## 11.15 - 12.30

# Ranking Impact

*Wilfred Mijnhardt (chair) – Erasmus University Rotterdam*

*Miłosz Rojek – Minstry of Science and Higher Education Poland*

*Laura Tucker – Vertigo Ventures*

**AESIS**

# Ranking Impact



Brama Floriańska room
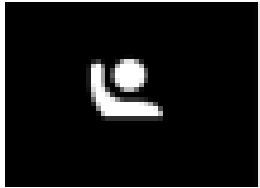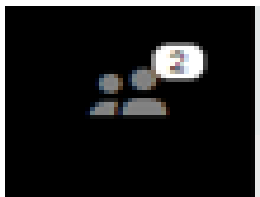
**Broadcast permission**:
- Turn on your microphone and/or camera
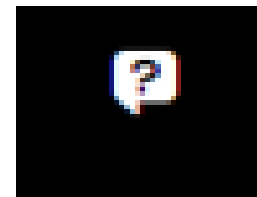- Participate in the discussion
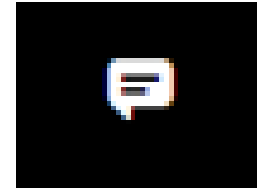
**Conversations**:
- General remarks
- Discussion
- News (links)

**Who are the attendees?**
- Speakers
- Participants

**Q&A**:
- (Targeted) questions
- Speakers answer the questions live

**Lay out view**:
Full screen, Tiled, Thumbnail

AESIS

#IoS20

# Ranking Impact

Importance of data evaluation and ranking to determine next steps in enhancing impact

# Speakers



## Miłosz Rojek

Miłosz Rojek holds PhD in economics from the Warsaw School of Economics. He is Head of Analyses and Strategy Unit at the Ministry of Science and Higher Education of the Republic of Poland. As the Education Department Director at the Polish Financial Supervision Authority he was responsible for the projects devoted to strengthening financial literacy and disseminating supervisory practices and arrangements among financial sector stakeholders (2009-2011). In 2012 he became Secretary of the Regulatory Impact Assessment Team at the Ministry of Justice where he worked on regulations affecting the business environment (i.a. deregulation of professions, one-stop shop for business registration). In 2016 he joined the Ministry of Science and Higher Education as a Counsellor to the Minister. He has been working of designing and implementation of the comprehensive reform of the science and higher education system, including the new model of the research quality assessment.

## Laura Tucker

As Founder and CEO of Vertigo Ventures (VV), Laura Tucker leads the strategy and growth of the company. Laura founded VV in 2009 and led the development of the company's flagship product, VV-Impact Tracker, which is now used by leading international research institutions globally, to identify, measure and report the impact of their research. Laura regularly contributes to the global impact agenda though co-writing official impact papers and speaking at conferences worldwide. For example, previously, UK's HEFCE commissioned VV to publish a 'Collecting Impact Evidence' best practice guide, and in 2018, Laura has presented at the EARMA and NCURA conferences in Brussels and Washington respectively, as well as at Times Higher Education (THE) Summits around the world.

## Wilfred Mijnhardt

Wilfred Mijnhardt is Policy Director at Rotterdam School of Management, Erasmus University. Wilfred brings 25 years of experience in research policy development and institutional advancement. He is passionate for universities, business schools, responsible research, excellence and impact. In his current role, his energy focusses on the strategic transition of RSM and EUR towards an impact driven mind-set. Internationally he is an active member in networks like RRBM, AACSB, EFMD, PRME and EUA. Mr. Mijnhardt holds a bachelor degree in Economics, a master's degree in Public Administration and a postgraduate diploma in Management of Change. He is as presenter at conferences and participates in the annual joint Development Programme for Directors of Research, a joint initiative between the Chartered Association of Business Schools (Chartered ABS) and the British Academy of Management (BAM).
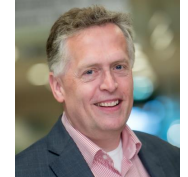
# Agenda for this session

**1: Polish research assessment user-case introduction & impact challenges**
Q&A on case study

**2: Ranking intelligence developments and how smart tech is helping us, illustration RSM SDG mapper business and management field**
Q&A on RI landscape

**3: Solution on large scale RA support through global platforms: the VV IT portal**
Q&A on the portal solution

**4: Eye on the future of RA with smart RI, (all speakers)**

**5: Conclusions**

# 1

## Polish research assessment user-case introduction & impact challenges
### Q&A on case study

Miłosz Rojek

Ministry of Science and Higher Education of the Republic of Poland

# 2

## Ranking intelligence developments and how smart tech is helping us. Illustration: RSM SDG mapper for top business schools
### Q&A on RI landscape

Wilfred Mijnhardt

Rotterdam School of Management, Erasmus University

# Ranking Impact Intelligence developments

Portfolio thinking on university rankings

1. Topics modelling: value of subject rankings
2. Benchmarking: compare with average  performance of groups, regions, alliances
3. Design of holistic composite variables
4. Stakeholder Schemata: Smart SDG mapping (case top business schools)

# Development 1:
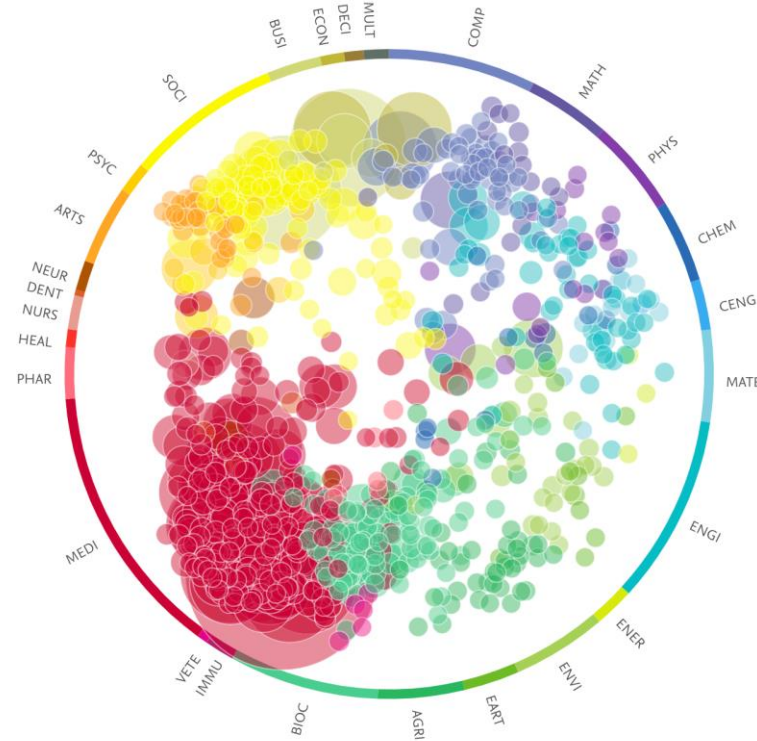# Topics modeling, Subject rankings & Benchmarking

# Topics & Subject mapping is a trend
Both supply side ((research intell) driven (Clarivate/Elsevier) as demand side driven (stakeholders)
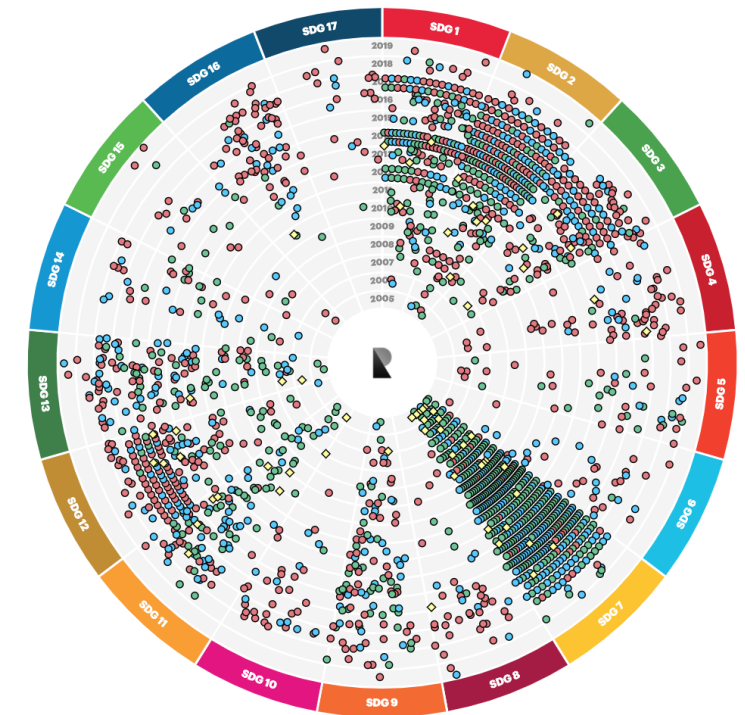
Clarivate:
Impact Topics
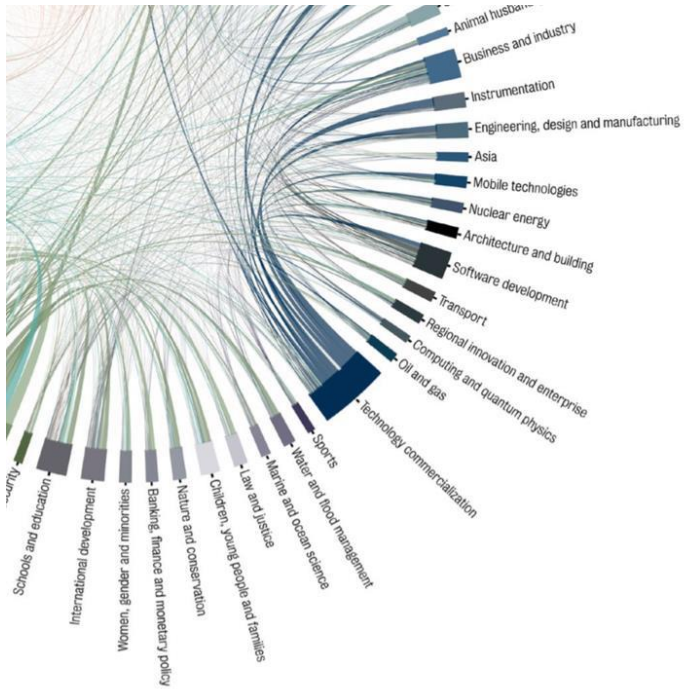
Elsevier:
SCIVAL Topics & Topic Clusters

Stakeholder Schemata:
Example: UN SDG's

# ARWU Subject categories overview
## 54 subjects

**Clinical Medicine and Pharmacy**

- Clinical Medicine
- Dentistry
- Medical Technology
- Nursing
- Pharmacy & Pharmaceutical Sciences
- Public Health

**Engineering Technology and Computer Sciences**

- Aerospace Engineering
- Automation & Control
- Biomedical Engineering
- Biotechnology
- Chemical Engineering
- Civil Engineering
- Computer Science & Engineering

- Electrical & Electronic Engineering
- Energy Science & Engineering
- Environmental Science & Engineering
- Food Science & Technology
- Instruments Science & Technology
- Marine/Ocean Engineering
- Materials Science & Engineering
- Mechanical Engineering
- Metallurgical Engineering
- Mining & Mineral Engineering
- Nanoscience & Nanotechnology
- Remote Sensing
- Telecommunication Engineering
- Transportation Science & Technology
- Water Resources

**Life and Agriculture Sciences**

- Agricultural Sciences
- Biological Sciences
- Human Biological Sciences
- Veterinary Sciences

**Natural Sciences and Mathematics**

- Atmospheric science
- Chemistry
- Earth Sciences
- Ecology
- Geography
- Mathematics
- Oceanography
- Physics

**Social Science**

- Business and Management Studies
- Communication
- Economics
- Education
- Finance
- Hospitality & Tourism Management
- Law
- Library & Information Science
- Management
- Political Sciences
- Psychology
- Public Administration
- Sociology
- Statistics

# QS Subject categories overview
## 48 subjects

**Arts & Humanities**

- Archaeology
- Architecture / Built Environment
- Art & Design
- Classics & Ancient History
- English Language & Literature
- History
- Linguistics
- Modern Languages
- Performing Arts
- Philosophy
- Theology, Divinity & Religious Studies

**Engineering & Technology**

- Computer Science & Information Systems
- Engineering - Chemical
- Engineering - Civil & Structural
- Engineering - Electrical & Electronic
- Engineering - Mechanical, Aeronautical & Manufacturing
- Engineering - Mineral & Mining

**Life Sciences & Medicine**

- Agriculture & Forestry
- Anatomy & Physiology
- Biological Sciences
- Dentistry
- Medicine
- Nursing
- Pharmacy & Pharmacology
- Psychology
- Veterinary Science

**Natural Sciences**

- Chemistry
- Earth & Marine Sciences
- Environmental Sciences
- Geography
- Materials Science
- Mathematics
- Physics & Astronomy

**Social Sciences & Management**

- Accounting & Finance
- Anthropology
- Business & Management Studies
- Communication & Media Studies
- Development Studies
- Economics & Econometrics
- Education
- Hospitality & Leisure Management

- Law
- Library & Information Management
- Politics & International Studies
- Social Policy & Administration
- Sociology
- Sports-related Subjects
- Statistics & Operational Research

Erasmus University
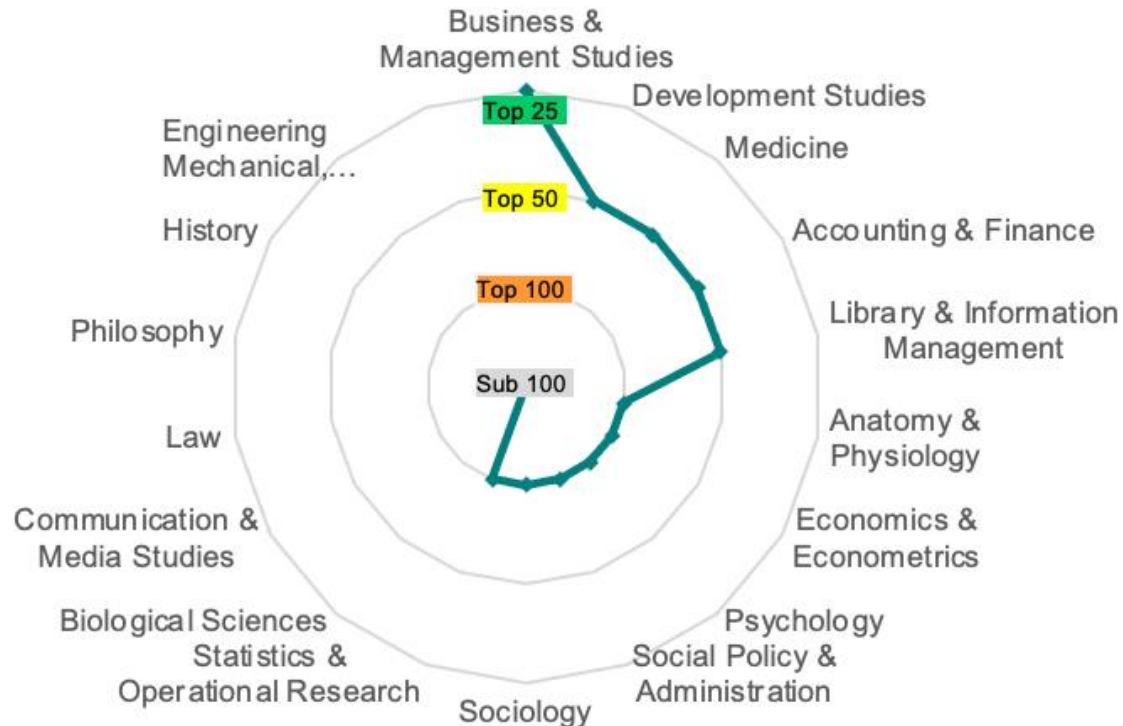Subjects portfolio

**QS world rank 2021**

Erasmus : **197**

*Total subjects in ranking:* **51**
*# Subjects ranked for EUR:* **17**

QS - Subject Ranking 2020

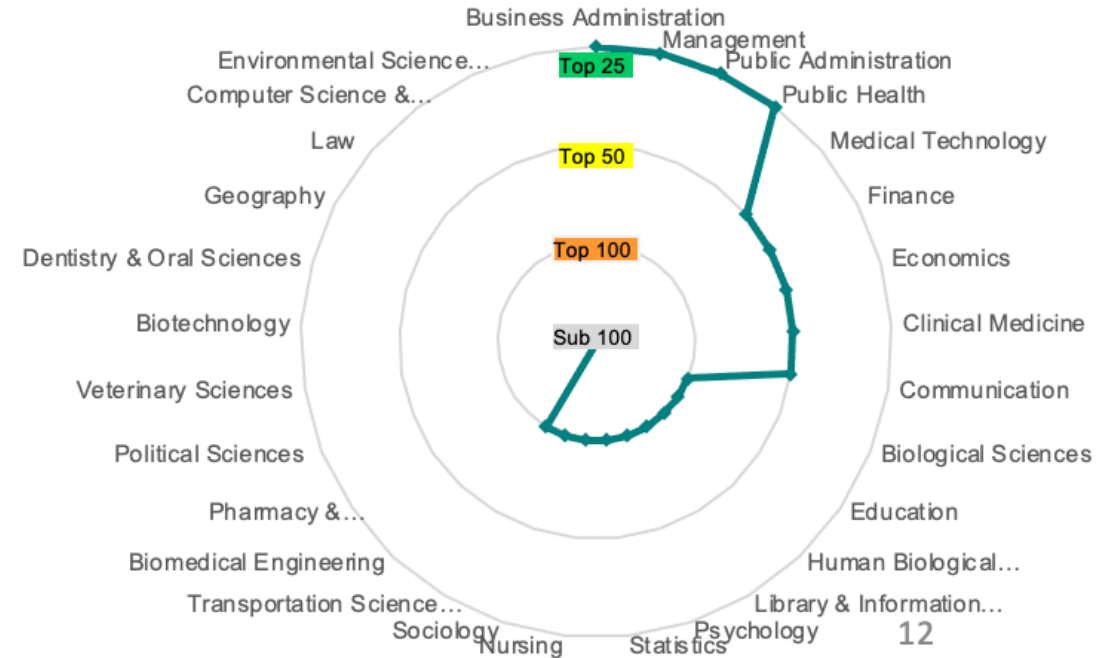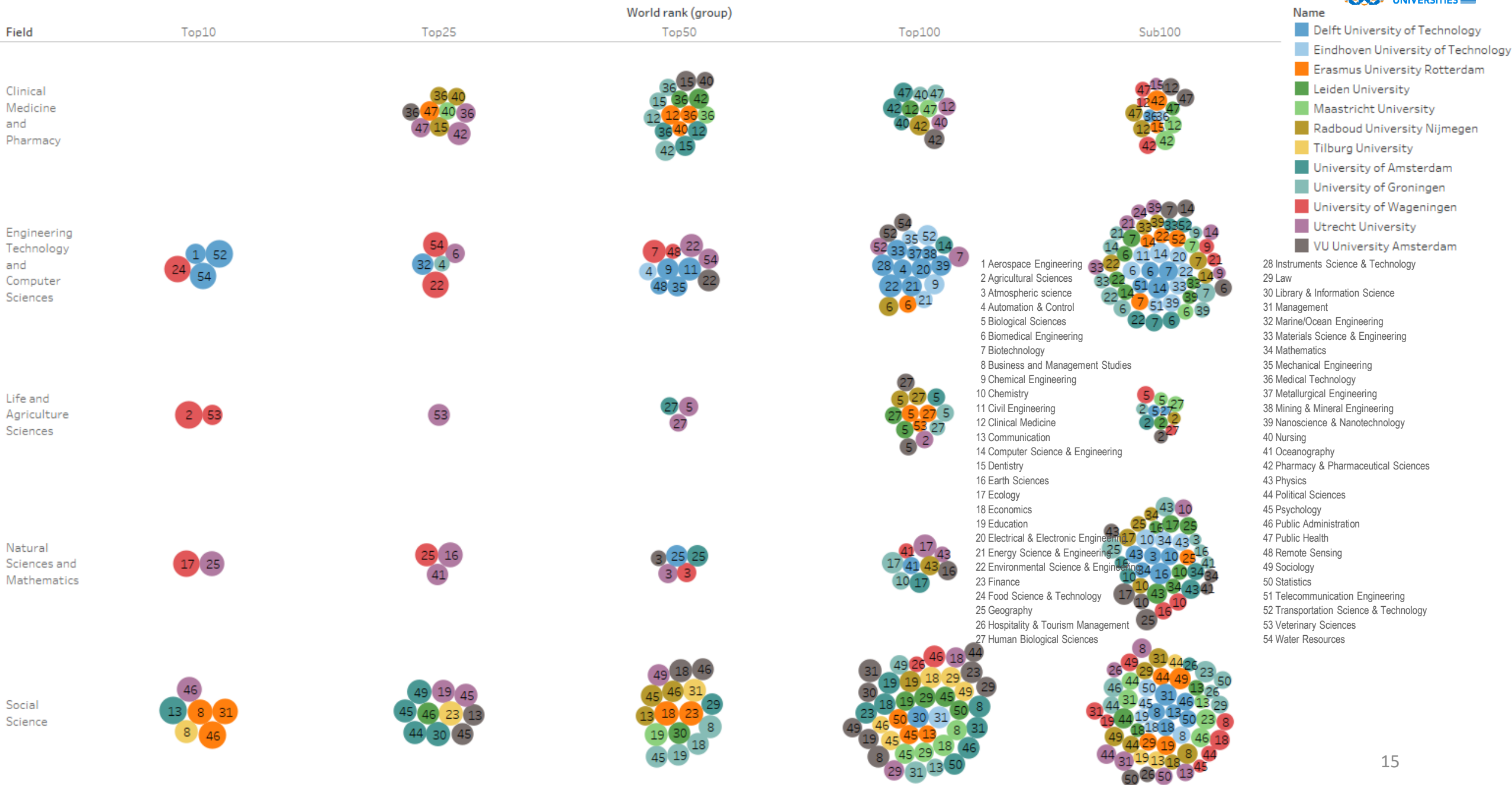**ARWU world rank 2020**

Erasmus : **80**

*Total subjects in ranking:* **54**
*# Subjects ranked for EUR :* **28**
*Coverage subjects in Top25 world rank:* **4/54**

ARWU - Subject Ranking 2020

# ARWU Subject 2019 - NL Universities -- PUB score proxy for Research size



**World rank (group):** Top10, Top25, Top50, Top100, Sub100

**Field:** Clinical Medicine and Pharmacy, Engineering Technology and Computer Sciences, Life and Agriculture Sciences, Natural Sciences and Mathematics, Social Science

**Name**
- Delft University of Technology
- Eindhoven University of Technology
- Erasmus University Rotterdam
- Leiden University
- Maastricht University
- Radboud University Nijmegen
- Tilburg University
- University of Amsterdam
- University of Groningen
- University of Wageningen
- Utrecht University
- VU University Amsterdam

1 Aerospace Engineering
2 Agricultural Sciences
3 Atmospheric science
4 Automation & Control
5 Biological Sciences
6 Biomedical Engineering
7 Biotechnology
8 Business and Management Studies
9 Chemical Engineering
10 Chemistry
11 Civil Engineering
12 Clinical Medicine
13 Communication
14 Computer Science & Engineering
15 Dentistry
16 Earth Sciences
17 Ecology
18 Economics
19 Education
20 Electrical & Electronic Engineering
21 Energy Science & Engineering
22 Environmental Science & Engineering
23 Finance
24 Food Science & Technology
25 Geography
26 Hospitality & Tourism Management
27 Human Biological Sciences

28 Instruments Science & Technology
29 Law
30 Library & Information Science
31 Management
32 Marine/Ocean Engineering
33 Materials Science & Engineering
34 Mathematics
35 Mechanical Engineering
36 Medical Technology
37 Metallurgical Engineering
38 Mining & Mineral Engineering
39 Nanoscience & Nanotechnology
40 Nursing
41 Oceanography
42 Pharmacy & Pharmaceutical Sciences
43 Physics
44 Political Sciences
45 Psychology
46 Public Administration
47 Public Health
48 Remote Sensing
49 Sociology
50 Statistics
51 Telecommunication Engineering
52 Transportation Science & Technology
53 Veterinary Sciences
54 Water Resources
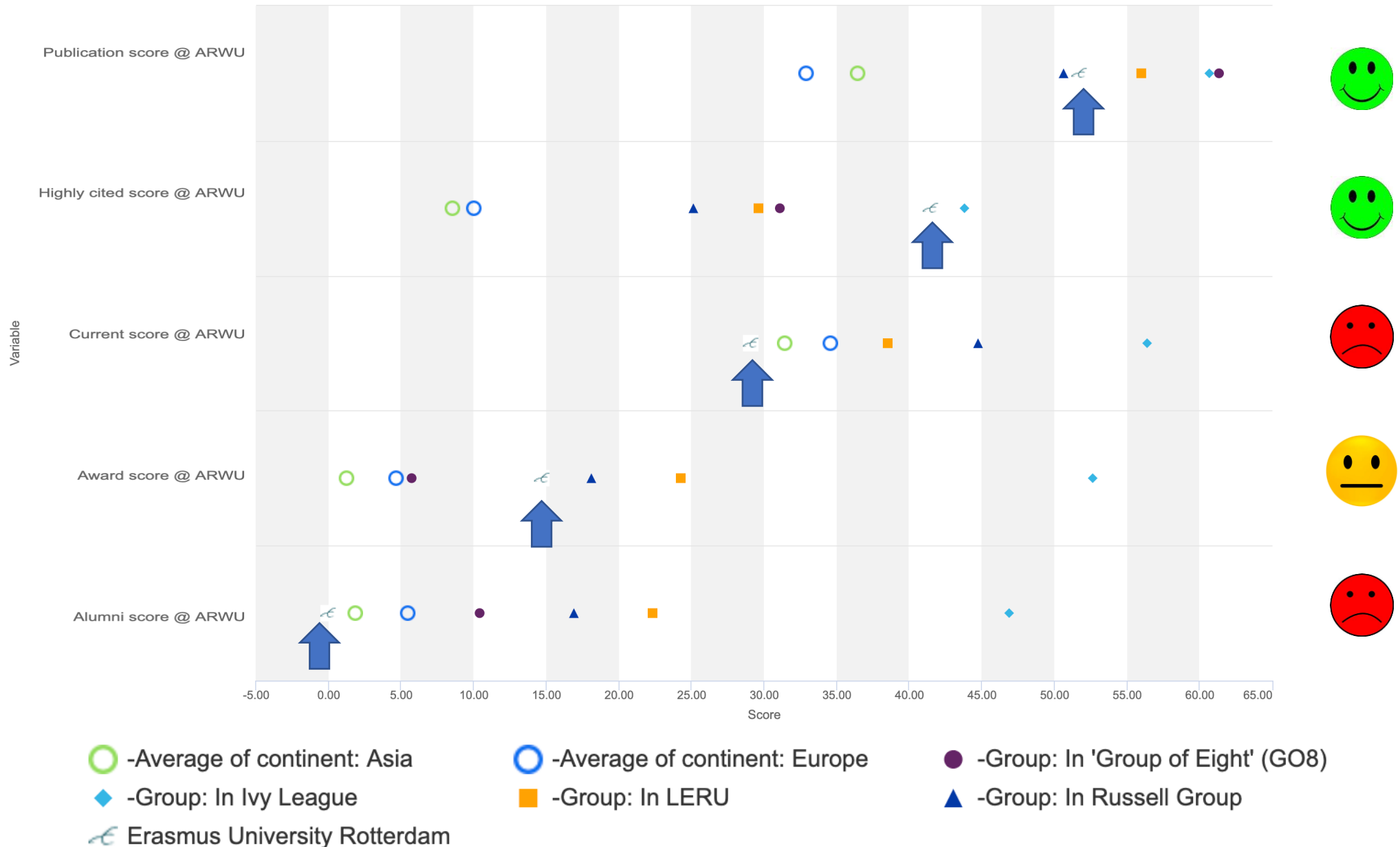
# Development 2:
# Benchmark with alliances/groups

# Benchmark my university (Erasmus) with average of regions & selected groups of institutions (Arwu 2019)
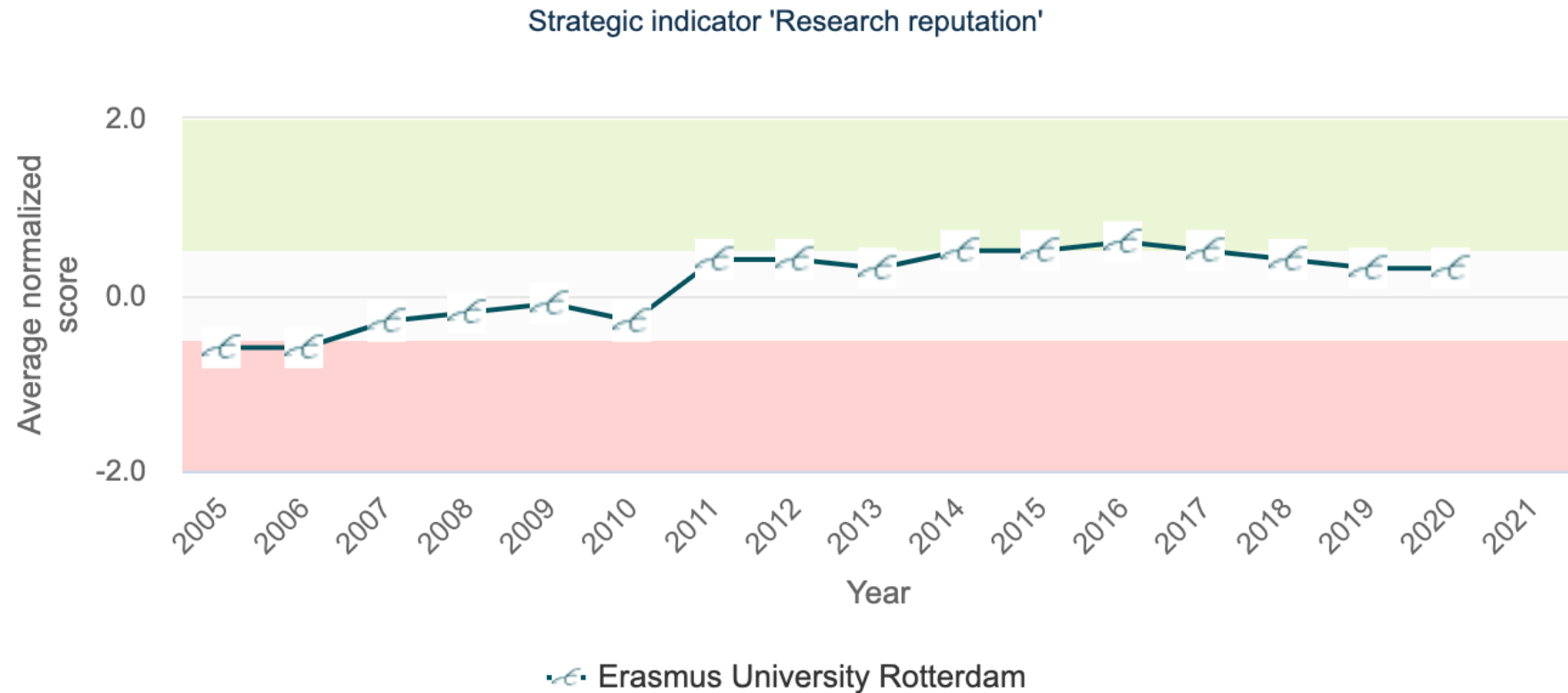
# Development 3:
# Composite variables

Compose new holistic variables using the diversity of variables from multiple rankings

Using the average of normalized scores of all variables (global average = 0)

# Impact & Rankings: Composite variables from different rankings 3: "Research reputation"



Strategic indicator 'Research reputation'

Erasmus University Rotterdam

Erasmus University Rotterdam / Dialogic

Average of normalized scores of all measurements of relevant variables (zero equals the global average):
Quality of faculty rank (CWUR), Publications collaboration (CWTS), PP interinstitutional collaboration (CWTS), Publications collaboration rank (CWTS), Publications interinstitutional collaboration (CWTS), Publications far collaboration (CWTS), Academic reputation score (QS), Academic reputation rank (QS), Alumni score (ARWU), Percentage of international collaboration (SIR), Scientific leadership (SIR), Excellence with Leadership Rank (SIR), Research score (THE), Research score (THE Reputation), External research income (UMultiRank), Presence rank (WOM), Impact rank (WOM), Openness rank (WOM),
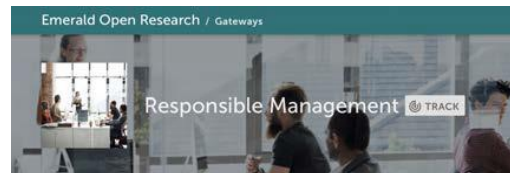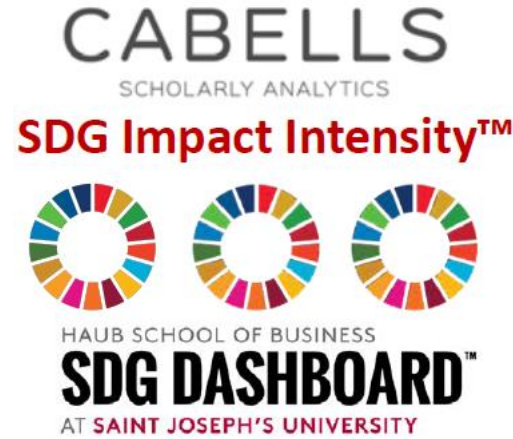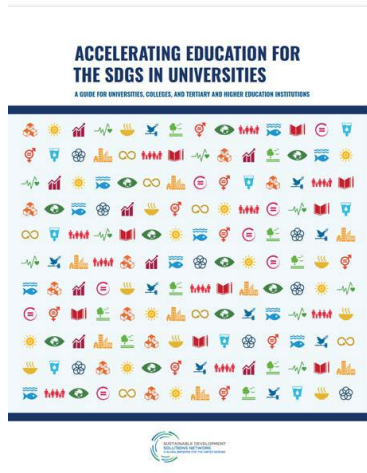
# Development 4: Sustainability reporting with SDG Mapping

Case: RSM SDG mapper for Top business schools

# Examples of International higher education sustainability reporting and assessment frameworks

| |  |  |  |
|---|---|---|---|
| **Overview** | The Sustainability Tracking, Assessment & Rating System (STARS) is a self-reporting framework for colleges and universities to measure their sustainability performance. | The Times Higher Education Impact Rankings measure global universities' success in delivering the United Nations' Sustainable Development Goals (SDGs). | The aim of the UI GreenMetric World University Rankings is to enable universities to measure and improve their implementation of sustainability policies and programs. |
| **Recognition Type** | Rating (four levels) | Ranking (top to bottom) | Ranking (top to bottom) |

https://stars.aashe.org/wp-content/uploads/2020/07/Higher-Education-Sustainability-Assessment-Frameworks-Compared.pdf

# SDG mapping mania is everywhere: both institutional, as publishers and networks *)

# RSM SDG mapper: building the RSM SDG portfolio footprint

**Challenge: How to "measure" impact?**
Develop metrics for impact of research, education and engagement (and develop an evidence based demonstration of impact for new AACSB standards 8 & 9) while we know Impact is very hard to measure (from empirical/research point of view), many methodological pitfalls exist

**Vision on the solution: combine analytics and narrative**
Don't invent the wheel yourself, but use **external schemata** developed by credible stakeholders, like the UN SDG's and develop a credible <u>proxy of relatedness</u> of results to these schemata by **use smart technology and analytics** to produce **evidence to develop the impact narrative** and **to feed the strategic dialogue** with stakeholders

**Approach: open science mindset**
We used open data and open source technology where possible (because of limited resources) and combine these with text based data from our research intelligence (articles, Phd theses), education results (MSc theses, canvas) and engagement examples (projects descriptions) results.

**Result**
A web based tool to provide analytics on the SDG relatedness of research, education and engagement in business schools.

Open demo dashboard (beta version): https://rsmmetrics.nl/sustainable-development-goals/triple-crown-sdg

# RSM SDG mapper: building the RSM SDG portfolio footprint

Scope:
Global analysis of all publications in the FT-50 and UTD journal list
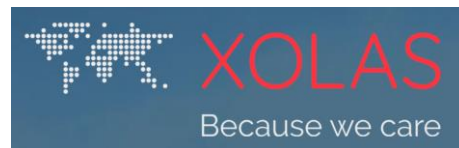Triple Crown Accredited Business schools.

Examples of analytics:
1. benchmark analytics on both schools and journals for SDG ratio's
2. SDG publications over time
3. Share of SDG publications within the total number of publications
4. SDG Profiles for individual schools and journals
5. SDG Heatmaps
6. SDG rankings based on the SDG share
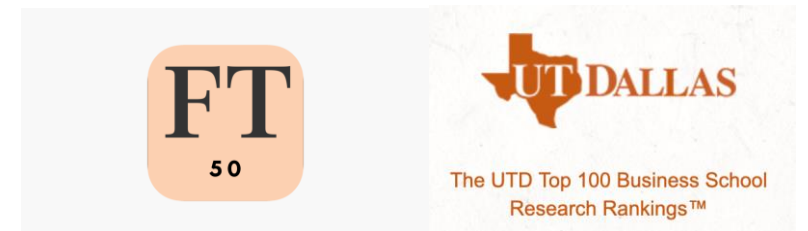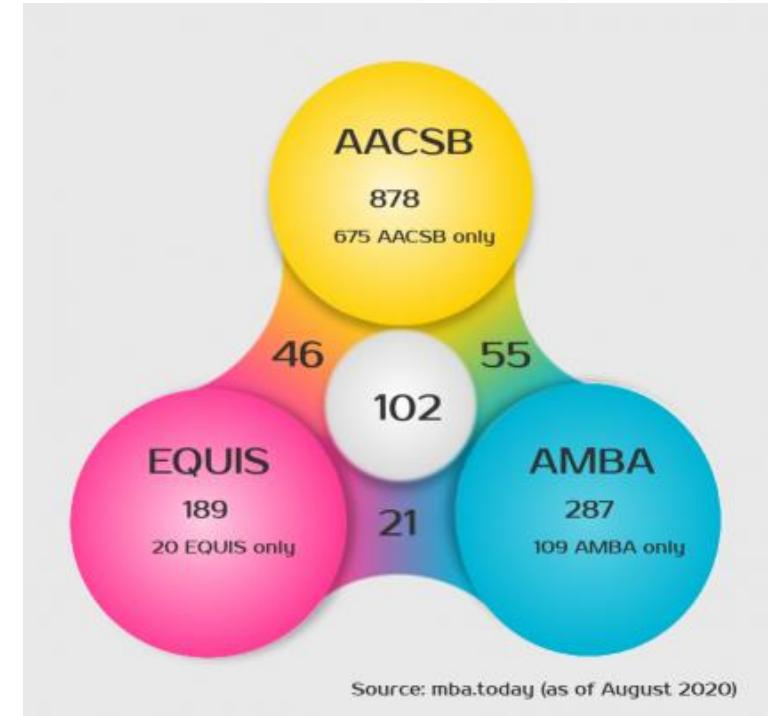7. High scoring publications

Partnership with Dialogic (technology) and XOLAS (strategy-metrics)



AACSB
878
675 AACSB only

46

55

102

EQUIS
189
20 EQUIS only

21

AMBA
287
109 AMBA only

Source: mba.today (as of August 2020)

dialogic
innovation · interaction

XOLAS
Because we care

https://www.dialogic.nl/en/

https://www.xol.as/

FT
50

UT DALLAS
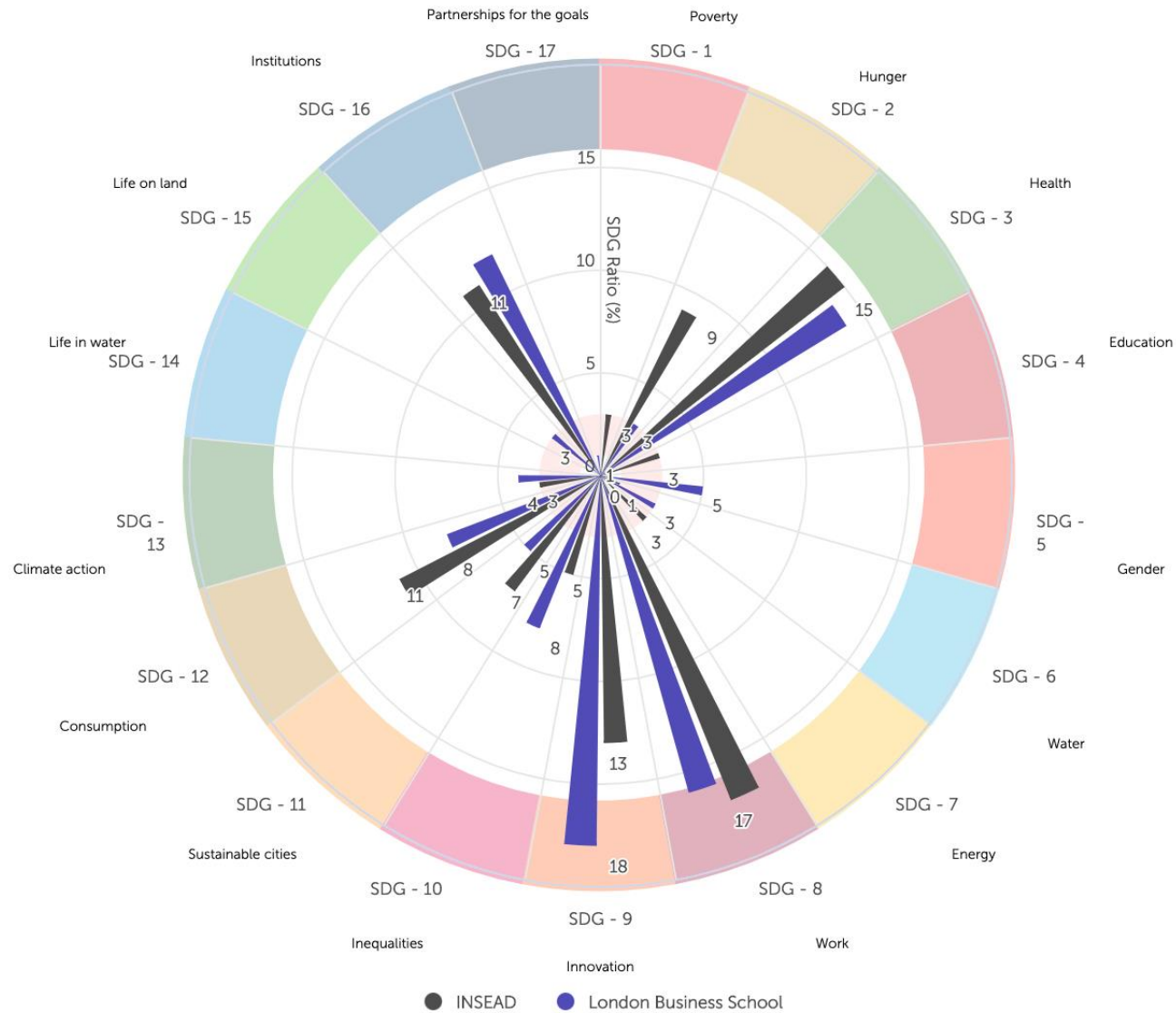The UTD Top 100 Business School
Research Rankings™

# RSM SDG mapper: Benchmark schools SDG related articles 2000-2019 (example: INSEAD vs LBS)

# RSM SDG mapper: building the RSM SDG portfolio footprint

Clusters of SDGs to so called 'SDG categories'.

As a demonstrator, we follow the logic of the "SDG wedding cake" model, (Stockholm Resilience Centre), combining SDG's on Planet/Biospere, People/Society and the Economy.
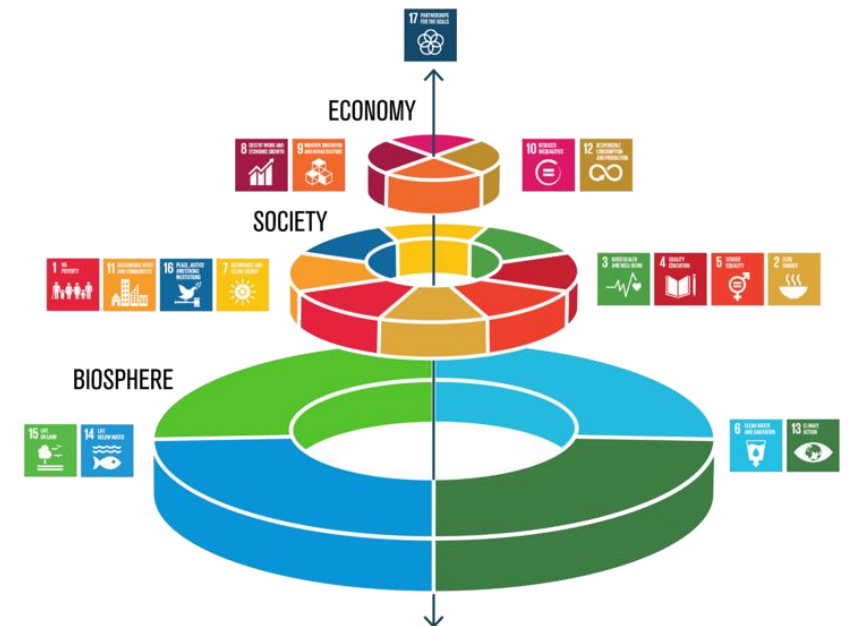
**Planet/Biospere**:
SDG - 6, SDG - 13, SDG - 14, SDG - 15
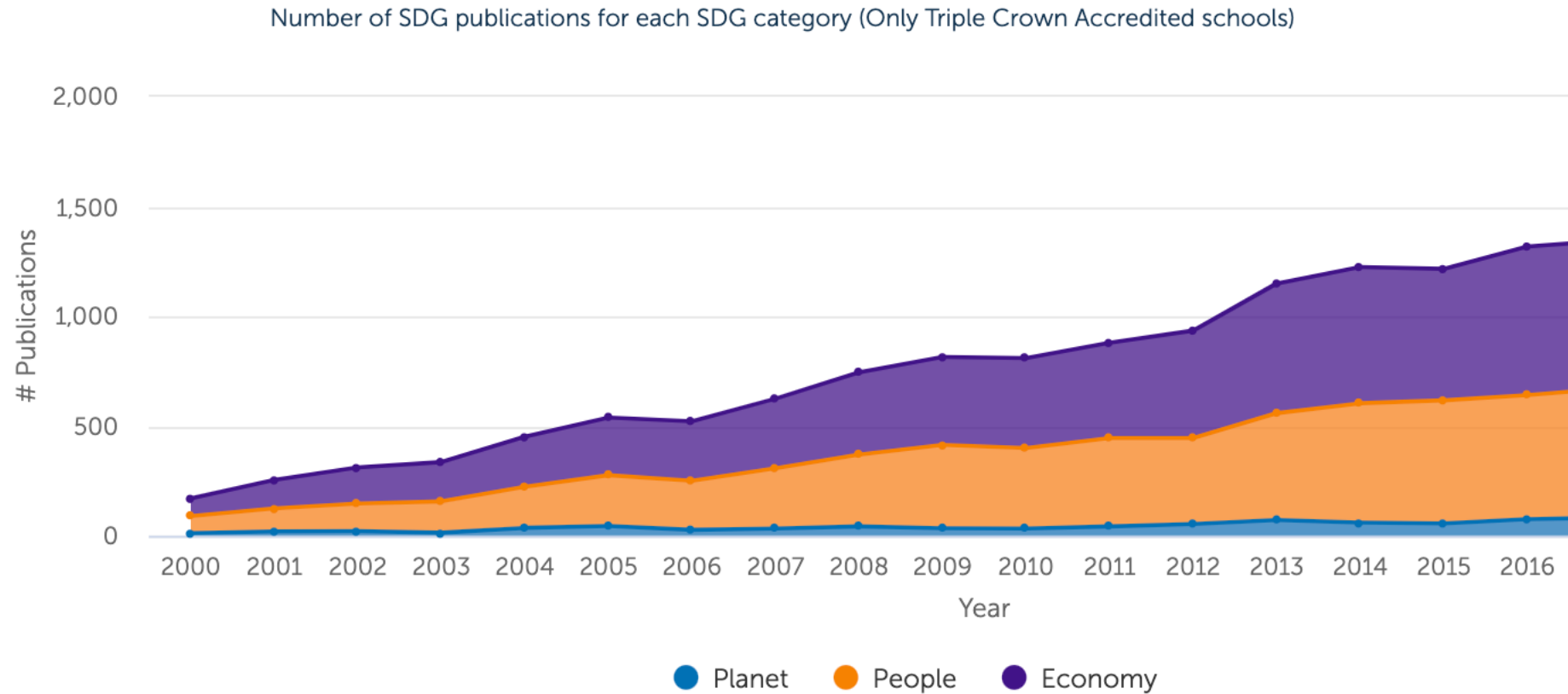
**People/Society**:
SDG - 1, SDG - 2, SDG - 3, SDG - 4, SDG - 5, SDG - 7, SDG - 11, SDG - 16

**Economy**:
SDG - 8, SDG - 9, SDG - 10, SDG - 12

# RSM SDG mapper: Triple crown SDG related articles 2000-2019



Number of SDG publications for each SDG category (Only Triple Crown Accredited schools)

# 3

**Solution on large scale RA support through global platforms: the VV IT portal**,
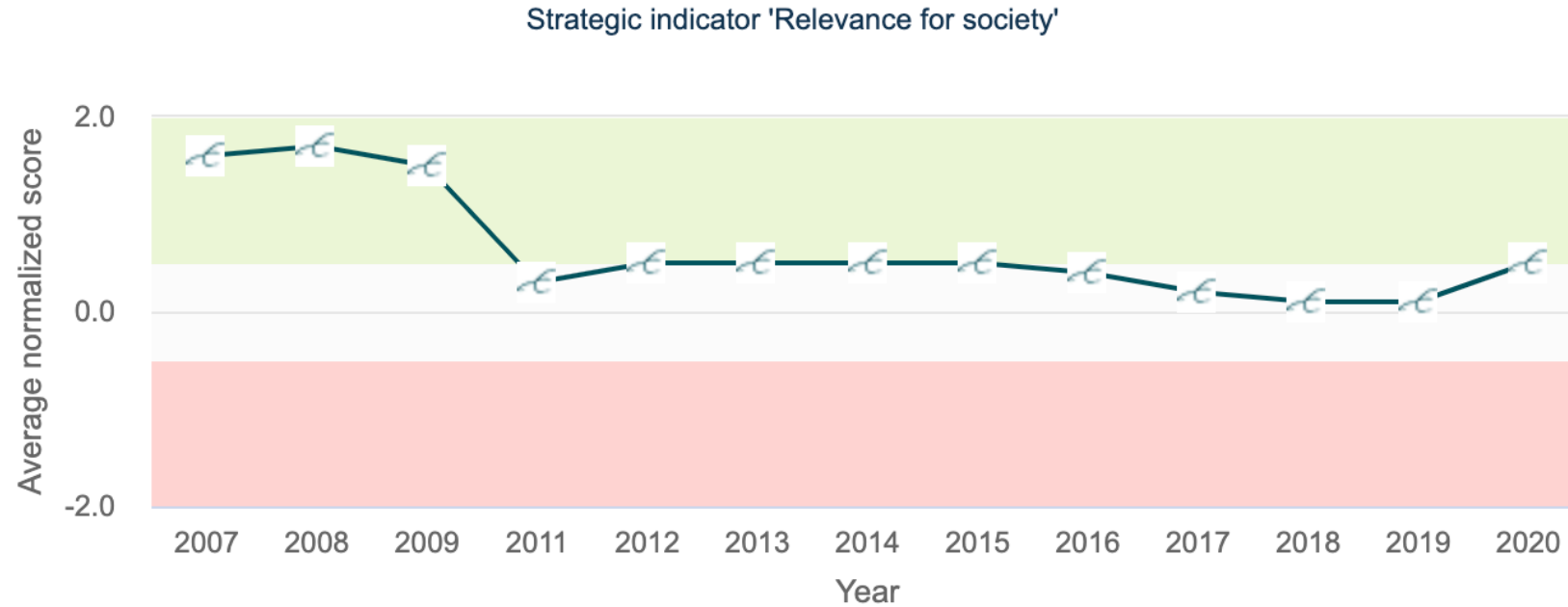Q&A on the portal solution

Laura Tucker

Vertigo Ventures

# 4

**Eye on the future of RA with smart RI
(all speakers)**

# Additional material

# Impact & Rankings: Composite variables from different rankings 1: "Relevance for society"



Strategic indicator 'Relevance for society'

Erasmus University Rotterdam

Erasmus University Rotterdam / Dialogic

Average of normalized scores of all measurements of relevant variables (zero equals the global average):
Alumni employment rank (CWUR), Employer reputation score (QS), Employer reputation rank (QS), Innovative Knowledge Rank (SIR), Industry Income score (THE), Relative BA graduate unemployment (UMultiRank), Relative MA graduate unemployment (UMultiRank), External research income (UMultiRank), Interdisciplinary publications (UMultiRank), Co-publications with industrial partners (UMultiRank), Income from private sources (UMultiRank), Patents awarded (size-normalised) (UMultiRank), Industry co-patents (UMultiRank), Spin-offs (UMultiRank), Income from continuous professional development (UMultiRank), Income from regional sources (UMultiRank),

# Impact & Rankings: Composite variables from different rankings 2: "Internationalization"



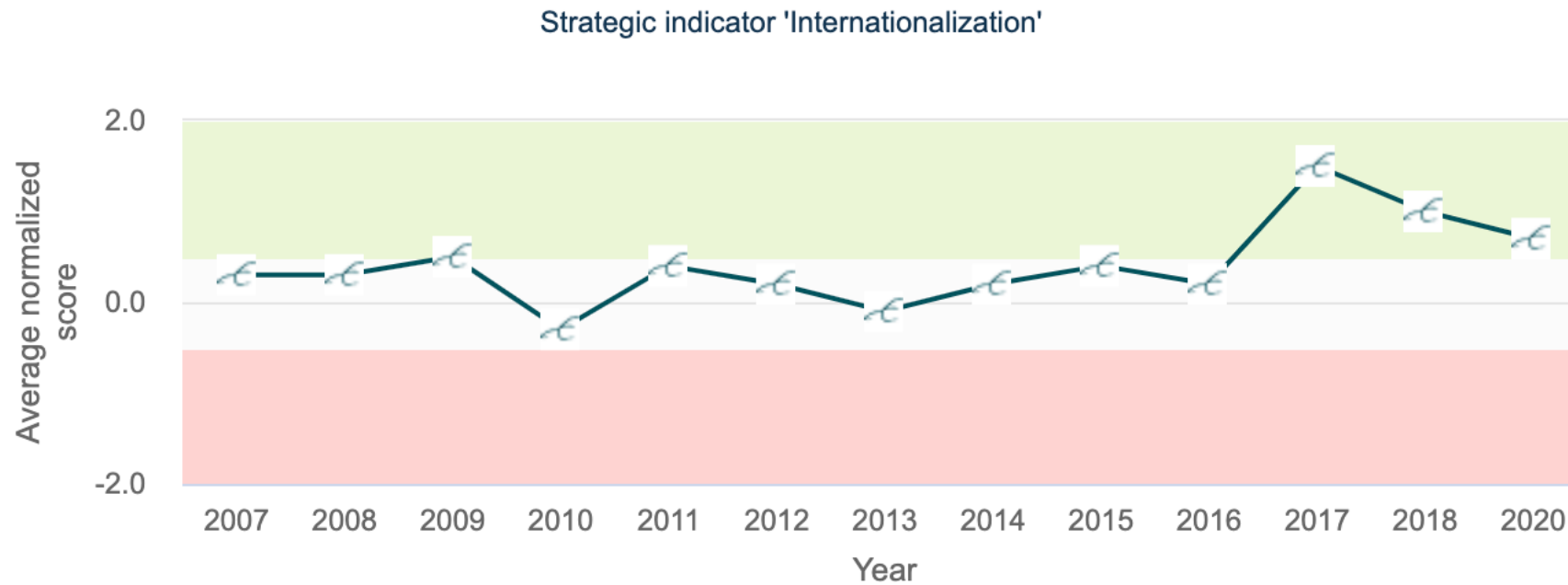Strategic indicator 'Internationalization'

Erasmus University Rotterdam

Erasmus University Rotterdam / Dialogic

Average of normalized scores of all measurements of relevant variables (zero equals the global average):
Publications international collaboration (CWTS), Publications far collaboration (CWTS), MGCD collaboration (CWTS), International faculty score (QS), International faculty rank (QS), International student score (QS), International student rank (QS), International academic staff (Round University Rankings), Percentage of international collaboration (SIR), International Rank (SIR), International Outlook score (THE), Foreign language bachelor programmes (UMultiRank), Foreign language master programmes (UMultiRank), Student mobility (UMultiRank), International academic staff (UMultiRank), International joint publications (UMultiRank), International doctorate degrees (UMultiRank),

# Impact & Rankings: Composite variables from different rankings 3: "Research reputation"



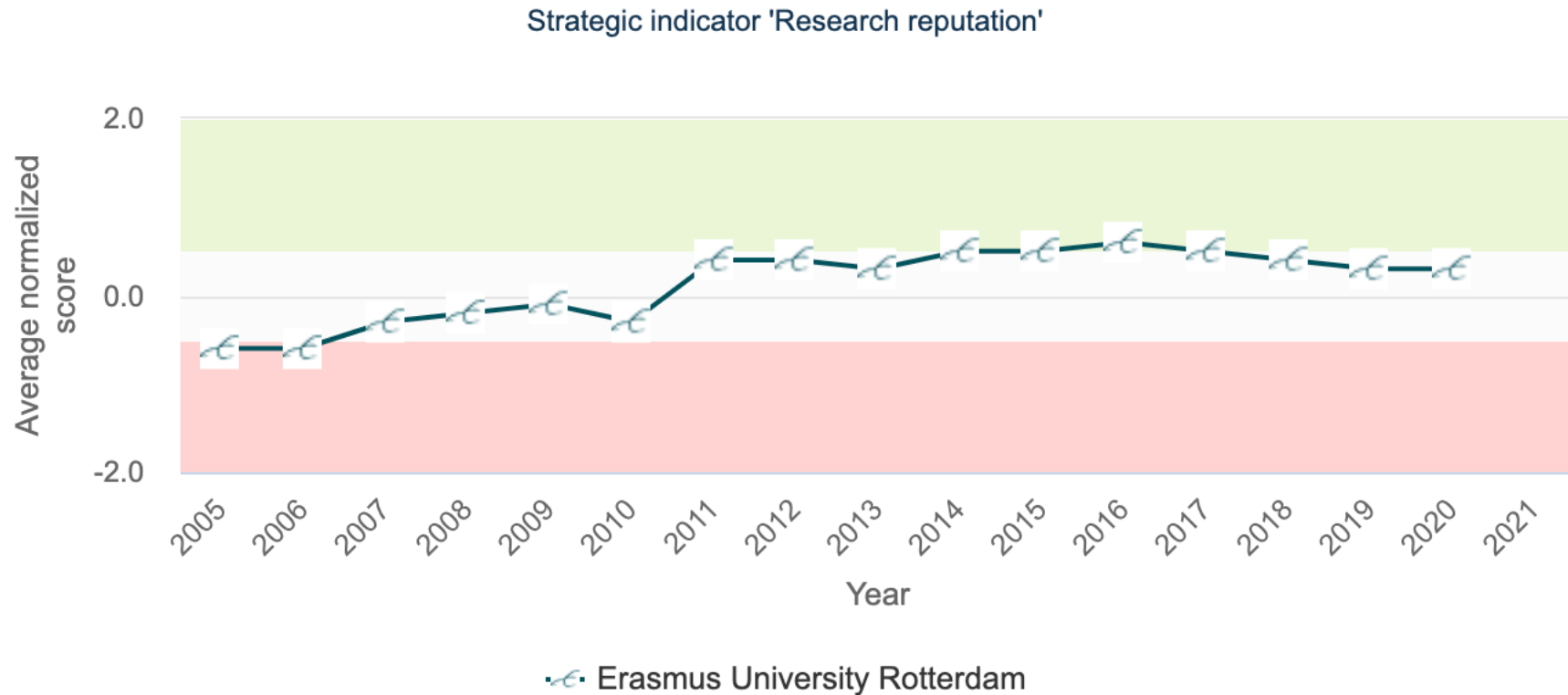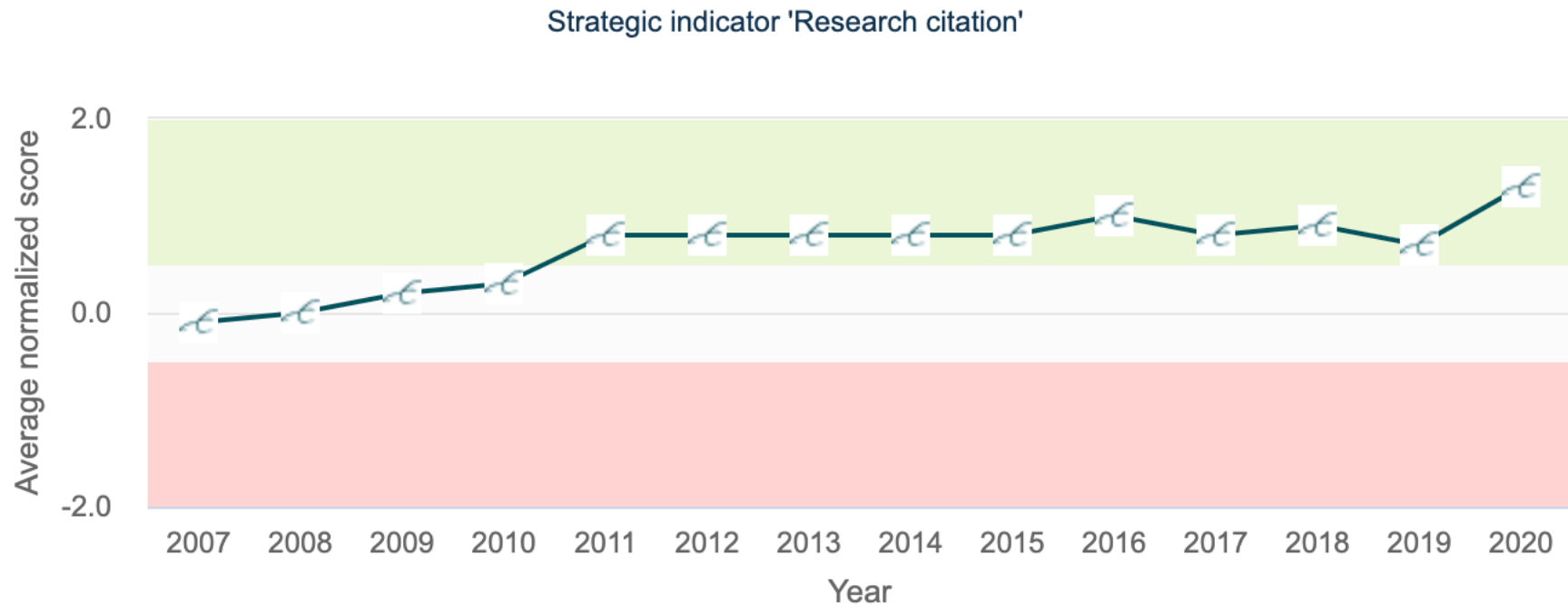Strategic indicator 'Research reputation'

Erasmus University Rotterdam

Erasmus University Rotterdam / Dialogic

Average of normalized scores of all measurements of relevant variables (zero equals the global average):
Quality of faculty rank (CWUR), Publications collaboration (CWTS), PP interinstitutional collaboration (CWTS), Publications collaboration rank (CWTS), Publications interinstitutional collaboration (CWTS), Publications far collaboration (CWTS), Academic reputation score (QS), Academic reputation rank (QS), Alumni score (ARWU), Percentage of international collaboration (SIR), Scientific leadership (SIR), Excellence with Leadership Rank (SIR), Research score (THE), Research score (THE Reputation), External research income (UMultiRank), Presence rank (WOM), Impact rank (WOM), Openness rank (WOM),

# Impact & Rankings: Composite variables from different rankings 4: "Research citation"



Strategic indicator 'Research citation'

Erasmus University Rotterdam

Erasmus University Rotterdam / Dialogic

Average of normalized scores of all measurements of relevant variables (zero equals the global average):
MNCS impact (CWTS), PPTop10% publications impact (CWTS), PP interinstitutional collaboration (CWTS), Highly cited score (NTU), High impact journal articles score (NTU), Highly cited score (ARWU), Nature and science publication score (ARWU), PCP score (ARWU), Top publication score (ARWU), Normalized impact score (SIR), Percentage of high quality publications (SIR), Excellence rate (SIR), Excellence rate with scientific leadership (SIR), Excellence rank (SIR), Excellence with Leadership Rank (SIR), Citations score (THE), Top cited publications (UMultiRank), Openness rank (WOM), Excellence rank (WOM),

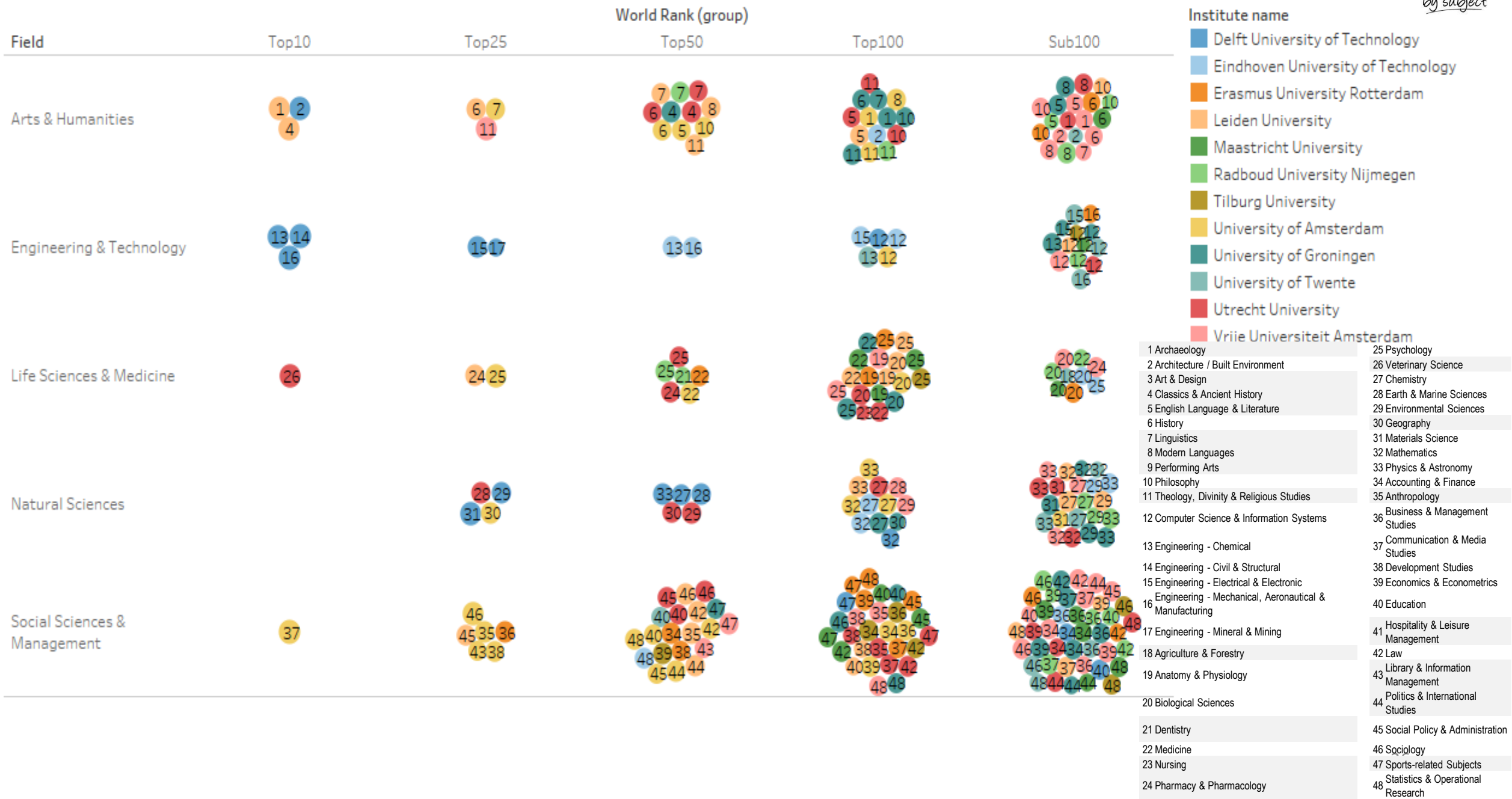# Erasmus University Rotterdam in QS & ARWU Business subject rankings

## QS Subject rank 2021: Business and management Studies

| | | |
|---|---|---|
| 1 | Harvard University | United States |
| 2 | INSEAD | France |
| 3 | London Business School | United Kingdom |
| 4 | Massachusetts Institute of Technology (MIT) | United States |
| 5 | Stanford University | United States |
| 6 | University of Pennsylvania | United States |
| 7 | Bocconi University | Italy |
| 8 | University of Cambridge | United Kingdom |
| 9 | HEC Paris School of Management | France |
| 10 | The London School of Economics and Political Science (LSE) | United Kingdom |
| 11 | University of Oxford | United Kingdom |
| 12 | University of California, Berkeley (UCB) | United States |
| 13 | National University of Singapore (NUS) | Singapore |
| 14 | Northwestern University | United States |
| 15 | Copenhagen Business School | Denmark |
| 16 | The Hong Kong University of Science and Technology | Hong Kong SAR |
| **17** | **Erasmus University Rotterdam** | **Netherlands** |
| 18 | Columbia University | United States |
| 19 | Yale University | United States |
| 20 | New York University (NYU) | United States |
| 21 | Universitat Ramon Llull | Spain |
| 22 | University of Chicago | United States |
| 23 | The University of Warwick | United Kingdom |
| 24 | Imperial College London | United Kingdom |
| 24 | Nanyang Technological University, Singapore (NTU) | Singapore |

## ARWU 2020 Subject: Business Administration

| | | |
|---|---|---|
| 1 | University of Pennsylvania | United States |
| 2 | Texas A&M University | United States |
| **3** | **Erasmus University Rotterdam** | **Netherlands** |
| 4 | Harvard University | United States |
| 5 | University of Michigan-Ann Arbor | United States |
| 6 | Tilburg University | Netherlands |
| 7 | Duke University | United States |
| 8 | Georgia State University | United States |
| 9 | Northwestern University | United States |
| 10 | University of Washington | United States |
| 11 | Pennsylvania State University - University Park | United States |
| 12 | Columbia University | United States |
| 13 | University of Maryland, College Park | United States |
| 14 | University of Minnesota, Twin Cities | United States |
| 15 | Indiana University Bloomington | United States |
| 16 | Arizona State University | United States |
| 16 | INSEAD | France |
| 18 | University of South Carolina - Columbia | United States |
| 19 | University of North Carolina at Chapel Hill | United States |
| 20 | The University of Georgia | United States |
| 21 | Stanford University | United States |
| 22 | Michigan State University | United States |
| 22 | University of Miami | United States |
| 24 | Aalto University | Finland |
| 25 | The University of Texas at Austin | United States |

35

# QS Subject 2019 ranking -- NL Universities -- Academic Reputation as proxy for Research size



**World Rank (group)**

| Field | Top10 | Top25 | Top50 | Top100 | Sub100 |
|-------|-------|-------|-------|--------|--------|

**Institute name**

- Delft University of Technology
- Eindhoven University of Technology
- Erasmus University Rotterdam
- Leiden University
- Maastricht University
- Radboud University Nijmegen
- Tilburg University
- University of Amsterdam
- University of Groningen
- University of Twente
- Utrecht University
- Vrije Universiteit Amsterdam

| | | | |
|---|---|---|---|
| 1 Archaeology | | 25 Psychology | |
| 2 Architecture / Built Environment | | 26 Veterinary Science | |
| 3 Art & Design | | 27 Chemistry | |
| 4 Classics & Ancient History | | 28 Earth & Marine Sciences | |
| 5 English Language & Literature | | 29 Environmental Sciences | |
| 6 History | | 30 Geography | |
| 7 Linguistics | | 31 Materials Science | |
| 8 Modern Languages | | 32 Mathematics | |
| 9 Performing Arts | | 33 Physics & Astronomy | |
| 10 Philosophy | | 34 Accounting & Finance | |
| 11 Theology, Divinity & Religious Studies | | 35 Anthropology | |
| 12 Computer Science & Information Systems | | 36 Business & Management Studies | |
| 13 Engineering - Chemical | | 37 Communication & Media Studies | |
| 14 Engineering - Civil & Structural | | 38 Development Studies | |
| 15 Engineering - Electrical & Electronic | | 39 Economics & Econometrics | |
| 16 Engineering - Mechanical, Aeronautical & Manufacturing | | 40 Education | |
| 17 Engineering - Mineral & Mining | | 41 Hospitality & Leisure Management | |
| 18 Agriculture & Forestry | | 42 Law | |
| 19 Anatomy & Physiology | | 43 Library & Information Management | |
| 20 Biological Sciences | | 44 Politics & International Studies | |
| 21 Dentistry | | 45 Social Policy & Administration | |
| 22 Medicine | | 46 Sociology | |
| 23 Nursing | | 47 Sports-related Subjects | |
| 24 Pharmacy & Pharmacology | | 48 Statistics & Operational Research | |

# **Agenda**

1. Societal impact in the Polish research quality assessment

2. Assessing impact of universities

3. Impact rankings of universities

   - Global state of play

   - THE Impact Ranking

   - Other chosen rankings

4. University rankings' utility as a public policy tool
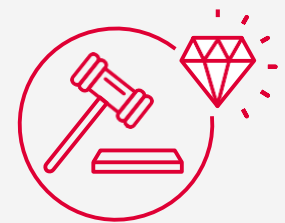
# 1. Societal impact in the Polish research quality assessment

With the introduction of the Constitution for Science, **assessment of impact** has been included in the **Polish framework** for research quality assessment.

**+**    allows to account for a broader impact of research outside academia

**+**    strengthens social and political legitimisation for increased public spending on science and higher education

**-**    requires substantial resources to be thoroughly conducted

„**Rankings support educational policy making via measurability** of certain indicators and worldwide comparisons [...] can be also used as an **instrument for convincing the public** that certain education reforms are needed, thus supporting the policy making." (Landinez et al., 2019)

# 2. Assessing impact of universities

**I** „[…] **rankings focus on teaching and research** activities but rarely measure the HEIs' connection to practice." (Urdari et al., 2017)

**II** „[…] while several ranking systems exist for the first and second missions, **the third mission lacks any cohesive methodology** for describing what universities actually do in this regard." (Secundo et al., 2017)

**III** „Rankings seem to **focus on education- and research-based indicators**. […]" Landinez et al., 2019

A need for **impact rankings** of universities?

Ministry of Science and Higher Education
Republic of Poland

# 3.1. Impact rankings of universities: global state of play

# 3.2. Impact rankings of universities: THE Impact Ranking (1/4)

- published by **Times Higher Education** (UK), prepared in cooperation with: **Vertigo Ventures, Elsevier**

- goal: to assess universities against the **United Nations' Sustainable Development Goals (SDGs)**

- **2 editions** so far (2019, 2020)

- **768 universities from 85 countries** in the last edition

- **data submission by universities** (accreditation, teaching undergraduates as only conditions)

**assessment areas**

| I | Research |
|---|---|
| II | Stewardship |
| III | Teaching |
| IV | Outreach |

THE IMPACT RANKINGS

# 3.3. Impact rankings of universities: THE Impact Ranking (2/4)

| | SDG 1. | SDG 2. | SDG 3. | ... | SDG 16. | SDG 17. |
|---|---|---|---|---|---|---|
| | voluntary data submission, three highest scores included | | | | | mandatory |
| Research | | | | | | |
| Stewardship | | | | | | |
| Teaching | | | | | | |
| Outreach | | | | | | |

27% in every SDG

weights varying by SDG

| **Total score** | 3 x 0,26 x SDG score* (three SDGs with the highest score) | + | 0,22 x SDG 17. score |
|---|---|---|---|

THE IMPACT RANKINGS
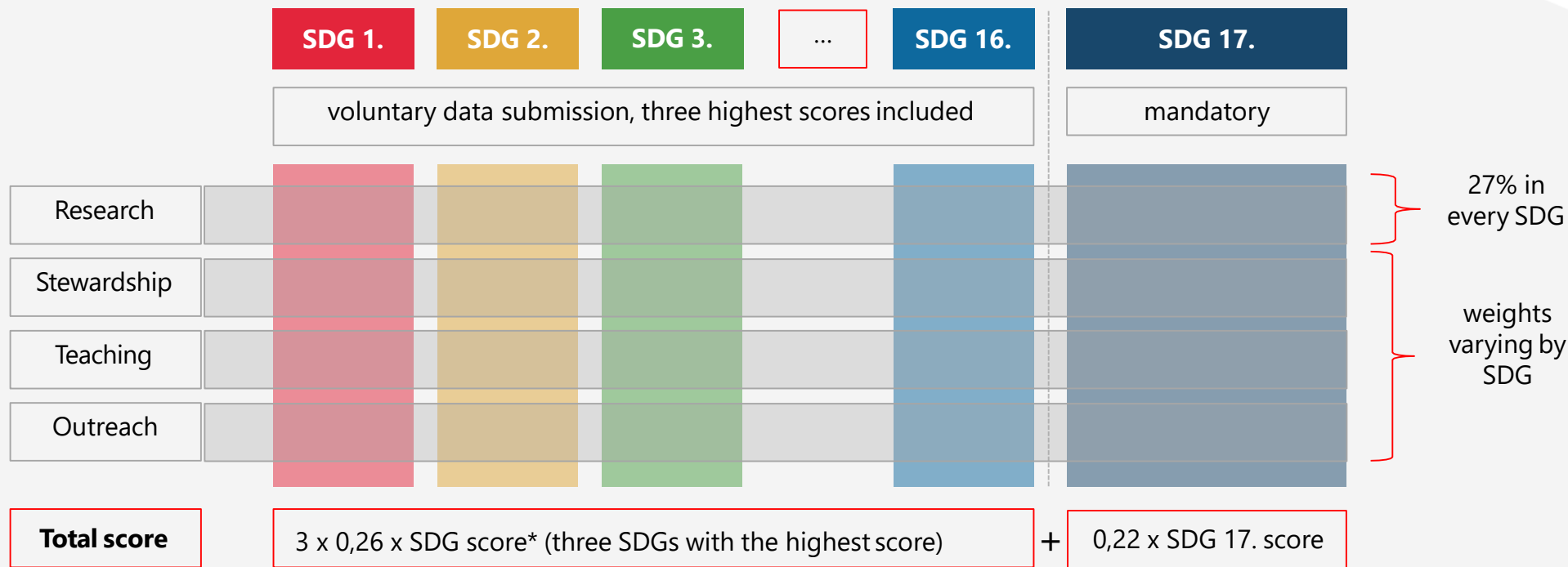
* all scores on 0-100 scale, adjusted to the highest university score in a given SDG (100 points)

# 3.4. Impact rankings of universities: THE Impact Ranking (3/4)

CFS CONSTITUTION FOR SCIENCE

| | Description | Main data sources | Examples of indicators |
|---|---|---|---|
| **Research metrics** | refer to research (quantity of publications, quality – citations etc.) | Elsevier | • Number of publications related to a given SDG<br>• FWCI of the above publications<br>• Proportion of papers in the top 10% of journals as defined by CiteScore |
| **Continuous metrics** | refer to time-varying characteristics with continuous observation | data provided by universities | • Proportion of graduates with teaching qualification<br>• Proportion of students receiving financial aid<br>• Proportion of women receiving degrees |
| **'Zero-one' metrics** | most frequently refer to Stewardship or Outreach (policies and partnerships pursued by a university) | evidence provided by universities | • Policy protecting those reporting discrimination<br>• Plans to upgrade buildings to higher energy efficiency<br>• Educational activities that are open to the general public, such as lectures or specific educational courses |

THE IMPACT RANKINGS

Ministry of Science and Higher Education
Republic of Poland

44

# 3.5. Impact rankings of universities: THE Impact Ranking (4/4)

**I** — SDGs as sole indicators of university impact

**II** — Limited availability of multiple SDGs

**III** — Methodological issues: SDG-related publications

„Moving **from the third mission goals**, it focuses on **three interrelated areas**: research, i.e. technology transfer and innovation, teaching, i.e. lifelong learning and continuing education, as well as, social engagement **in line with regional and national development**." (Secundo et al., 2017)

Going beyond teaching and research, the University Third Mission – services to Society – has at least 3 dimensions: a non profit – social – approach; an **entrepreneur focus**; and an **innovative approximation."** (Montesinos et al., 2008)

„As a consequence, the higher the degree of **internationalization of university third mission activities**, the higher will be the students' progress on the entrepreneurial ladder." (Minola et al., 2016)

THE IMPACT RANKINGS

# 3.6. Impact rankings of universities: other chosen rankings (1/2)

**CF-S** CONSTITUTION FOR SCIENCE

- published by **Scimago Lab** (Spain)

- **6 editions** (Societal Rank)

- **3897 universities** in the last edition

| I | 50% | research performance |
|---|-----|----------------------|
| II | 30% | innovation outputs |
| III | 20% | societal impact (content visibility) |

SCIMAGO INSTITUTIONS RANKINGS
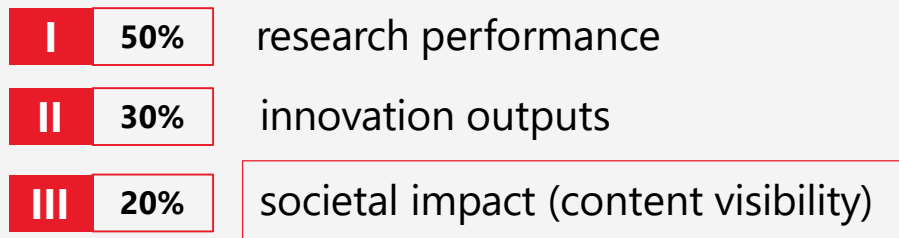
- published by **Centre for Science and Technology**, Leiden University

- **9 editions** (since 2011/2012)

- **1176 universities** in the last edition

| I | scientific impact |
|---|-------------------|
| II | collaboration |
| III | open access |
| IV | gender |

indicators to choose from

CWTS Meaningful metrics Leiden Ranking

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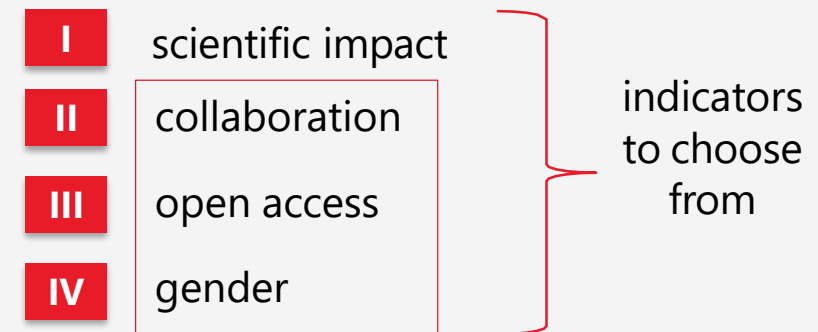
# 3.7. Impact rankings of universities: other chosen rankings (2/2)

- initiated by **Universitas Indonesia**

- **10 editions** (since 2010, the latest: 2019)

- **780 universities** in the last edition

| | | |
|---|---|---|
| **I** | **15%** | Setting & Infrastructure |
| **II** | **21%** | Energy and Climate Change |
| **III** | **18%** | Waste |
| **IV** | **10%** | Water |
| **V** | **18%** | Transportation |
| **VI** | **18%** | Education and Research |

UI Green Metric
World University Rankings
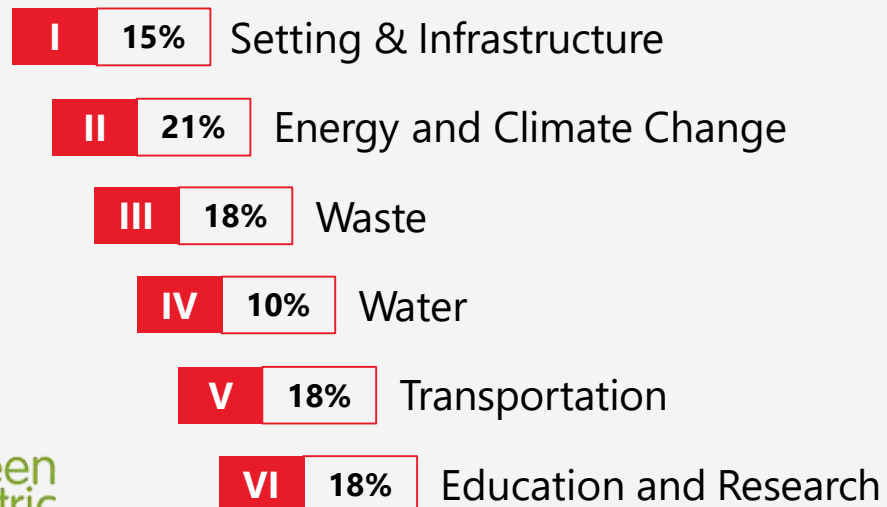
- published by **Washington Monthly**

- **16 editions** (since 2005)

- **389 universities** in the last edition (US only)

| | | |
|---|---|---|
| **I** | **33%** | research |
| **II** | **33%** | recruitment (supporting social mobility) |
| **III** | **33%** | outreach (community projects, preparing graduates for public service) |

WM

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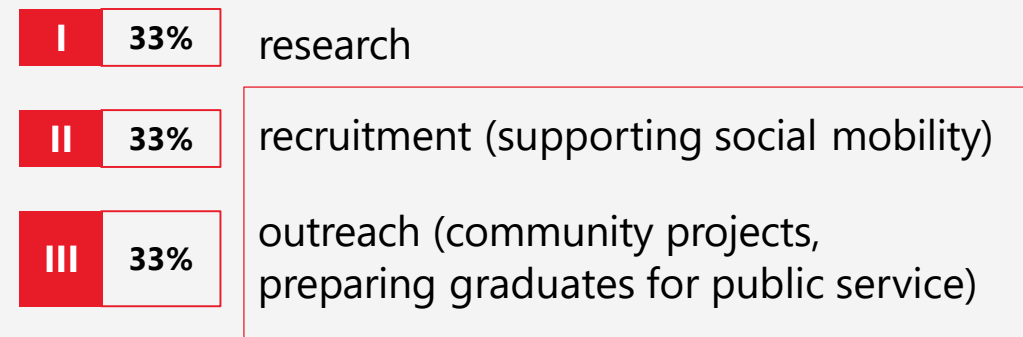
# 3.8. Impact rankings of universities

| | Assessed areas | | Data collection | Entry criteria | Ranking visibility | |
|---|---|---|---|---|---|---|
| **THE IMPACT RANKINGS** | Research | Teaching | **mainly submitted by universities** | teaching undergraduates | **85** | . |
| | Stewardship | Outreach | | | | |
| **SCIMAGO INSTITUTIONS RANKINGS** | Research | Teaching | mainly from Internet sources/from suppliers | min. 100 publications in Scopus (last year) | 59 | . |
| | Stewardship | Outreach | | | | |
| **CWTS Leiden Ranking** | Research | Teaching | mainly from Internet sources/from suppliers | min. 800 publications in Web of Science[1] | 58 | 64 |
| | Stewardship | Outreach | | | | |
| **WM** | Research | Teaching | mainly from Internet sources/from suppliers | teaching on EQF 6-8, minimal # of students[2] | 78 | 83 |
| | Stewardship | Outreach | | | | |
| **UI Green Metric World University Rankings** | Research | Teaching | **mainly submitted by universities** | **none** | 78 | . |
| | Stewardship | Outreach | | | | |

**Legend**  ■ Major area  ■ Minor area  ■ Not covered

1) The requirement refers to a four-year period before the assessed year (2015-2018 in the latest edition).
2) The requirement refers to a number of graduates too.

# 3.9. Impact rankings of universities

**THE IMPACT RANKINGS** — contribution to SDGs

**SCIMAGO INSTITUTIONS RANKINGS** — visibility of created content

**CWTS Leiden Ranking** — transfer of knowledge; contribution to lowering gender inequalities

**UI GreenMetric World University Rankings** — contributing to mitigating climate change, promoting sustainable development

**WM** — promoting social mobility, supporting local community, preparing for public service

# 4. University rankings' utility as a public policy tool

I — Lack of third mission assessment in leading global rankings

II — Methodological issues (even more in case of impact rankings)

III — Understanding of impact: narrow or inadequate to the universities' activities and country-level development strategies

IV — New exclusiveness

„traditional" rankings
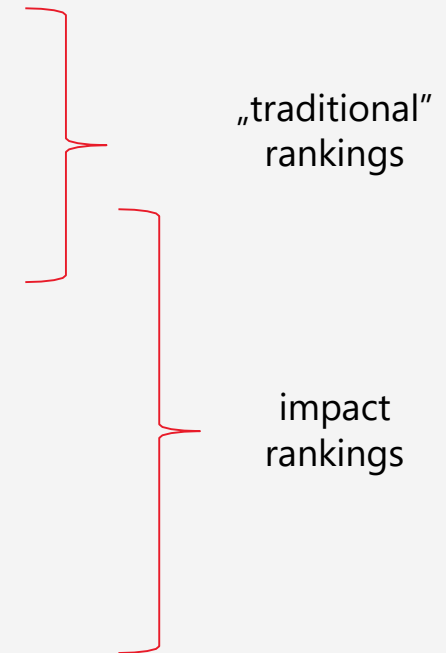
impact rankings

# Thank you for your attention!

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Ministry of Science
and Higher Education
Republic of Poland

![Vertigo Ventures logo]

# The Future of Ranking Impact Is Valuing It

3,339 days to achieve the
UN Sustainable Development Goals

**Date: 06.11.2020**

**Presented by: Laura Tucker**

# Decade Of Action

The world is burning around us

<10 years to achieve the UN SDGs and prevent global temperatures rising above 1.5oC

Arctic ice is now half as thick as it was in the 1980's and this year the birthplace of arctic sea ice has not frozen in October as it usually does

Disruption: ecosystems, marine life and indigenious people's livelihoods

Future risks include: civil unrest and cyber security

Transitioning to a nature positive economy could create
$10 trillion in business value and
395 million jobs by 2030

**\*World Economic Forum | October 2020**



*Photo | Matt Howard |UnSplash

# To embed impact reporting for a sustainable world

Purpose

**By enabling the measurement of impact, we believe we are contributing to a more sustainable world**

# Overview

## Proven partner for 10+ years

We work with leading organisations to help them identify, capture and report their impact.

Mostly through our software product, VV-Impact Tracker, but also through consultancy, training and eLearning.

Our software, VV-Impact Tracker is now being used:
- by over 6,500 academics and research managers
- around 50 universities, institutes and funders
- in UK, Australia, Hong Kong, the Netherlands and New Zealand

Secured Innovate UK bid to support global collaboration of experts with a Wiki for citizens, via a public web application

**@vertigoventures**
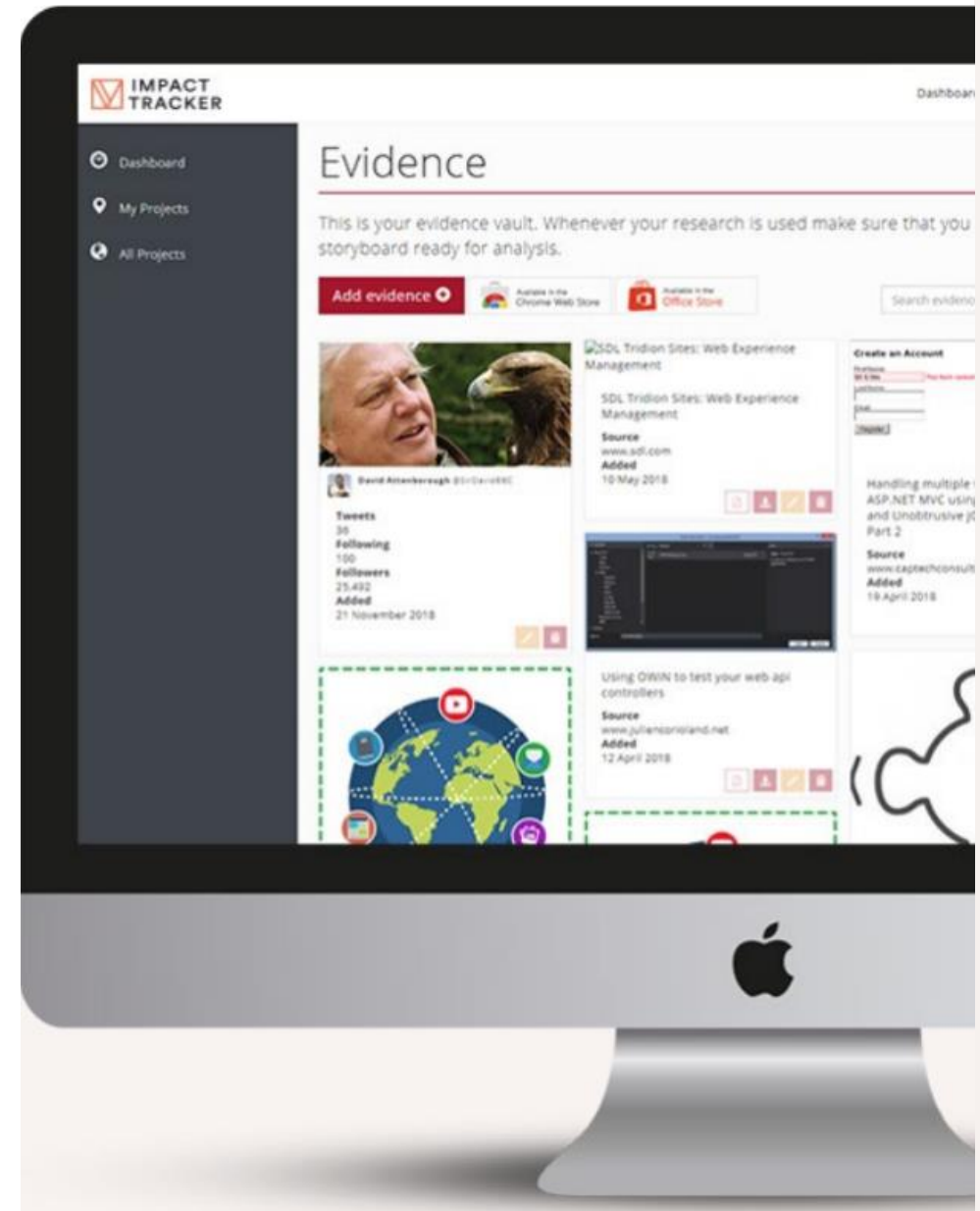
# Official Advisors to THE Impact Rankings



Working with Times Higher Education to create the annual, global university rankings

Over 850 universities from 89 countries participated 2020

Aligned to the 17 UN Sustainable Development Goals

Determined an appropriate and feasible methodology

Support engagement, buy in and participation from the global Higher Education sector.

Implementing year on year refinements

*Please see timeshighereducation.com for more information |
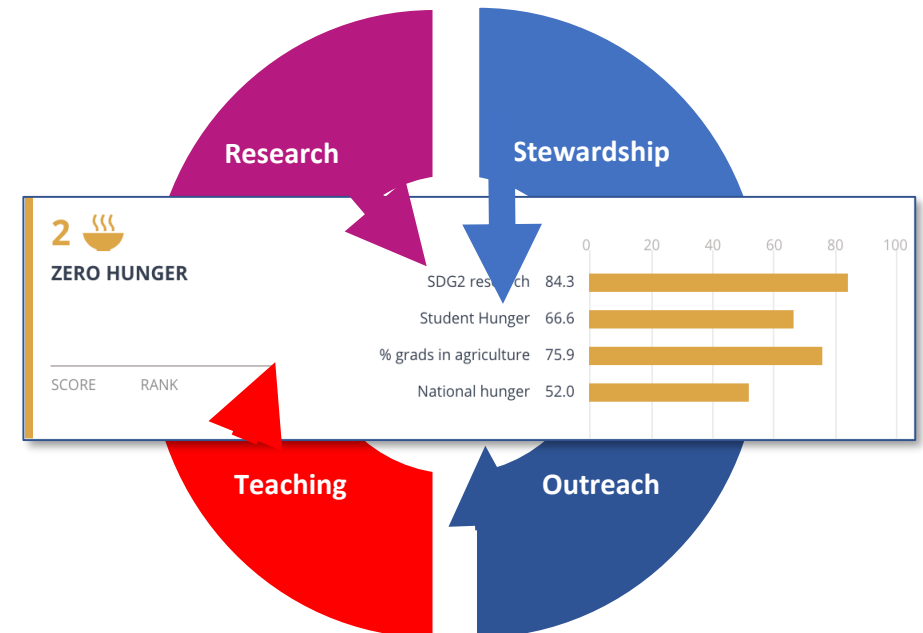
# FUTURE

# Launch Of
# TrackImpact.org  Jan.2021

**Opening Up VV-Impact Tracker
for global collaboration and greater
impact**

Facilitate collaboration across sectors, globally

Showcase research impact

Populate university websites

Open up impact data and evidence from projects

Register for free pre-launch access:
hello@vertigoventures.com
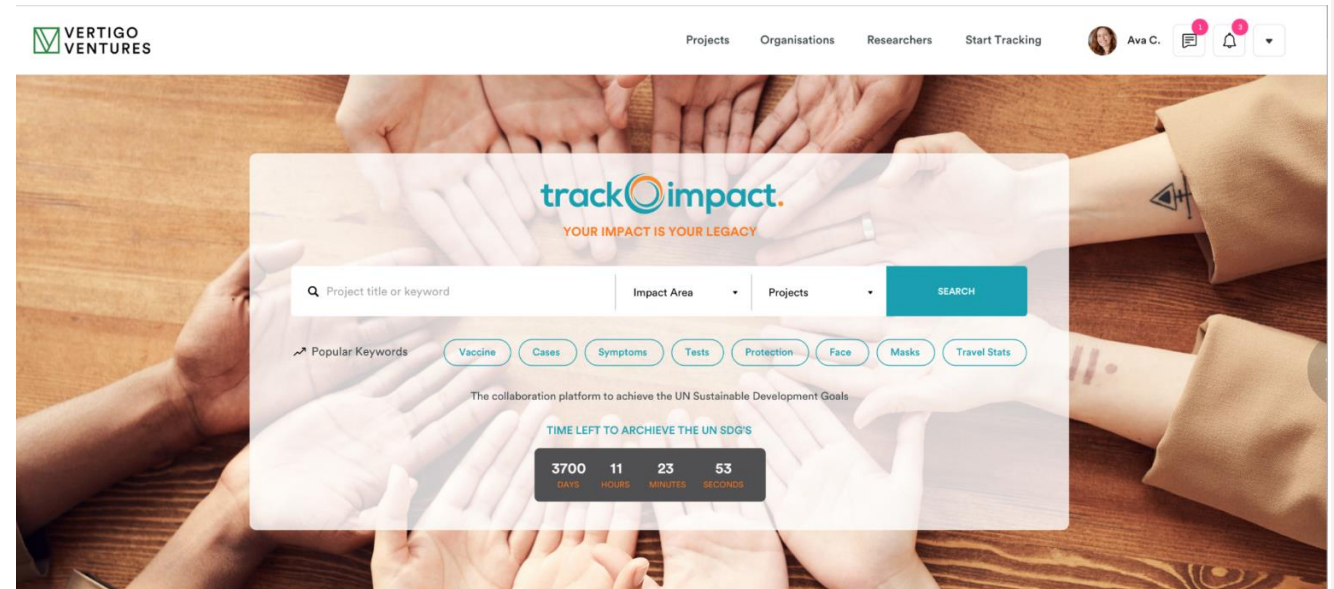
# Public Research Projects

## *Draft in progress*

- Enable global collaboration

- Search and view projects in terms of their social economic impact

- Understand contributions to the UN Sustainable Development Goals

- All information is kept private unless Project Owners choose to make it public

- Downloadable Evidence
  ○ (Tracking options TBC)

# Impact Profiles

## *Draft in progress*

- Showcase the impact from across your projects

- Demonstrate your contribution and your role in different projects

- View aggregated impact data

- Identify potential collaborators

- Leverage academic profiles for credibility

# Organisation Profiles

## *Draft in progress*

- Showcase your organisation's impact from across your projects

- Demonstrate your contribution to different impact areas and UN Sustainable Development Goals

- Deliver on your mission and showcase differentiation

- Identify potential collaborators across sectors

# CURRENT CHALLENGES

# Open Research Cycle

Header 2



Idea → Grant → Preprint → Methods → Data → Article → Patent ⇢ Impact

arXiv.org
ARDC Research Data Australia
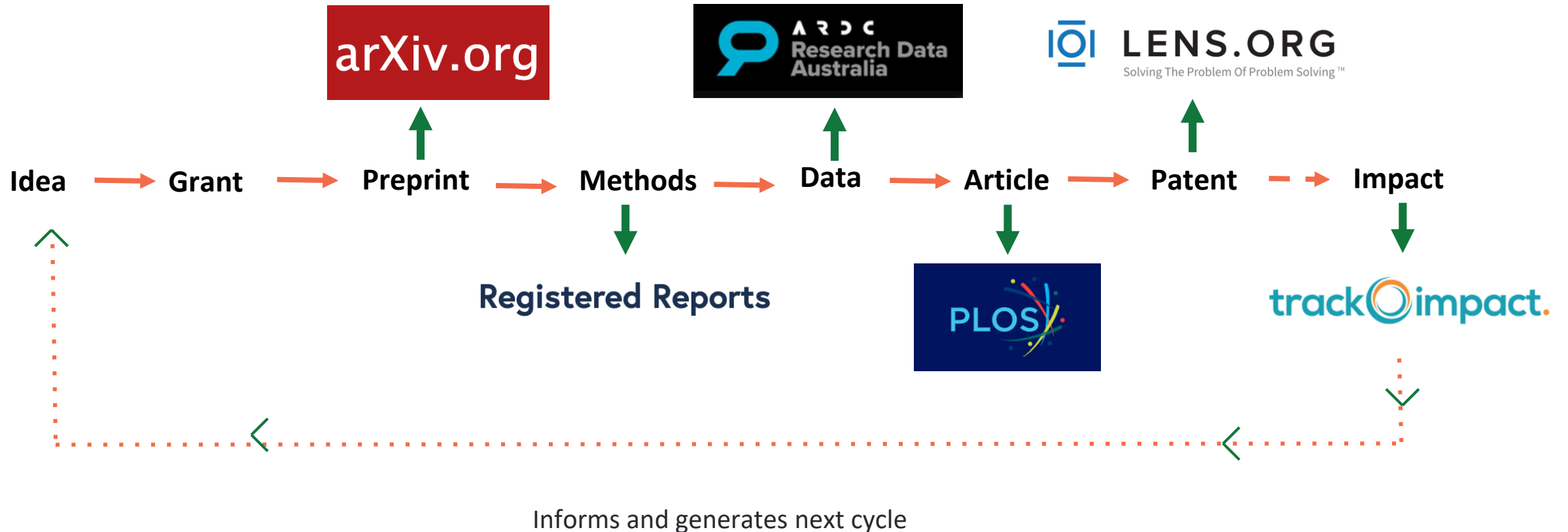LENS.ORG — Solving The Problem Of Problem Solving ™
Registered Reports
PLOS
track impact.

Informs and generates next cycle

# Impact Reporting Now

## Current experience

Reliant on senior management support, understanding and resourcing

Still cyclical in nature

Siloed in different departments (KEF, REF, EI, Public Engagement)

Not integrated into organisation performance analysis

Recognition limited to individual internal Awards

Is impact performance really valued?

*Photo | Aaron Hare | UnSplash

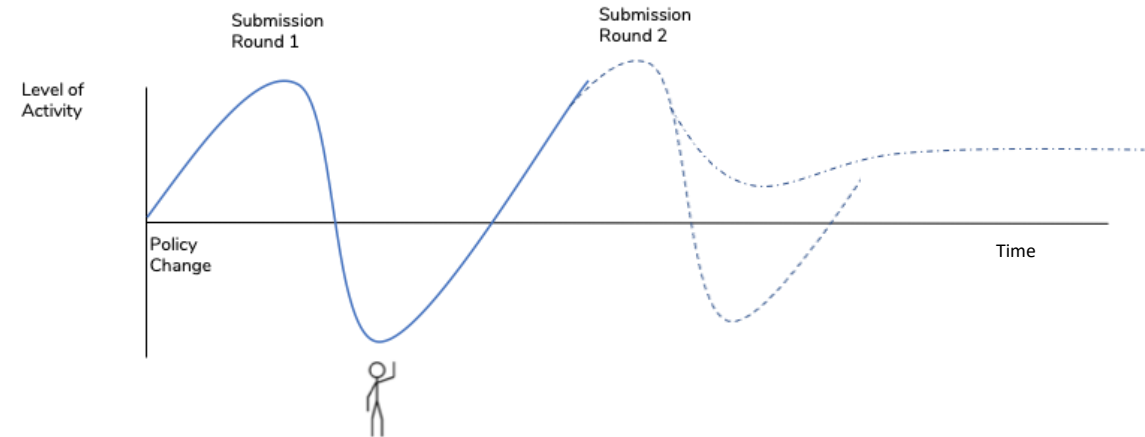# How Do You Value Impact As Part of Business As Usual

## Impact should not just be a priority every X years

What additional incentives/levers/messaging can be used?
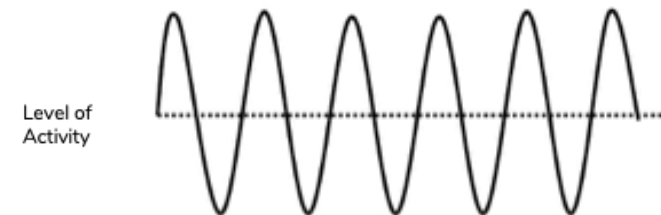
THE Impact Ranking, KEF can help stimulate annual reporting but

BUT … Visibility of impact and contribution towards achieving the UN SDGs is needed in real time

**National Assessments**



**THE Impact Ranking**

# Make This the
# Decade Of Action

## How do we value impact?

How do we best utilise impact information to solve the greatest challenges, for a more sustainable world …. by 2030?

How do we operationalise impact throughout an organisation?

How do we incentivise academics/teams based on their impact?

How can we keep momentum post national assessment submissions for impact?

**track impact.**



*Photo | Jakob Owens | UnSplash

# Thank You

# Questions?

Email: Laura.Tucker@vertigoventures.com

# Up Next

12.30-13.00          Break

13.00-15.00          Closing Panel: "Recommendations for the Polish science system, and beyond"

AESIS

#IoS20