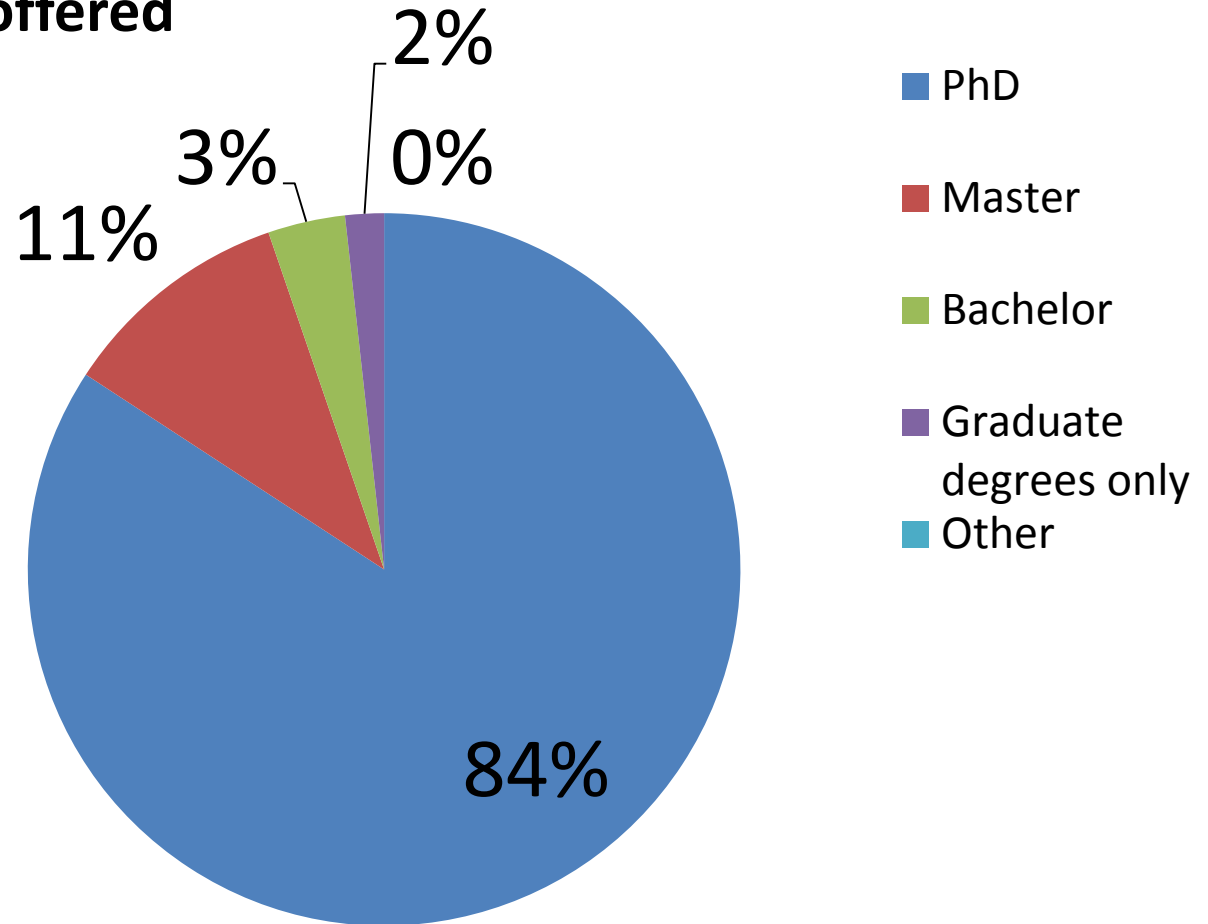
Results from questionnaire

Source of Funding
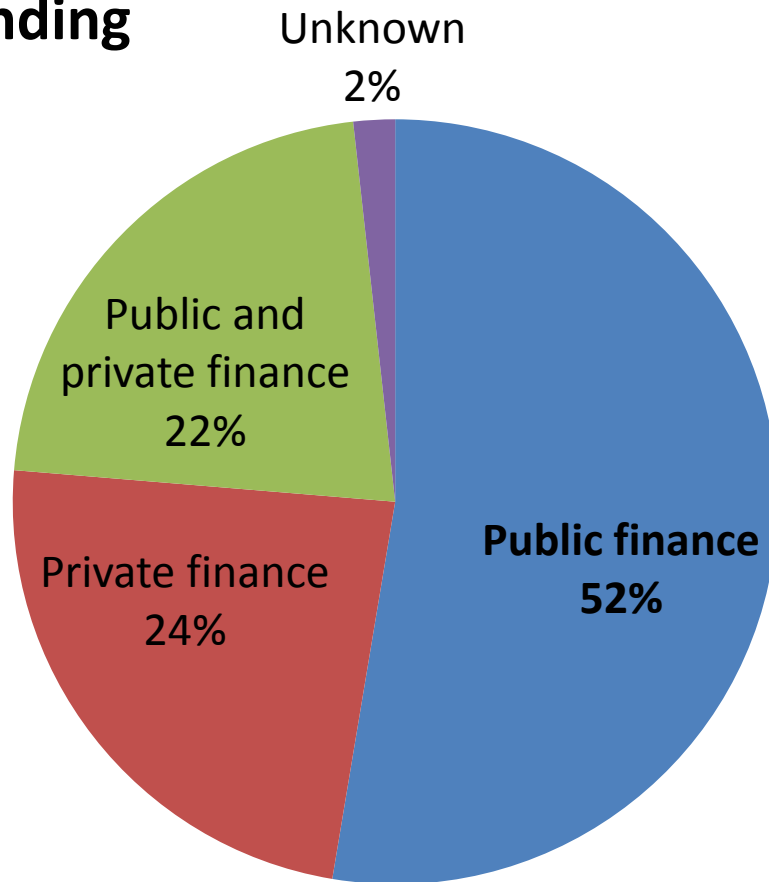
Results from questionnaire

Language of Instruction

- Same as country's official language
- Different than country's official language (eg English)
- Mix of country's official language and foreign language(s)
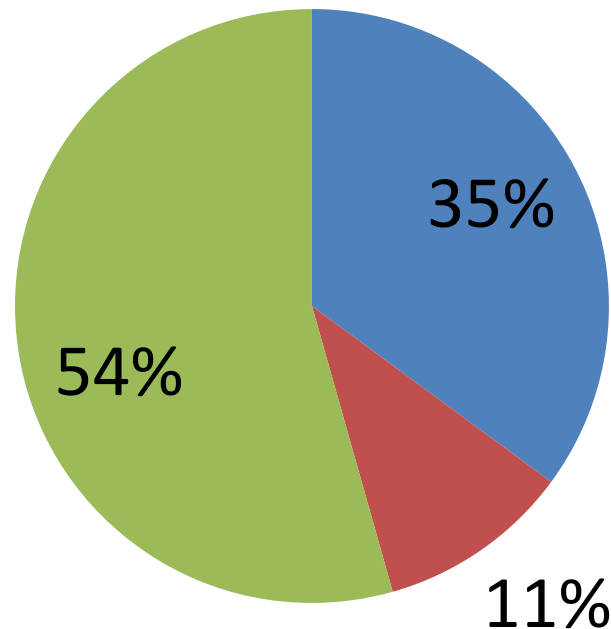

35%

11%

54%
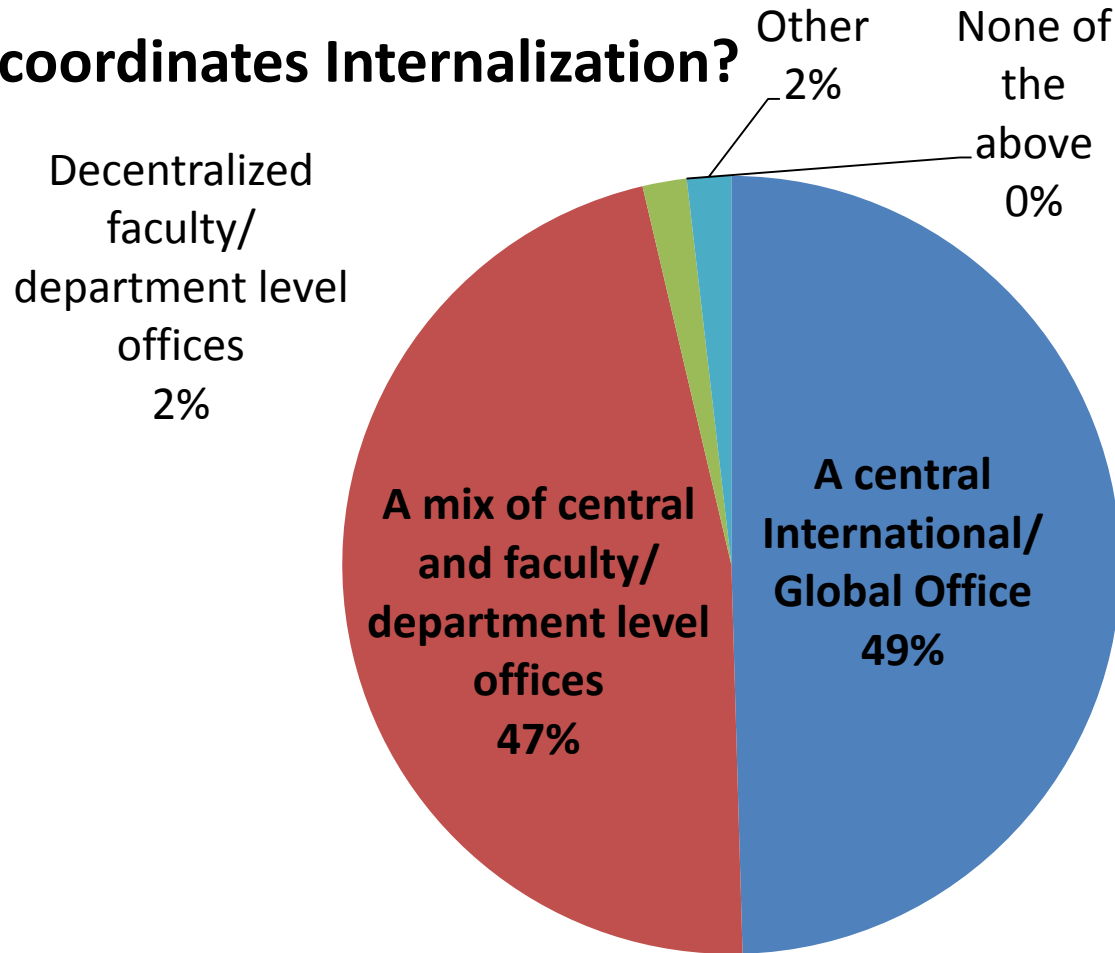
Online questionnaire

Research questions

What were the most "popular" indicators? (top 5) – which areas?
Are there significant differences in the top 10 indicators according to university profile?
For the top 10 indicators which academic or administrative unit is usually responsible for collecting the data?
What are the most common uses of this top 10 indicators?
Do they have procedures or plans to ensure data accuracy?
What is the most common format for collecting the data of the top 10?
What is the most common format for decision makers at the university?

Online questionnaire

Top 5 most common internationalization dimensions /aspects

Internationalization aspects or dimensions	Frequency	Percentage
International partnerships	108	92,31%
International students (full time degree and credit mobility)	99	84,62%
International student, faculty and staff services	92	78,63%
International research projects (funding, collaboration)	91	77,78%
International programmes	80	68,38%

Online questionnaire

How is internationalization data managed right now?

- **69%** of the respondents agree that they are able to find internationalization data and indicators easily (18% disagreed)
- **67%** of the respondents think that their universities keep internationalization data up to date (14% does not agree)
- **56%** of the respondents think their data collection formats are easy for queries and reporting (16% disagree)
- **72%** respondents believe that university senior managers use internationalization data for strategic decisions (10% disagree)
- **78%** of the respondents agree that university staff are able to collect, analyse and report internationalization data whereas 8% do not agree

Online questionnaire
Those universities that disagreed…

Are universities able to find internationalization data and indicators easily? - 18% (20) disagree

- 50% are large universities and 35% are medium sized

- 90% of the universities offer PhD as the highest degree

- 40% of the universities are financed both publicly and privately

- 45% of the universities are older than 50 years old and 35% are younger than 10 years old

- In 50% of the universities, a central International/Global office coordinates internationalization and in the remaining portion a mix of central and faculty/department level offices coordinates.

Are university senior managers using internationalization data for strategic decisions? - 10% (10) of the respondents do not agree

- 40% are large universities and 40% are small sized

- All the universities offer PhD as the highest degree.

- 60% of the universities are public and private funded

- 60% are younger than 10 years old

- In half of the universities, a mix of central and faculty/department level offices handles international coordination, in 40% a central International/Global Office coordinates internationalization

Online questionnaire
Selection of indicators

- **30 internationalization indicators** and respondents were asked to select a **maximum of 10**

- The 30 indicators were selected by the project partners from a shortlist of 100 indicators established by the **IMPI project** as «Indicators of the Year» based on their case studies. The **IMPI project built a tool with a total of 489 indicators across 9 categories**.

	Main Category – Sub-Category	Indicator Number – Indicator name
1	Students - Study Abroad	01-001 Does the unit advise students on study abroad opportunities?
2	Students - Study Abroad	01-002 Does the unit provide specific contact information for international internships?
3	Students - Study Abroad	01-003 What proportion of students from the unit participates in outgoing exchange or mobility programmes in a given year?
4	Students - Study Abroad	01-004 Out of all students in the unit, what proportion studies abroad in a given year?
5	Students - Study Abroad	01-005 In a given year, what proportion of students in the unit is required by their study programme to study abroad for at least three months?
6	Students - International Students	01-008 What is the proportion of international students that graduates from the unit in a given year?
7	Students - International Students	01-023 Does the unit maintain an international alumni database?
8	Staff - Academic and Non-Academic Staff Members – General Data	02-004 Does the unit have a defined strategy to develop the participation of staff in internationalisation activities?
9	Staff - Academic and Non-Academic Staff Members – General Data	02-018 In a given year, what proportion of international conferences is organised by the unit's staff members?
10	Staff - Academic Staff Members	02-030 In a given year, out of all of the unit's academic staff members, what is the proportion that attends at least one international conference or seminar?
11	Staff - Academic Staff Members	02-032 In a given year, out of all of the unit's academic staff members, which proportion of the academic staff members are members of at least one international academic or professional association?
12	Staff - Academic Staff Members	02-041 In a given year, out of all of the unit's academic staff members, what proportion is involved in international joint doctoral supervision / co-tutelle?
13	Staff - Academic Staff Members	02-047 In a given year, out of all academic staff members in the unit, what proportion are visiting staff members from abroad?
14	Administration - Administration	03-001 Does the unit have a clearly defined strategy for internationalisation?
15	Administration - Administration	03-009 Does the unit have a specific organisational structure to support internationalisation?

16	**Funding and Finance - Funding and Finance**	**04-001 In a given year, what is the total budget within the unit dedicated to internationalisation?**
17	Funding and Finance - Funding and Finance	04-006 In a given year, out of the unit's total budget for scholarships, what proportion is dedicated to scholarships for international students?
18	Funding and Finance - Funding and Finance	04-013 In a given year, how much external funding does the unit receive for international cooperation projects?
19	Curricula and Academic Services - Curricula and Academic Services	05-023 Out of all degree programmes offered by the unit in a given year, what proportion are international joint/double/multiple degree programmes?
20	Curricula and Academic Services - Curricula and Academic Services	05-030 Out of all courses offered by the unit in a given year, what is the proportion of courses taught in a foreign language?
21	Research - Researcher Activity	06-016 In a given year, what proportion of researchers in the unit is involved in at least one research project with an international partner?
22	Research - Researcher Activity	06-018 In a given year, what is the ratio of conference presentations delivered abroad (or in the context of international conferences) to the number of researchers in the unit?
23	Research – Institutional Profile	06-021 In a given year, what proportion of research projects with which the unit is formally associated is internationally funded?
24	Research – Publications and Citations	06-029 In a given year, what proportion of researchers in the unit author (or co-author) pieces (books, journal issues, articles, etc) is published internationally?
25	Research – Publications and Citations	06-032 In a given year, what proportion of articles authored (or co-authored) by the researchers in the unit is published in internationally refereed journals?
26	Promotion and Marketing - Promotion and Marketing	07-001 Does the unit have a defined strategy for international communication, promotion and maketing?
27	Promotion and Marketing - Promotion and Marketing	07-002 Does the unit monitor its international visibility?
28	Promotion and Marketing - Promotion and Marketing	07-013 Does the unit participate in national, regional or local networks supporting internationalisation?
29	Promotion and Marketing - Promotion and Marketing	07-014 What is the ratio between the budget spend for international marketing in a given year and the number of newly enrolled international students in the following year in the unit?
30	Non- Academic Services and Campus and Community Life – Services to International Students	08-008 Does the unit provide international students with comprehensive pre-arrival information (covering such topics as visa procedures, cost of living, tuition fees, accommodation options, university services, sports and cultural activities);?

Online questionnaire

What were the 10 most "popular" indicators?
Which dimensions do they refer to?

Indicator	Frequency	Percentage
Does the university advise students on study abroad opportunities?	72	61,54%
What proportion of students from the university participates in outgoing exchange or mobility programmes in a year?	66	56,41%
Does the university have a clearly defined strategy for internationalisation?	49	41,88%
Does the university provide international students with comprehensive pre-arrival information (covering such topics as visa procedures, cost of living, tuition fees, accommodation options, university services, sports and cultural activities);?	43	36,75%
Does the university have a specific organisational structure to support internationalisation?	43	36,75%
Does the university provide specific contact information for international internships?	42	35,90%
What is the proportion of international students that graduates from the university in a year?	39	33,33%
Out of all courses offered by the university, what is the proportion of courses taught in a foreign language?	34	29,06%
Out of all students in the university, what proportion studies abroad in a year?	32	27,35%
Does the university have a defined strategy to develop the participation of staff in internationalisation activities?	29	24,79%

Online questionnaire

Are there significant differences in the top 10 indicators according to university size, age, highest degree offered, funding and internationalization structure?

- 53% have between 10,000 and >40,000 students (large)
- 90% of the respondents offer PhD as the highest degree
- 55% of the universities are publicly funded
- 42% of the universities are younger than 10 years old
- In 54% of the universities, a central international/global office coordinates internationalization

Online questionnaire

The top 10 internationalization indicators – data management practices

- **88% of the respondents have the data for the top 10 indicators**, 7% have partial data

- In the countries of 39% of the universities the top 10 indicators are compulsory whereas in the countries of the remaining 61% of the universities collection of top 10 indicators is **optional**.

- In 53% of the universities the indicators are **collected once per year**, 33% collects them once per term.

- In 65% of the universities, **the international office is responsible** for collecting them

- On average, 28 of the universities use them for **educational/academic planning**. 16 use them for funding and budgeting, 10 for media and marketing.

- **81% of the respondents believe that their institution have plans or procedures for ensuring data quality**

- On average, in 29 of the universities the indicators are presented to decision makers in **annual report format**, 14 of the universities use their institution's website and 8 universities use the institution's intranet.

- 23 of universities collects the indicators **as Excel database/worksheet**. 20 use **paper records** and 14 of use their own institution's data management software.

Online questionnaire

**What were the bottom 5 least "popular" indicators?
Which dimensions do they refer to?**

Code	Indicator Name	Frequency	Percentage
Q14av	In a year, what is the ratio of conference presentations delivered abroad (or in the context of international conferences) to the number of researchers in the university?	8	6,84%
Q14ax	In a year, what proportion of researchers in the university author (or co-author) pieces (books, journal issues, articles, etc) is published internationally?	8	6,84%
Q14ak	In a year, out of all of the university's academic staff members, what proportion are members of at least one international academic or professional association?	8	6,84%
Q14al	In a year, out of all of the university's academic staff members, what proportion is involved in international joint doctoral supervision/co-tutelle?	4	3,42%
Q14aq	In a year, out of the university's total budget for scholarships, what proportion is dedicated to scholarships for international students?	4	3,42%

Online questionnaire

The bottom 5 internationalization indicators – data management practices

- 73% of the universities have data for them

- In 88% of the countries they are optional

- In 84% of universities, they are collected once per year

- In 38% of the universities, **Education/Academic departments/units are responsible for collecting** them followed by Other (18%) and Research departments (17%)

- 82% of the universities use them **for Educational/Academic planning purposes**, 38% use for Funding and budgeting and 32% use for Media and marketing.

- The most common format is Excel (64%), paper records (48%) and own institution's data management software (31%).

- In 75% of the universities this data is presented to decision makers in annual reports (however, 18% of the universities also use open source/free data management/sharing software)

Online questionnaire

Research questions

Was the questionnaire a good proxy for the data sharing tool?

Were the indicators and questions relevant to the universities?

Were the questions and indicators within respondents' scope of work?

Was the phrasing/definition of most indicators easy to understand?

Did respondents had to ask for information outside their own units?

Did universities consider that collecting this information is helpful?

How aware about internationalization after using the questionnaire?

Good practices in internationalization data management

Recommendations about the proposed tool

Online questionnaire

Using the questionnaire as a proxy for the data sharing tool

- 72% of the respondents agree or strongly agree that the questionnaire was **easy to complete**

- 76% agrees that the indicators and questions were **related and relevant**

- 84% believes that the questions and indicators were within respondents' **scope of work**

- 82% found the **phrasing/definition** of the indicators easy to understand. (10% disagreed)

- 30% agrees that they need to ask for information outside their own units/departments. **57% does not agree that they need outside help**

- 70% found that the data collection is **helpful**

Online questionnaire

How aware about internationalization are the universities' as a whole after going through the exercise of the questionnaire as a proxy for the tool?	Frequency	Percentage
Low	4	5,41%
Moderate	26	35,14%
High	44	59,46%

Online questionnaire

Why do you think there is low level of awareness of internationalization at your institution?

- Being a **young/new/small/ small and public** institution – needs more time and staff or it is not a priority yet («*management understands the basic concept of it but does not take it as an integral part of functioning of our institution*»)
- Not a **goal** for the management
- No **administrative staff** supporting this process
- Insufficient **budget** / not made any relevant investment in this field.
- We need more **time** to collect it (data) effectively
- We need a better international s**trategy** / there is no strategy / not yet reached a good level of planning of internationalization
- Lack of **communication** between departments/units
- Internationalization comes as a product of many activities and it is **hard to monitor** all aspects.
- Some academic/administrative units still have **doubts** on some of the activities which may be placed under internationalization such as development of international curriculums.
- **Location** of our university is a disadvantage for internalization.

Results from questionnaire

Good practices

- Ease the accessibility of the data by the public
- «*Most of the collected data is not disseminated*»
- Develop better monitoring systems
- Use data to take part in more projects and raise awareness of students and staff
- Each department should determine its own strategy
- Need to be aware what the other departments do in order to work collaboratively

Results from questionnaire

How did completing the questionnaire feel/did it help?

- «Even though, we have centralized international units, namely department of international affairs, our academic departments internationalization perspectives seemed limited»

- *«We have wide awareness of internationalization, however your survey has helped us to widen our scope a little».*

- Helped to review international dimensions of the university.

- Some of data asked in the questionnaire could be very useful for future planning

- Most helpful for benchmarking

- Good starting point

- Easy to fill / Easy to understand or follow / useful / relevant

- Questionnaire looked like repeating itself / pretty long but I understand why / complex

- Easy to complete, but requires a thorough knowledge of internationalization at the institute

Results from questionnaire

Recommendations for the tool – indicators missing in respondent's opinion

- *The annual budget of the international office is decided by the management and international office has no say on that – there should be question related to those decision-making mechanisms*

- *Most of the suggested indicators are measurable and already collected at our institutions. How about more intangible and more unconventional ones?*

- *Contribution and/or level of knowledge of the academic staff in terms of internalization of the university.*

- *Terms should be culturally integrated in different policy practices of different countries with sui generis practices*

- Student services and their function or role in internationalization

- Students advisors at each faculty responsible for mobility and/or exchange activities.

- International student activities

- Facts and figures about the policy of the institutions

- National legislation

Results from questionnaire

Recommendations for the tool – functions / general principles

- Visualisation of data
- Flexible as possible
- *«Import and export of data is a must»*
- *«A data base that is user friendly and that can be easily filled without too many indicators»*
- *«Create a centralized online tool such as the Mobility Tool prepared by the European Commission»*
- *«prefer intranet based to a desktop application»*
- Free of charge

The HEIDA Beta Tool v.1

- Web-based tool
- Login using existing university profile username
- 3 **types of users**:
  - **Admin**: «owner» of tool (eg International Office)
  - **Editor**: «content providers» of the tool (eg. Academic Coordinators, Unit Managers)
  - **Viewer**: «users» of the tool (eg. professors, communications staff, prospective students, partner universities, funding agencies, etc)
- A public and internal interface

heida.
Data driven decision making
for internationalization of
higher education

The HEIDA Beta Tool v.1

- Database objects:
  - **GROUPS:**
    - 9 groups that represent an aspect of a higher education institution
  - **SUBGROUPS**
    - 22 subgroups that represent more specific aspects of internationalization / dimensions of internationalization
  - **INDICATORS:**
    - All have a unique code (eg. 01-001)
    - Indicator name is written as a question (eg. *«What proportion of staff members in the unit has work experience abroad of at least six months?»*
    - 2 types: Yes/No, Numerical (absolute, ratio, %)
  - **DATA MANAGEMENT CRITERIA**
    - 8 questions/criteria
    - Some Y/N, some are multiple choice
    - Customisable list of options but fixed criteria

GROUP	SUB-GROUP	INDICATORS
RESEARCH	• Institutional profile • Patents • Publications and Citations • Researcher activity • Researcher profiles • Visiting researchers	56
STAFF	• Academic and Non-Academic Staff - Outgoing Staff • Academic and Non-Academic Staff - Staff from Abroad • Academic and Non-Academic Staff General Data • Academic Staff • Non-Academic Staff	93
STUDENTS	• General Student Data • International Students • Study Abroad	98
ADMINISTRATION	• Administration	37
CURRICULA AND ACADEMIC SERVICES	• Curricular and Academic Services	87
FUNDING AND FINANCE	• Funding and Finance	39
NON-ACADEMIC SERVICES AND CAMPUS AND COMMUNITY LIFE	• Services to International Students • Services to Staff • Services to Study Abroad Students	57
PROMOTION AND MARKETING	• Promotion and Marketing	21
OTHER	• Other	1

Criteria 1 Do we have this data?	Criteria 2 Optional or required?	Criteria 3 Collection frequency	Criteria 4 Who is responsible for collection?	Criteria 5 What is this used for?	Criteria 6 Quality assurance	Criteria 7 Format of collection	Criteria 8 Format for use
Yes	Optional	Once per year	Academic departments	Academic planning	Yes	Paper	Annual reports
No	Compulsory	Once per term	Research deparments	Accreditation	No	Excel	Intranet
Partially		Once a month	International office	Membership records		Own data mgmt software	Website
		Other	HR deparment	Funding and budgeting		Commercial data mgmt software	Own CRM
			Quality assurance deparment	National statistics		Open source data mgmt software	Open CRM
			ICT department	Media and marketing		Other	Other
			Finance deparment	Research			
			Strategic planning	Benchmarking			
			Other	Other			

The HEIDA Beta Tool v.1

- Functions:
  - **INDICATOR SELECTION**
  - **DATA INPUT**
  - **VISUALIZATION – EXPORT**
  - **PUBLISH TO WEBSITE / LINK TO WEBSITE**
  - **QUERY / SEARCH**
    - Select **relevant indicators** for your unit (College, Graduate School, whole university, administrative unit)
    - Select **data for current and/or previous years**
    - **Download detailed data documents** if relevant (PDFs, Excel, other)

The HEIDA Beta Tool v.1

- What would an **«editor» do in the first session**:
  - **Logs in** using the university login system
  - **Selects the unit** they represent from a menu
  - **Selects from the 489 indicators** which ones they want to provide information for
  - **Provides the information** requested (type, access type, year, value, 8 criteria questions)
  - **Saves** their input

The HEIDA Beta Tool v.1

- What would an **«editor» do in the next session**:
    - Logs in using the university login system
    - Selects from the indicators they chose before which ones need to be updated
    - Provides the information requested (year, value, 8 criteria questions)
    - Saves their input

The HEIDA Beta Tool v.1

- What would a senior manager **do**:
  - Logs in using the university login system
  - Selects from the indicators available
  - Selects the years available for selected indicators
  - Visualizes the data and exports file
  - Uses information in reporting, benchmarking, analysis,

Dr. Andrej Koren

Data-driven decisions and management/leadership for HEI improvement

April 2016, Celje

WHY DATA?

- Unprecedented demands for Accountability, Efficiency, Effectiveness
- Increased expectations for greater transparency
- A recognition that shared services are more than just a good idea that somebody else should do
- More competition than ever before.

Types of data

- Student data
- Classroom/instructor data
- Program data
- Faculty data
- Institutional data
- Multi-institutional data

Current developments

- Data Warehouses and "the Cloud" make it possible to collect, manage and maintain massive numbers of records.

- Sophisticated technology platforms – turning the mass of numbers into meaningful patterns.

- Data mining uses descriptive and statistics

Exercise for participants

- What data do you collect/have?

Big and «small» data?

- Questionnaires
- Interviews
- Observation
- Analysis of pupils' work
- Spot checks
- Critical incident analysis
- Force field analysis
- Posters
- Photo inquiry

What/why are data used for at your institution?

- Accreditation
- Reporting
- Projects
- Financing, staffing
- Planning
- Improvement
- Students achievement

What we know so far

- Success and decision making are predicated on access to data

- Understanding strengths and weaknesses is dependent on having access to all data within the enterprise

- Data tells us what has happened and improves strategic planning moving forward

- Are they about students learning?

Asking the right question

- The hardest part is always **asking the right question**, because if you don't ask the right question, almost any answer will do.

- Where analytics is concerned, investment is the area in which higher education institutions are making the **least progress**.

Descriptive Analytics

1. How many logins, page views, and other metrics have occurred over time?

2. What were the course completion rates for a particular program over time? What were the attributes of the students who didn't successfully complete?

3. Which tools are being used in courses the most?

Predictive analytics

1. Which students are exhibiting behaviors early in the semester which put them at risk for dropping or failing a course?

2. What is the predicted course completion rate for a particular program? Which students are currently at risk for completing and why?

3. Which tools and content in the course are directly correlated to student success?

Where to invest as an institution

- Institutions should focus their investment on expertise, process, and policies before acquiring new tools or collecting additional data.

Recommendations for HE leaders and managers

- Map out strategy and planning
- Look for an early win
- Invest in people over tools
- Don't wait for perfection
- Partnership and communication are key
- Faculties have experts in methodology and statistic.

Example Questions for Evaluators to ask Students – school level case study

- Do you enjoy being at school?
- Do you feel proud of being at this school?
- Do you feel you receive praise and encouragement?
- Do lecturers treat you with respect?
- Of all the ways the lecturers gets you to learn about things, which do you enjoy the most?
- Of all the ways the lecturers gets you to learn about things, which do you enjoy least?

Example Questions for Evaluators to ask Students – school level case study

- What activities do you not enjoy? Why?
- What do you find difficult? Why? What would help?
- How do you feel during lessons? What makes you feel this way?
- What one thing would you change to improve this school?

By the time I have left school I would like to have learned...

Successful learner

Communication skills

Speaking and listening

Tone – style – vocabulary – clarity

Negotiation and influencing

Confident individual

Deal with emotions

Self confidence

Assertive not aggressive

Responsible Citizen

Sense of fairness – challenge injustice: rights and responsibilities

Self efficacy " feel they can change things for the better"

Economic awareness