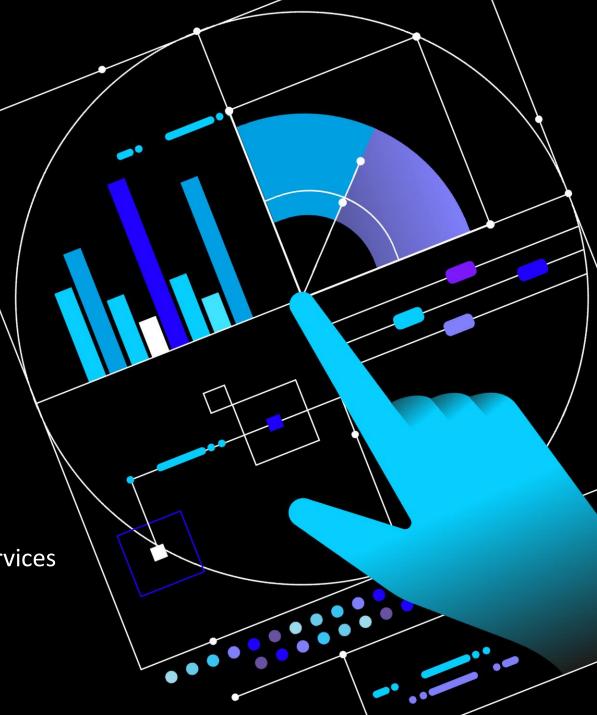


# The 2025 World University Rankings

**Duncan Ross** Chief data officer Times Higher Education **M'hamed El Aisati** VP Analytical and Data Services Elsevier



## **50+ Years of Insights**

Empowering higher education by combining data and expertise within a global platform, THE helps universities deliver transformative impact for people, places and the planet.

We connect the world's higher education community, facilitate the flow of ideas and talent, and help academics and students fulfil their potential.

We are proud to support universities, and believe that together we will build a better, more sustainable future.





2024

s and strategic co	ucation suitancy support to agenda setting e cation to make smarter, more inform		solutions, our				
	Rankings		Resources	Tames Hyper Education	Home News Rankings Jol		
glar	The world's must comprehensive univer- tankings	sty	THE Campus brings together insight and solice for academics and university staff daily	News	Home	Latest Opinion In-depth Leadership	Digital editions Newsletters Q Q
$\rightarrow$	лl	$\rightarrow$	Ee -	🗎 🏹 Cam	PUS 涍 Spotlight 🍕 ur	nlocking the potential of open acces	ss and open research ≽ 👗
	Jobs Higher reducation's global job board		Data Heiging leaders make better decisions	LATEST NEWS >	TOP STORIES >	RANKINGS >	EVENTS >
→	8	$\rightarrow$	8 -	→	1		
1000	Times Higher Education	on		e far: Latering behind hars hitting fortunes of priore decision ii and the state of the the state of the the state of the the state of the the state of the state of the state of the state of the	Array of the second secon	Two new tables - o science and online	I schedule CAMPUS >
				Stay i	nformed with <i>THE</i> . Sign (	up to our free newslette	rs.
		-	-	NORTH AMERICA	EUROPE >	ASIA >	AUSTRALIA & NEW ZEALAND >
				Robbins to depart Arizona a financial woes @	mid deep Sexual harassment of PhDs linke academia's feaky pipeline' ii	d to Al-generated lecturers take a turn Hong Kong university @	at . Academic careers recommended by just

## **Our Rankings**

### RESEARCH



**Focus:** research output, research quality, research collaboration, reputation + more

**Participation rules:** 1,000+ publications over 5 years, teach undergraduates across a range of subjects

## **IMPACT & SUSTAINABILITY**





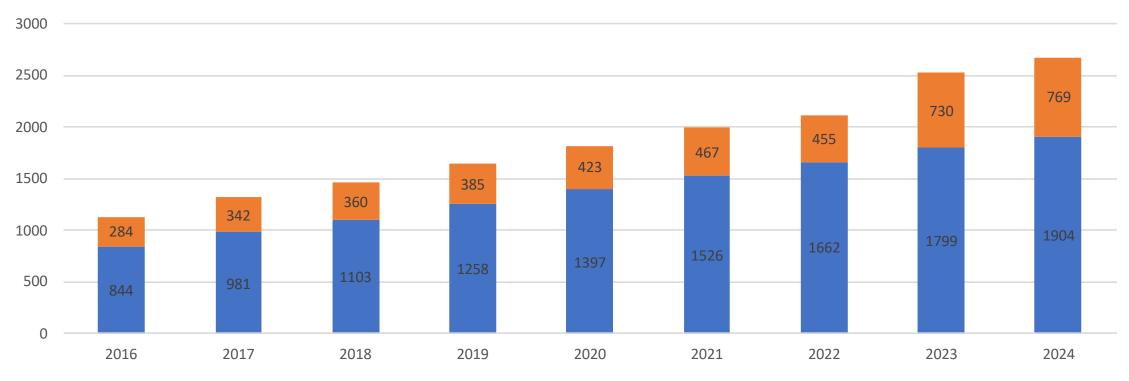
**Focus:** research, teaching, stewardship and outreach against the UN's 17 Sustainable Development Goals

Participation rules: all UG or PG higher education institutions



## WUR 2024: 20<sup>th</sup> Anniversary of THE World University Rankings

Number of universities which submitted data to THE World University Rankings



ranked unranked





# The world's biggest university ranking

## Universities

The world's biggest university ranking



## **Universities** Data

Rankings 2025

The world's largest data gathering exercise from universities



Data fields collected

216

## **Bibliometrics**

In partnership with  $\begin{tabular}{c} ELSEVIER \\ \hline \end{tabular}$ 

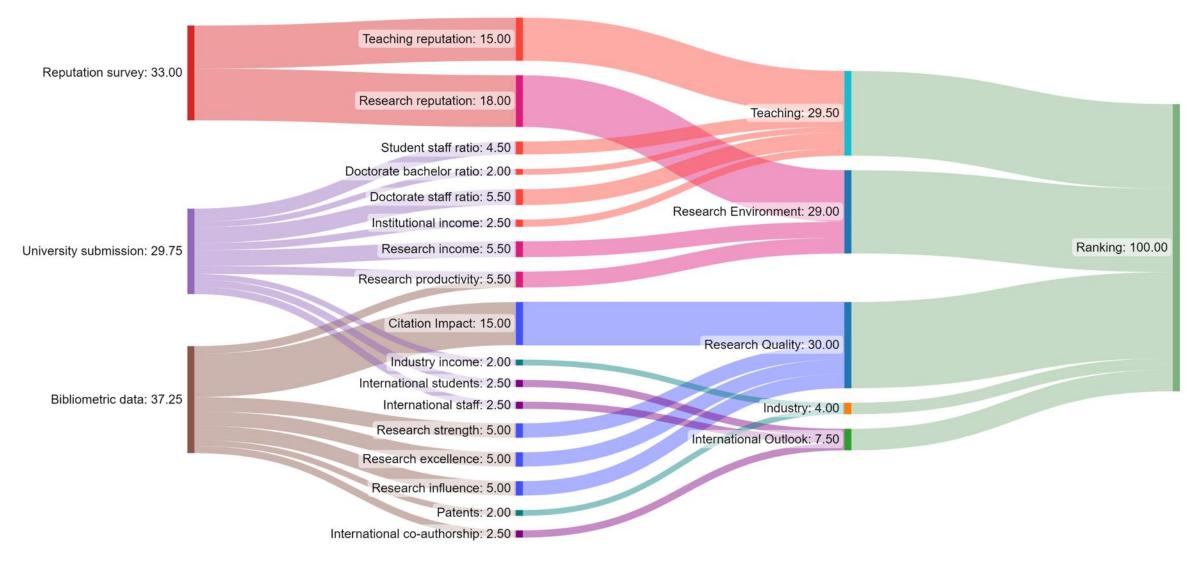


## Academic Survey

The world's largest academic survey



# Methodology



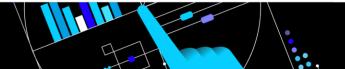


## Changes 2022 onwards

Taking a more sophisticated approach to metrics

- Bibliometrics
- Reputation assessment
- Validation and comparison





## **Partnership with Elsevier**

THE and Elsevier have recently renewed their partnership agreement.

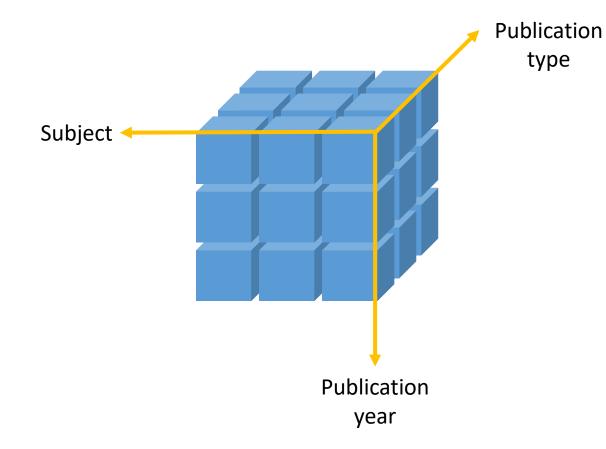
THE will now be calculating bibliometric measures directly from the source data, with support from Elsevier.

Both companies will share expertise, experience and data to support the sector.





## The basic units of bibliometric understanding

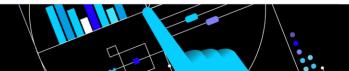


Let's say I published a journal article in 2019 on artificial intelligence, and it received 6 citations so far...

...and the average number of citations received by publications of the <u>same</u> <u>type</u>, <u>same year</u> and <u>same subject</u> is 2...

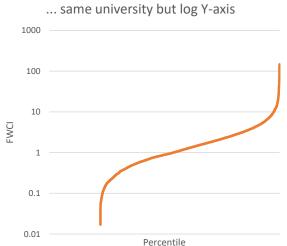
...then the FWCI of this publication is 6/2 = 3



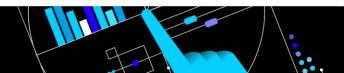


# **THE World University Rankings Research Quality Metrics**

- Citation Impact Mean FWCI of an institution's output
- Research Strength 75<sup>th</sup> percentile FWCI of an institution's out
- Research Excellence Number of papers in top 10 percent by F
- Research Influence Different from others research quality me
  - Not all citations are created equal
  - Citations from important papers counts more
  - How to define "important papers"?

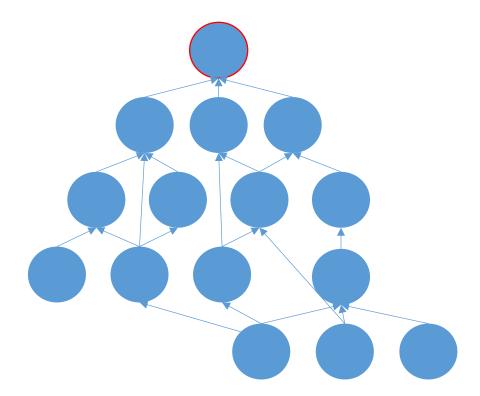


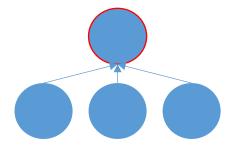




## **Research Influence - Papers**

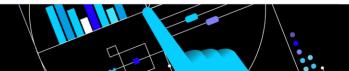
Taking a broader look at how citations interlink gives us deeper insight into the value of research











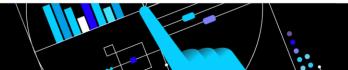
# **Effect on participation rules**

Using a basket of bibliometric measures makes the assessment of quality more stable and robust.

We expect that this will enable us to reduce the number of papers required for participation in the World University Rankings

- Initial reduction in the number of papers per year (maintaining an overall requirement)
- Possible reduction in the overall number of papers required
- Ability to build more sophisticated approaches accounting for subject balance





# **Fairly assessing reputation**

### **Primary goals**:

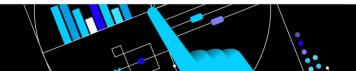
- Randomly selected
- Active academics (published in last 5 years)
- Balanced by geography

### Secondary goals:

• Balanced by subject



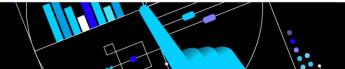




## Academic survey details

	1	2	3	4		5	6
	Data sources	Initial participation rules	Selection method	Stratification	I	Quality checks	Number of responses
New approach	Contact details from openly available research papers	Have published at least once in last five years, with one or more citations	Random	2) Subjec on pre	ct based	National and university level	c 55,000
Previous approach	Contact details from research papers within Scopus	Have published at least once in last five years. Not included in another Elsevier survey.	Random	on cou 2) Subjec on pre	ct based	Mainly national level only	c 10,000





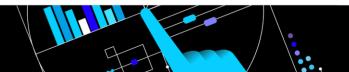
## **Effect of new approach**

The new in-house survey attracts more than 5 times as many votes as the previous out-sourced survey, giving us far more representation, plus deeper insight as we know more about the respondents

	2021 (Elsevier)	2023 (In house)	2024 (In house)	Ratio 2021-2024
Respondents	10,963	38,796	55,037	500%+
Ranking votes	149,536	524,305	764,397	510%+
Countries participating	128	166	193	150%
Response rate	1.6%	1.8%	1.8%	

WUR 2025 will utilise reputation survey results from 2023 and 2024 surveys, utilising more than 5.2 times as many votes in the reputation metrics compared to WUR 2022





# **Changes to reputation**

### Self voting is not wrong, unless it is abused

- Self votes are now limited to a maximum of 10% of an institution's votes
- Only a small number of institutions are affected

## Voting distribution

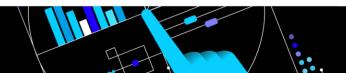


- Where votes come from a small range of institutions it may be an indicator of inappropriate behaviour
- We are now limiting the ratio of votes per institution to approximately 15:1 (to be confirmed)
- Less than 15 institutions are affected

## **Country distribution**

- The current dataset of national researcher numbers is being discontinued
- Need to find a new stratification approach





## Data definitions: staff numbers

Working towards country specific definitions for a number of metrics

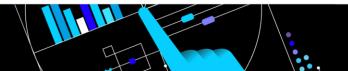
This will allow us to give clearer guidance in individual countries, and also relate this to official datasets

Key principals for calculation

- Use FTE for staff numbers
- Only include staff numbers in relevant roles (academic)
- Where roles are permanent the employment status of the employee is not the issue

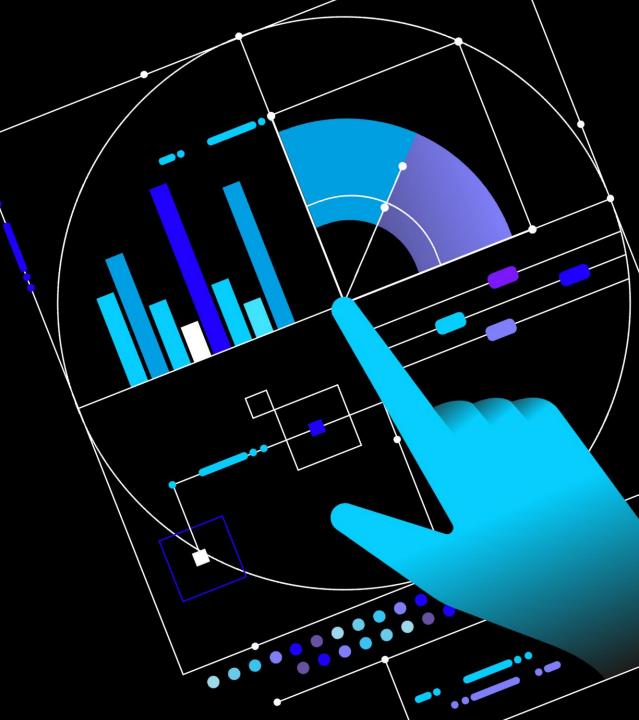
We do want feedback to ensure we can get to consistency across major nations







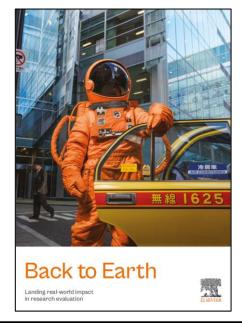
# Operationalising the Academic Evaluation Framework



## **Background and Context**

# For over a decade, Academic communities globally have been calling for the evolution of evaluation systems

To gain insights into the need for change and what prevents it, Elsevier commissioned a global survey of the academic community



## A global survey with 400 respondents:

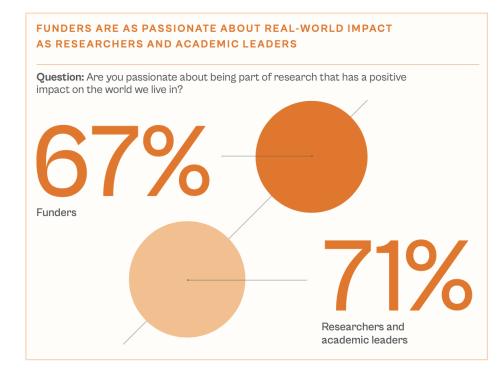
- 180 academic and institutional leaders
- 120 researchers
- 100 executives at funding bodies

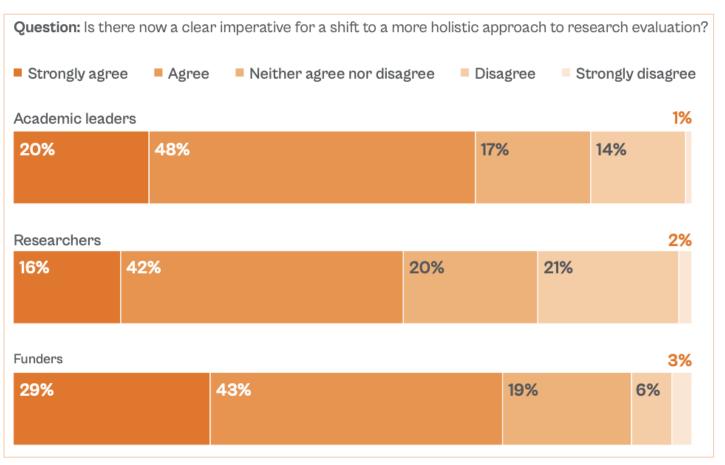






# A clear global trend toward an accelerated holistic evaluation that includes real-world impact

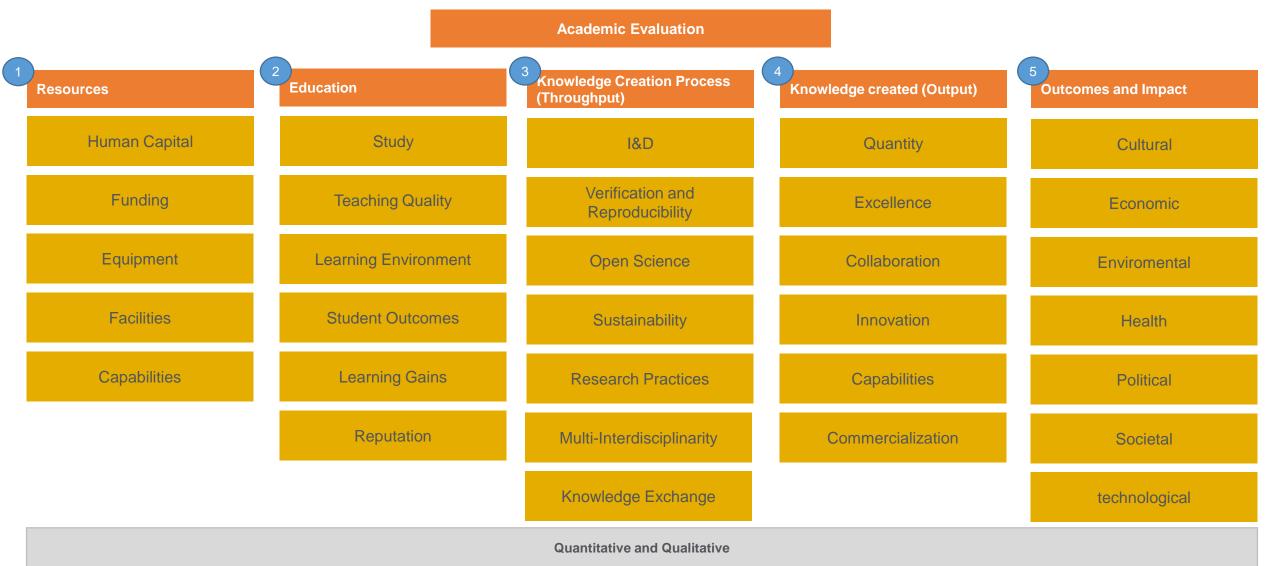




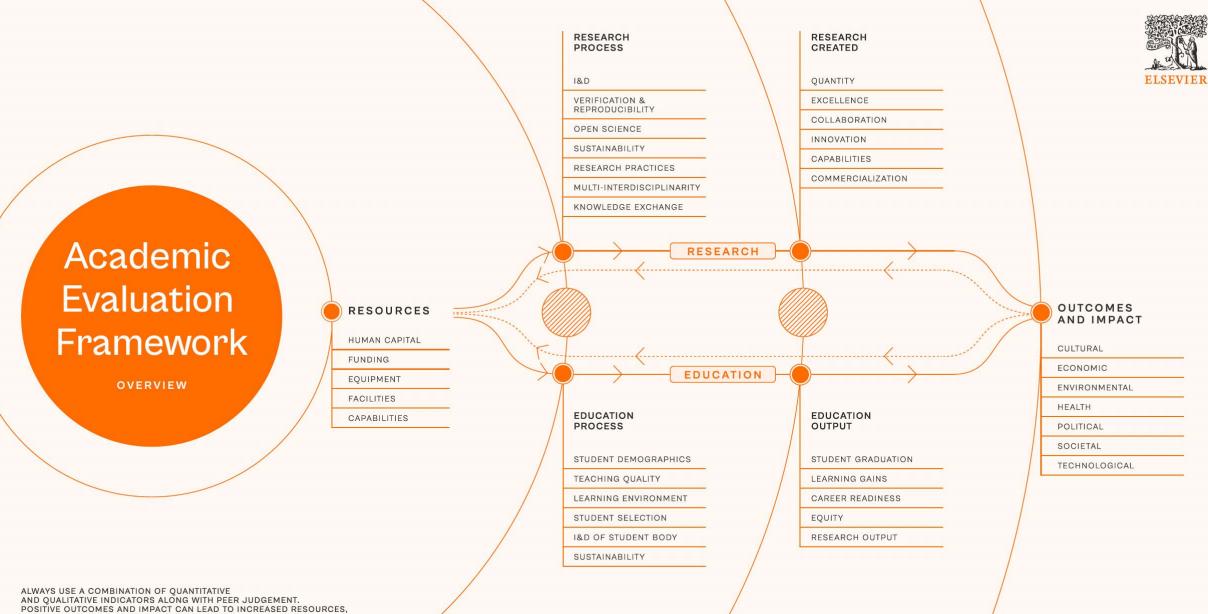




## With this input, Elsevier developed the Academic Evaluation Framework





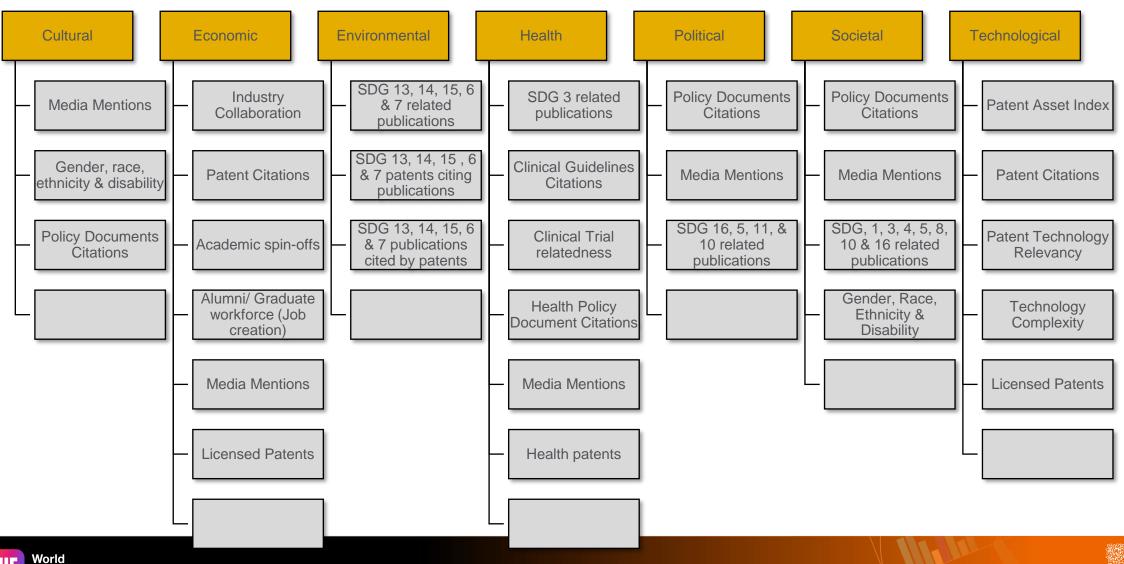


SUPPORTING FURTHER RESEARCH AND EDUCATION ACTIVITIES.





#### **Research Outcomes and Impact**







## **Operationalising the AEF: Examples**

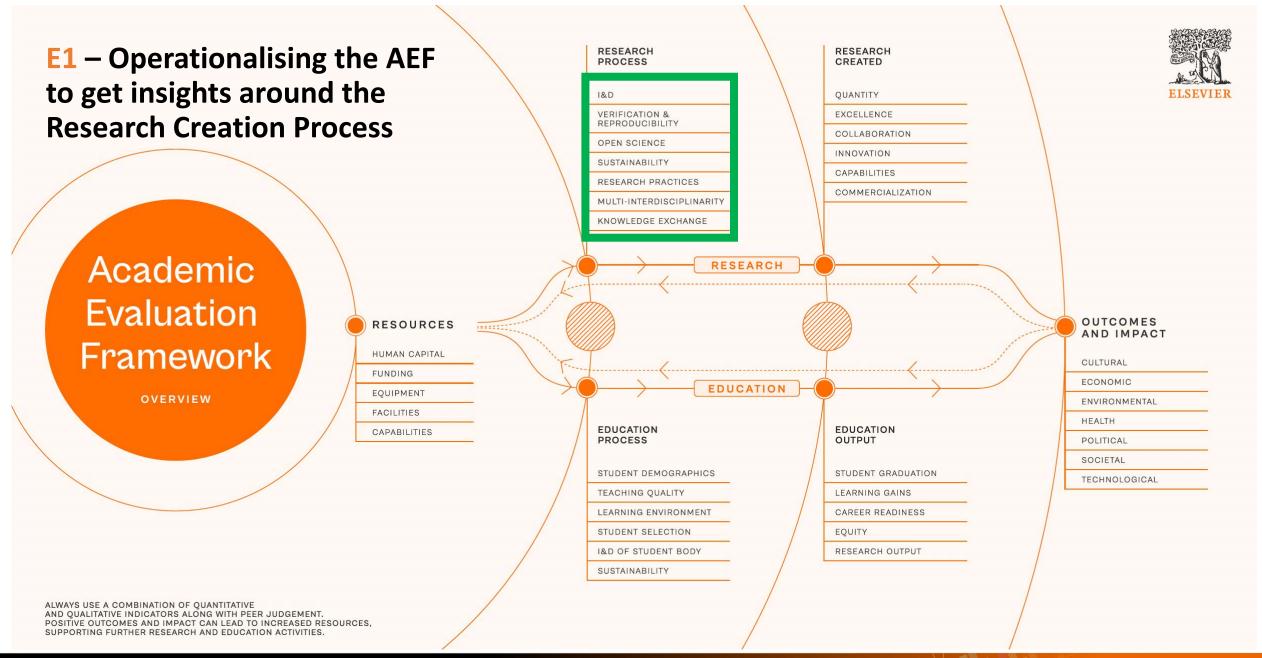
To operationalise the Academic Evaluation Framework to deliver real value beyond bibliometrics, Elsevier has been working closely with universities and funders. This is consistent with and builds on prior collaborative efforts (e.g. <u>Snowball metrics</u>, <u>Tasmanian</u> <u>Societal Impact Model</u>).

The following examples are part of this program of activity. Specifically, we developed a set of indicators to get insights around:

- 1. The research **process**
- 2. Assessing the progress and performance to help TU/e assess its progress and performance in becoming a 'Fourth Generation University'
- 3. Identifying real-world impact output and providing **narratives** around it leveraging GenAI
- 4. Identifying abnormalities in research output







World University Rankings 2025



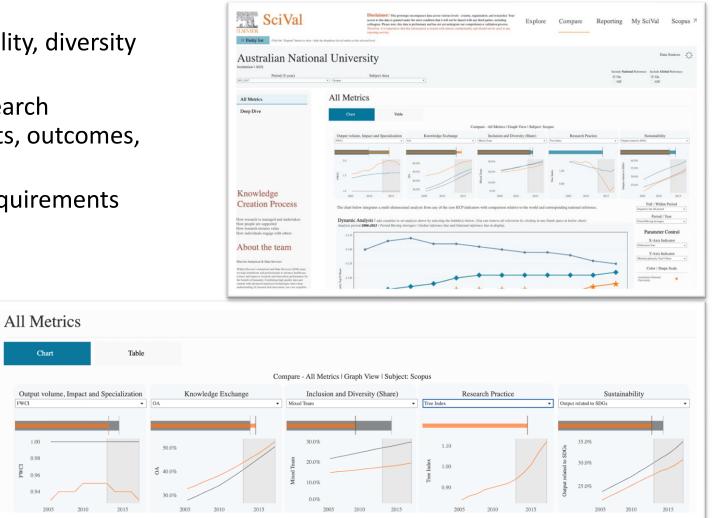
## Underlying drivers for developing a Knowledge Creation Process Dashboard

Chart

FWC

0.98

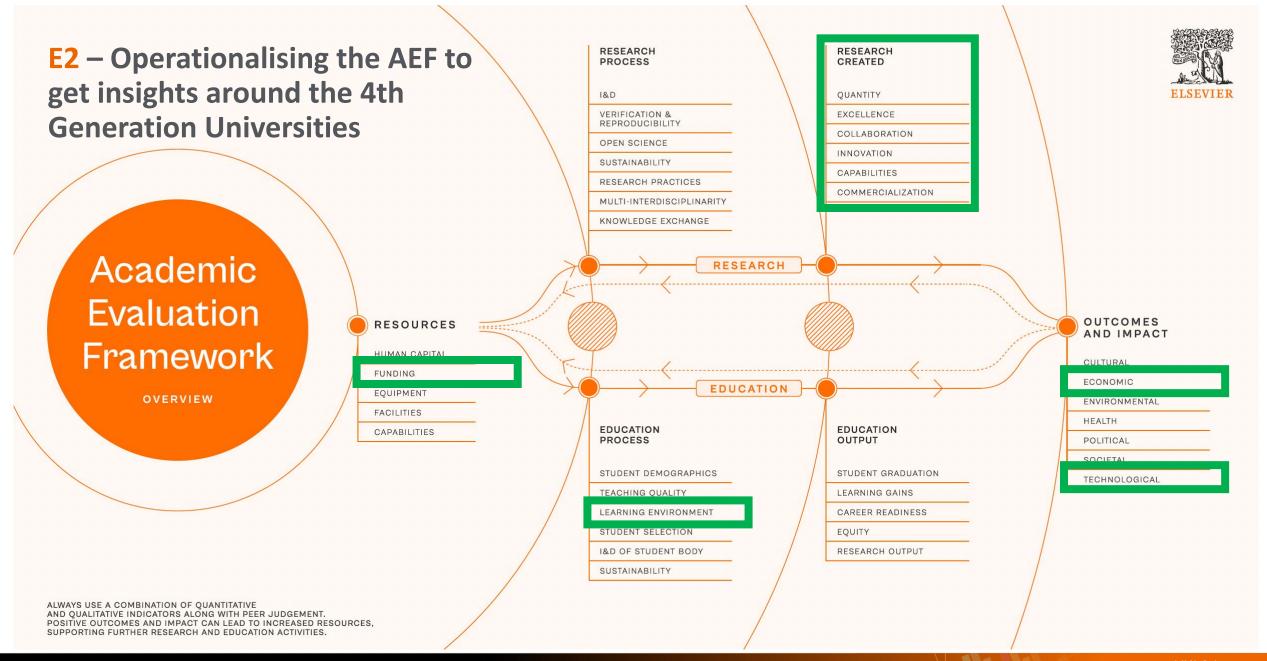
- Showcase commitment to sustainability, diversity & inclusion, etc.;
- Monitor and adaptively manage research • activities to maximize desired outputs, outcomes, and impacts; and
- Comply with eligibility/evaluation requirements











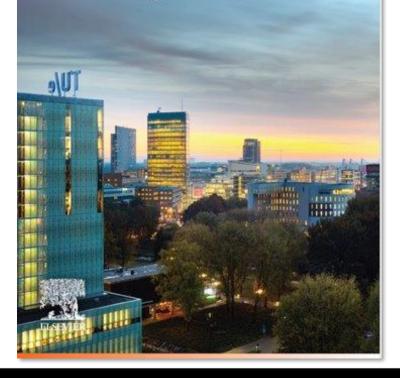




## **Background to 4th generation university (4GU) project**

#### Towards the 4th generation university

The transformative role of TU/e in delivering innovation and impact in the Eindhoven region



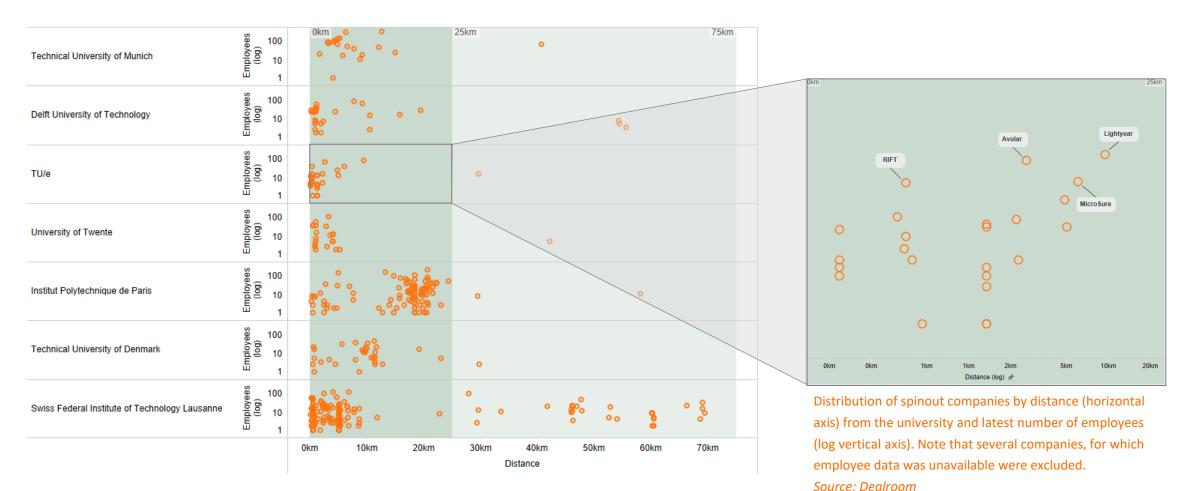
- **Project initiated by TU/e President Robert-Jan Smits** who approached Elsevier looking for effective measures of what universities are trying to achieve.
- Elsevier and TU/e collaborated for a full year to develop and calculate indicators that aimed to capture the four key dimensions of 4GUs.
- The report was publicly launched in March 2024 at the Times Higher European Universities Summit in Bremen.
- Feedback since launch has been extremely positive. Universities and university associations around the world are expressing an interest in being involved.





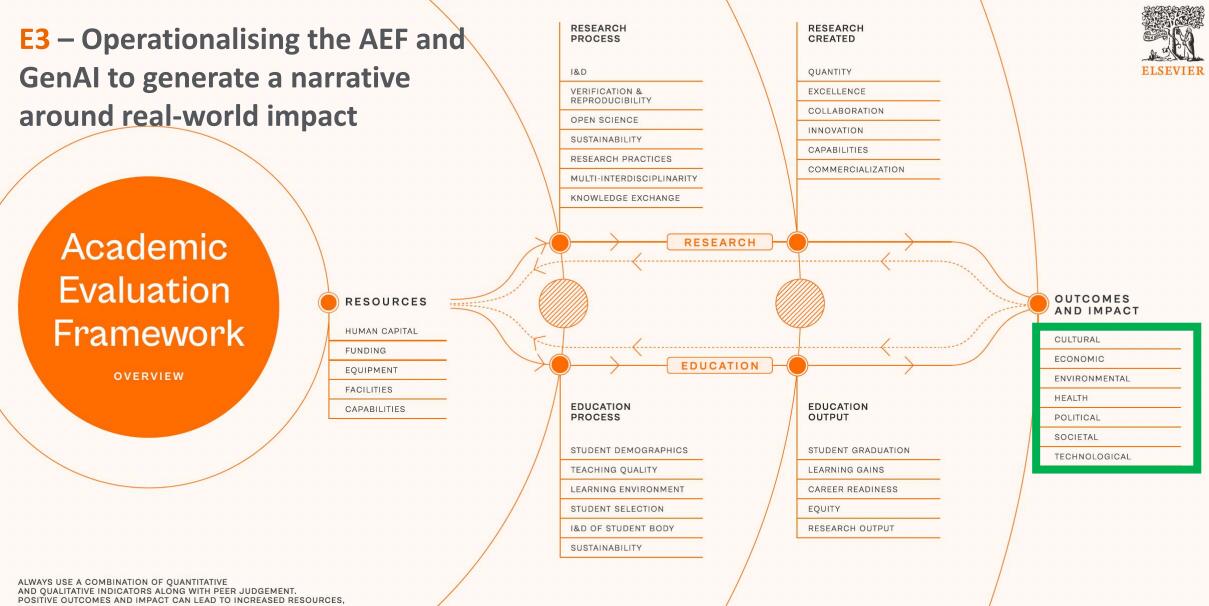
# **Transfer knowledge: spinouts**

### TU/e spinouts establish themselves close to campus, benefiting from university links









AND QUALITATIVE INDICATORS ALONG WITH PEER JUDGEMENT. POSITIVE OUTCOMES AND IMPACT CAN LEAD TO INCREASED RESOU SUPPORTING FURTHER RESEARCH AND EDUCATION ACTIVITIES.

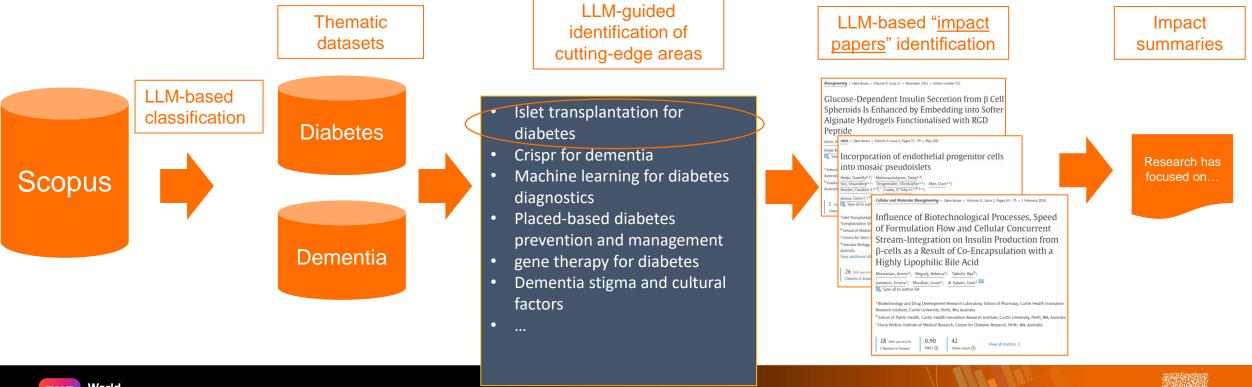




## E3 - Real-world impact: economic, social, environmental

Assessing research impact beyond bibliometrics, technometrics (patents), and policy: What is the <u>real</u> <u>impact</u>?

Key idea: Identify papers that discuss the economic, social, environmental, and other impacts of research on cutting-edge technologies/interventions



ELSEVIER



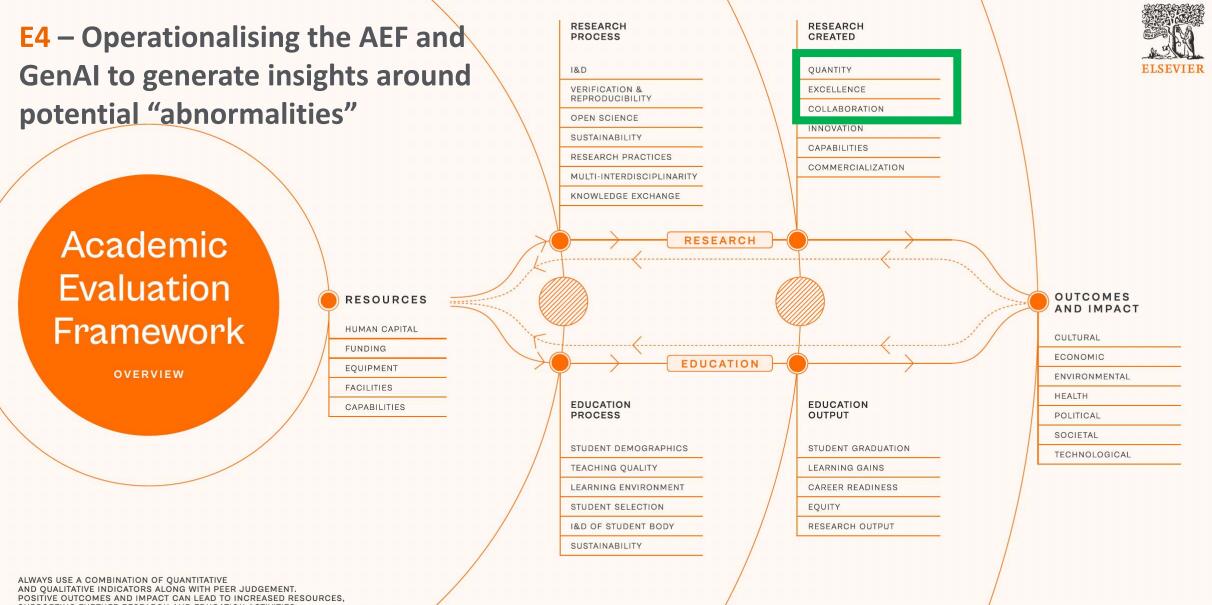
## E3 - Examples of impact summaries (2 of 27)

### Real-world impact: economic, social, environmental

Cutting- edge Area	Impact summary
CRISPR for dementia	CRISPR Technology for Dementia: Unraveling the Complexity of Neurodegenerative Diseases CRISPR/Cas9 genome editing has been employed to investigate the molecular mechanisms underlying dementia, a complex and multifactorial neurodegenerative disorder. In CLN3 disease, a lysosomal storage disorder associated with fatal neurodegeneration, CRISPR/Cas9 correction of the 966 bp deletion mutation in human induced pluripotent stem cells (iPSCs) revealed disease-related changes in protein synthesis, trafficking, and degradation, as well as neuronal activity (10.1242/dmm.049651). Similarly, CRISPR/Cas9-mediated knockdown of APOE in SK-N-SH human neuroblastoma cells demonstrated that apoE is not essential for neuritogenesis or cell survival, but its loss affects HtrA1 expression (10.1042/BSR20204243). In amyotrophic lateral sclerosis (ALS), CRISPR/Cas9 editing of the TARDBP gene introduced a heterozygous missense mutation, generating a human iPSC line with normal cellular morphology and pluripotency markers (10.1016/j.scr.2023.103137). Furthermore, CRISPR/Cas9- mediated generation of a tau knockout strain in mice revealed reduced susceptibility to excitotoxic seizures and normal memory formation in young mice (10.3233/JAD- 171058). Additionally, CRISPR/Cas9 tagging of TDP-43 in live cells showed that aggregation-prone TDP-43 sequesters and drives pathological transitions of free nuclear TDP-43, exacerbating neurodegeneration (10.1007/s00018-023-04739-2). These studies collectively demonstrate the potential of CRISPR technology in elucidating the molecular mechanisms underlying dementia and related neurodegenerative diseases.
Machine learning for diabetes diagnostics	Machine Learning for Diabetes Diagnostics: A Synthesis of NHMRC-Funded Research The NHMRC-funded research has made significant strides in leveraging machine learning (ML) for diabetes diagnostics, demonstrating its potential in predicting end-stage kidney disease (ESKD), detecting nocturnal hypoglycemia, and identifying cardiac autonomic neuropathy (CAN). A non-invasive, real-time imaging technique using auto- fluorescence multispectral imaging (AFMI) was developed to assess reactive oxygen species (ROS) levels in live cells and tissues, which can contribute to progressive diseases like diabetes (10.1016/j.redox.2020.101561). An ML model was trained on featurized time series data to predict ESKD with superior performance compared to clinicians and the Kidney Failure Risk Equation (KFRE) (10.3389/fmed.2022.837232). Retinal age gap, calculated using a deep learning model, was found to be associated with metabolic syndrome and inflammation (10.1111/1753-0407.13364). Electroencephalogram (EEG) spectral moments were used to detect nocturnal hypoglycemia in type 1 diabetes patients, with significant changes observed in spectral moments during hypoglycemic episodes (10.1109/JBHI.2019.2931782, 10.1109/JBHI.2021.3054876). Finally, an ML model was developed to predict CAN occurrence in patients with diabetes using clinical data, demonstrating outstanding performance with a receiver operating characteristic curve of 0.962 (10.1177/20420188221086693).







POSITIVE OUTCOMES AND IMPACT CAN LEAD TO INCREASED RES SUPPORTING FURTHER RESEARCH AND EDUCATION ACTIVITIES.



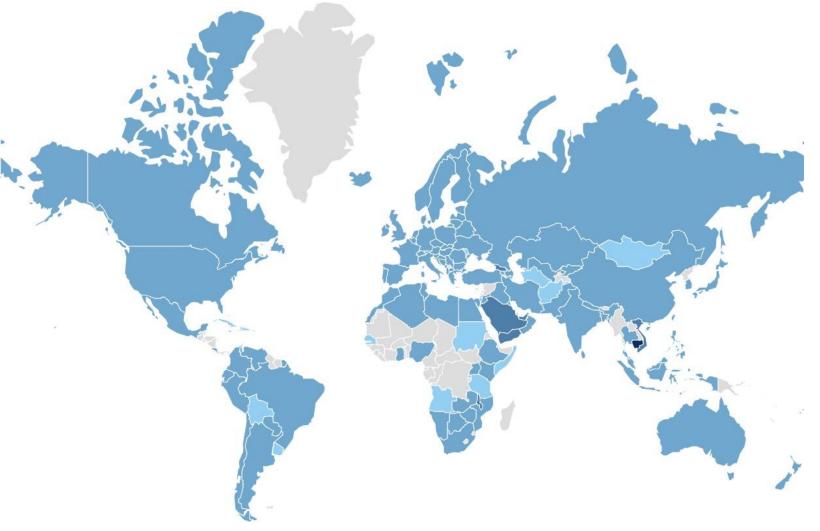


# Hyperprolific authors's contribution to publication output

### Period = 2019-2023

Hyperprolific author = author with > 19 papers in one single publication year

Colour scheme = the darker the higher is the % of publications from by highprolific authors relative to total country output



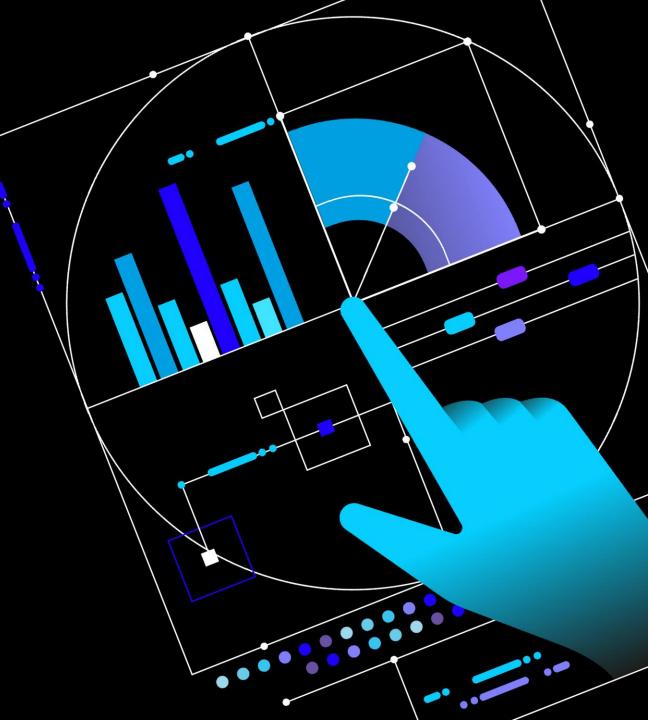






# **Country insights**





# What's happening in the UK (and Australia)?

### FINANCIAL TIMES

COMPANIES TECH MARKETS CLIMATE OPINION LEX WORK & CAREERS LIFE & ARTS HTSI

Education ( + Add to myFT

More than half of British universities slip down global rankings

Australian universities rise in world rankings but experts warn international student cap could hurt 'cutting-edge' status UK universities face 'irreversible decline', global league table suggests

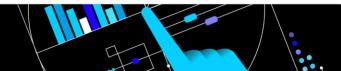
British institutions face possible closure as 52 out of 90 are given lower positions this year in Quacquarelli Symonds (QS) rankings



Imperial College London has been named as the second top education institution in the world in the annual QS rankings, but was one of only 20 British universities to see its ratings improve. Photograph: Toby Melville/Reuters

UK universities will have their international reputations dented and face possible closure because of continuing funding pressures, according to an

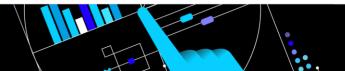




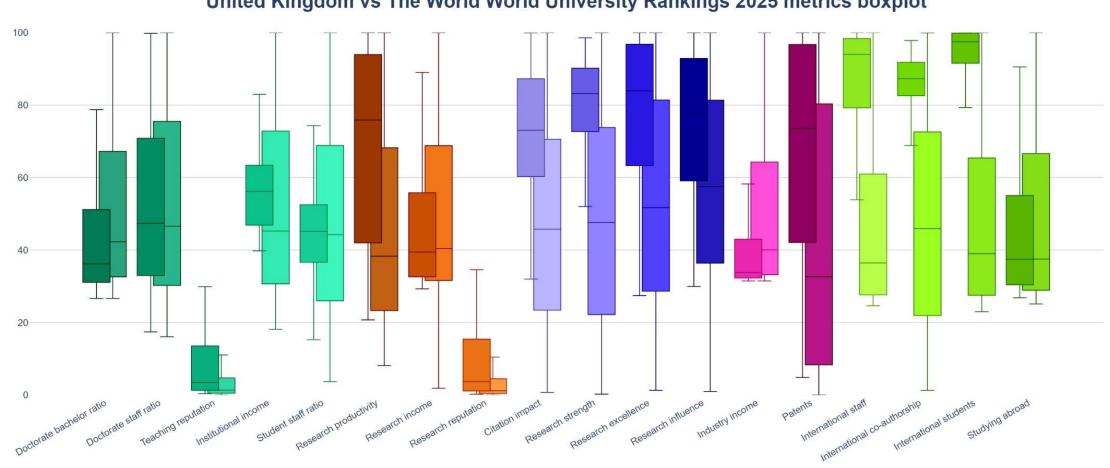
# "The report of my death was an exaggeration"

- UK retains 3 places in Top 10
- Oxford is No. 1 for the nineth consecutive year.
- Cambridge stable at 5th place, Imperial College London drops one place from 8th to 9th
- A total of 107 universities from the UK are ranked (up 2 from 105)
- The UK takes 25 places in the Global Top 200, same as last year (12 up, 8 down, 5 unchanged)
- All but two (University of Edinburgh and University of Glasgow) of these 25 are in England
- Amongst the UK universities in the Global Top 200, there are notable improvements in funding related metrics (institutional income, research income and industry income). However, both reputation metrics (teaching and research) drop this year.



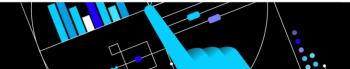


## But there are challenges coming









## **Trouble at the Top**

Russell Group vs World Top 184 Metric Relative Score Difference 2024

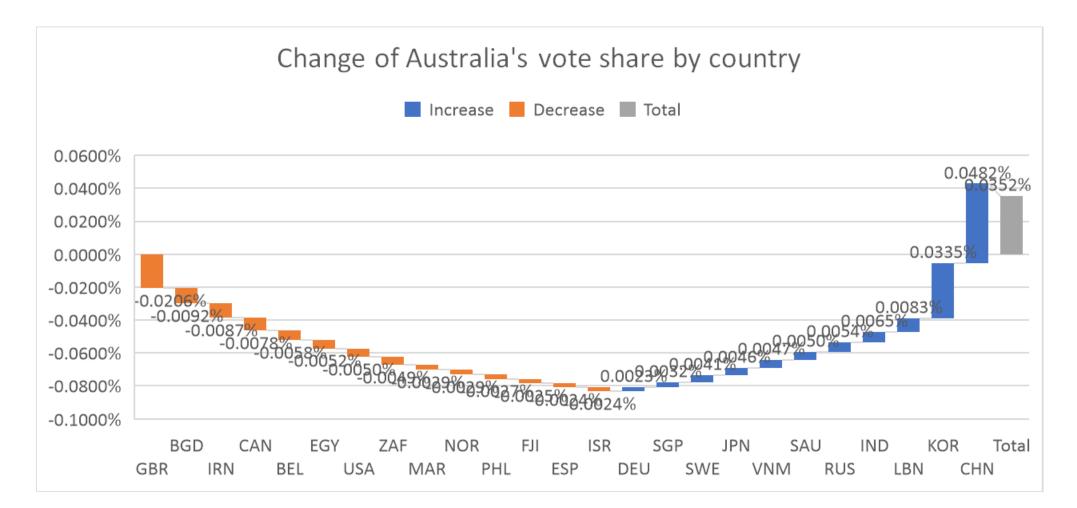


Relative Score Difference

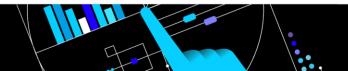




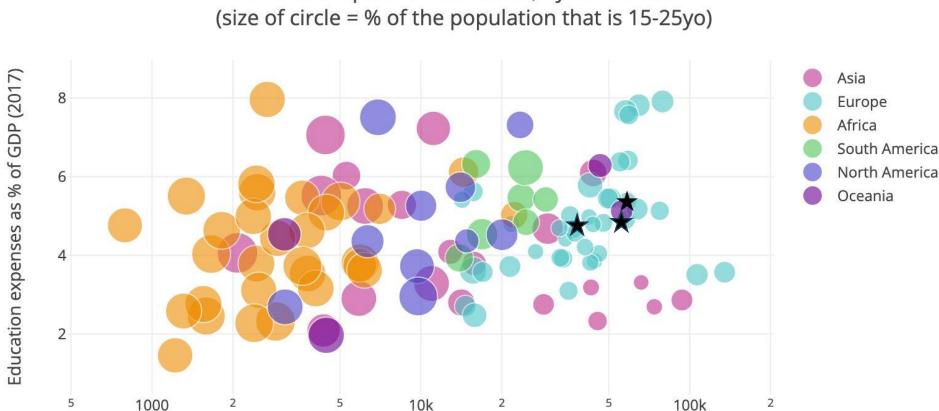
## Australia: a shift of focus







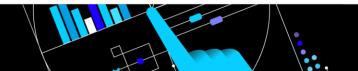
## The European Centre: Germany, Austria, Hungary



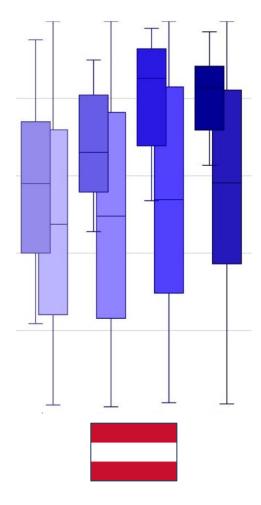
% of GDP spent on education, by size of GDP

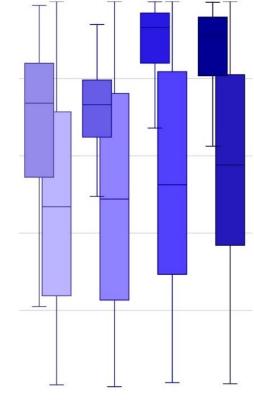
GDP per capita (2021)



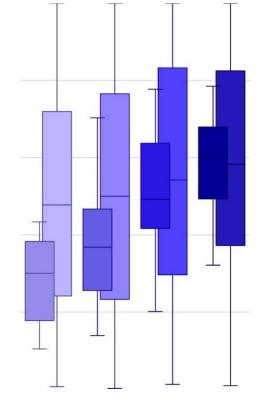


## **Research in the European Centre**



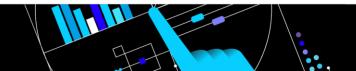




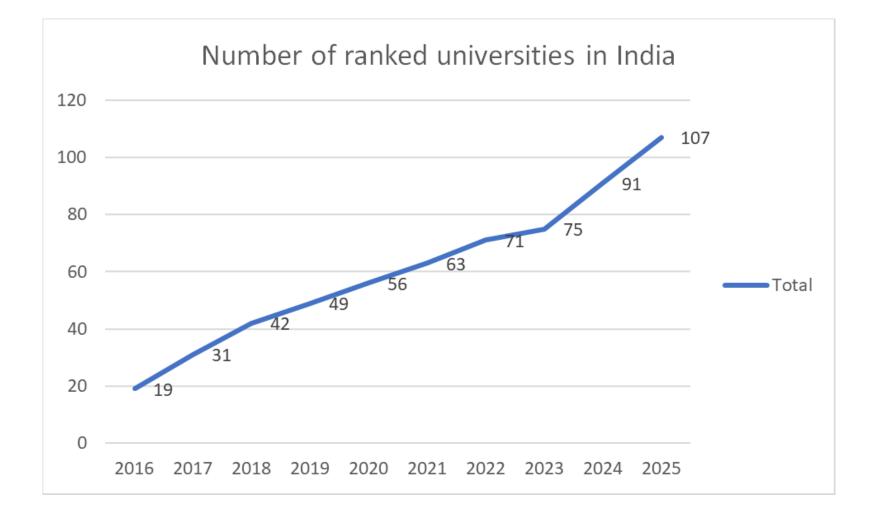




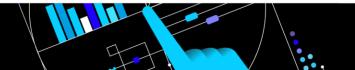




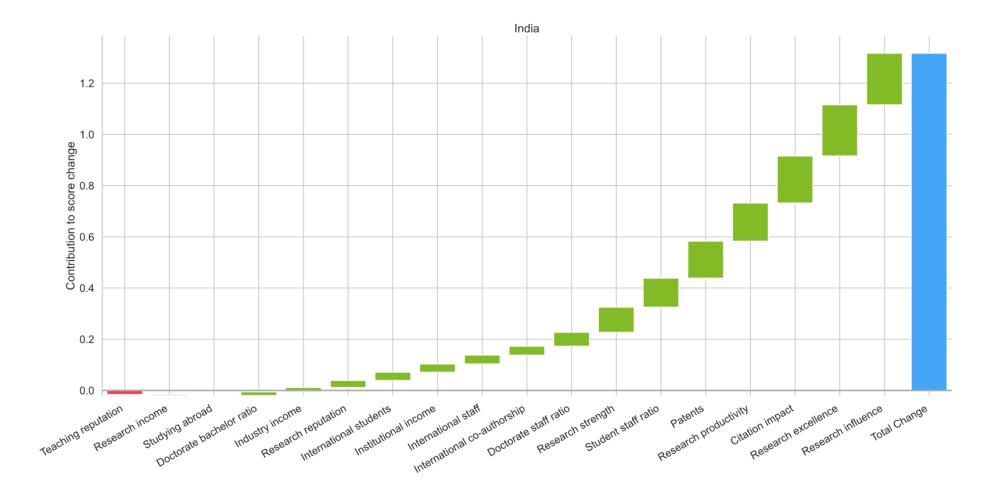
## India's growth



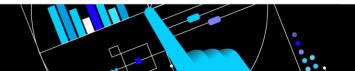




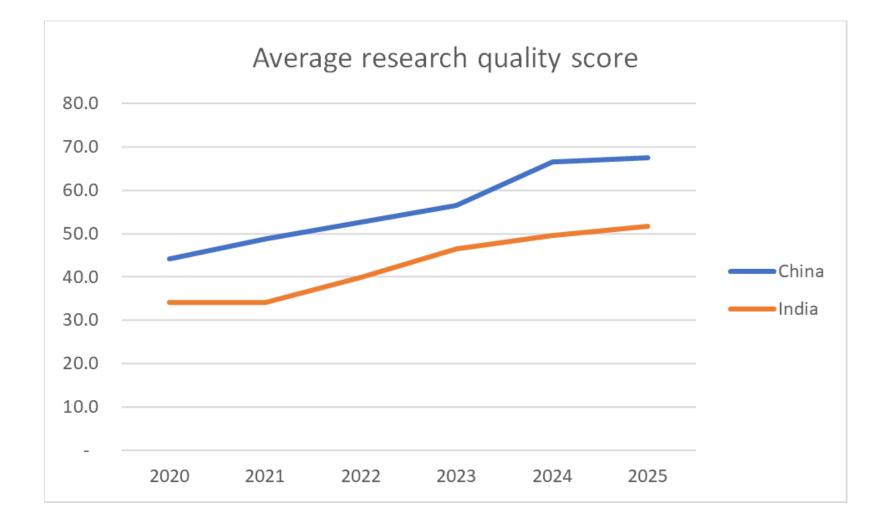
## India's performance



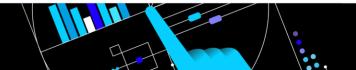




## The chase in Asia







# Thank you



