ELSEVIER

IREG 2023
CONFERENCE

Locally produced, **Globally** connected

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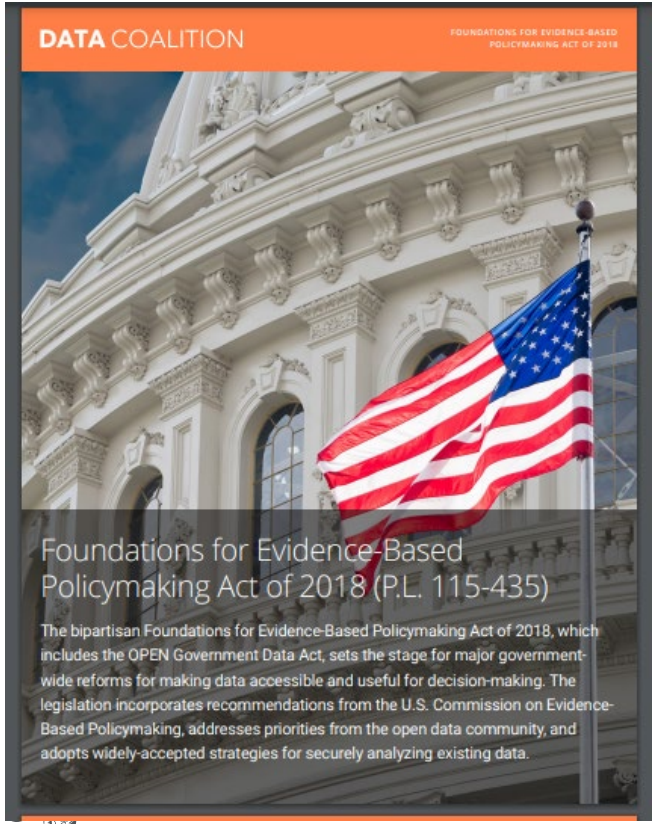
Tashkent, 27 April 2023

Context

A growing need for big data platforms for evaluating **impact** of research, promoting **visibility**, **collaboration** and **innovation**

Evidence based policy - sometimes legally mandated



Demonstrating Societal Impact from Research (increasingly in a quantifiable way)

Discontinuation of Engagement and Impact (EI) 2024 assessment

Australian Government
Australian Research Council

Network Message

The Australian Research Council (ARC) Chief Executive Officer Ms Judi Zielke PSM has announced the discontinuation of the scheduled 2024 round of the Engagement and Impact (EI) assessment. EI assesses how well Australian university researchers engage with end-users of research and how well universities are translating research into impacts beyond academia.

EI is administered by the ARC as a companion assessment to Excellence in Research for Australia (ERA), Australia's national research quality assessment. The ARC is currently developing a plan to transition to a new framework for research evaluation and provide a more modern, data driven assessment. As ERA and EI are interrelated exercises, changes to ERA are likely to impact EI. The ARC previously announced on 30 August 2022 that an ERA round would not be conducted in 2023.

The ARC is being supported by an expert working group in developing the transition plan and considering the resulting impacts to EI. The transition plan will be delivered to the Minister for Education, the Hon Jason Clare MP, in December 2022.

If you have any questions, please email era@arc.gov.au or phone +61 2 6287 6755

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Research Assessment - EU Reform

455 signatories (as of 27 January 2023)

Rankings increasingly questioned

"We cannot blindly follow others or simply copy foreign standards and models when we build world-class universities of our own. Instead, we must proceed from our country's realities and blaze a new path to developing world-class universities based on Chinese conditions and with Chinese characteristics,"

China's President Xi Jinping at Renmin University on 26 April 2022

Source: University World News (https://www.universityworldnews.com/post.php?story=20220511170923665)

Why are we not progressing?

Incomplete, fragmented and unconnected data

- Commercial citation databases often lack local language content
- Some disciplines (e.g. arts and humanities) focus on “non traditional” research outputs which are harder to find.
- Research and innovation data sources (and responsibilities) often disconnected
- Data standards often absent and have limited impact even where they exist - causing e.g. incorrect attributions.

These factors lead to the research community having less confidence in decisions and less trust in decision makers

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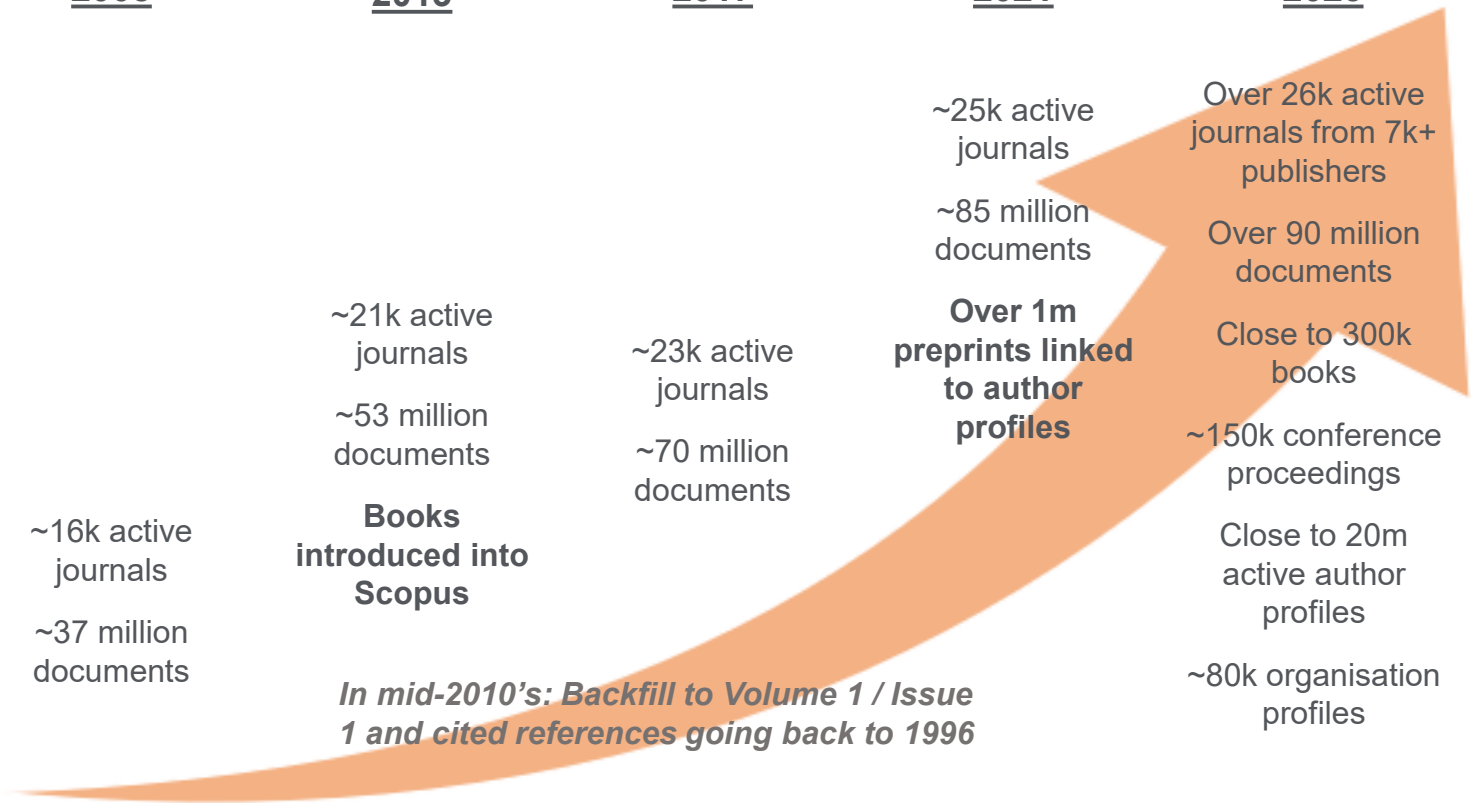
Scopus data evolution in ~20 years



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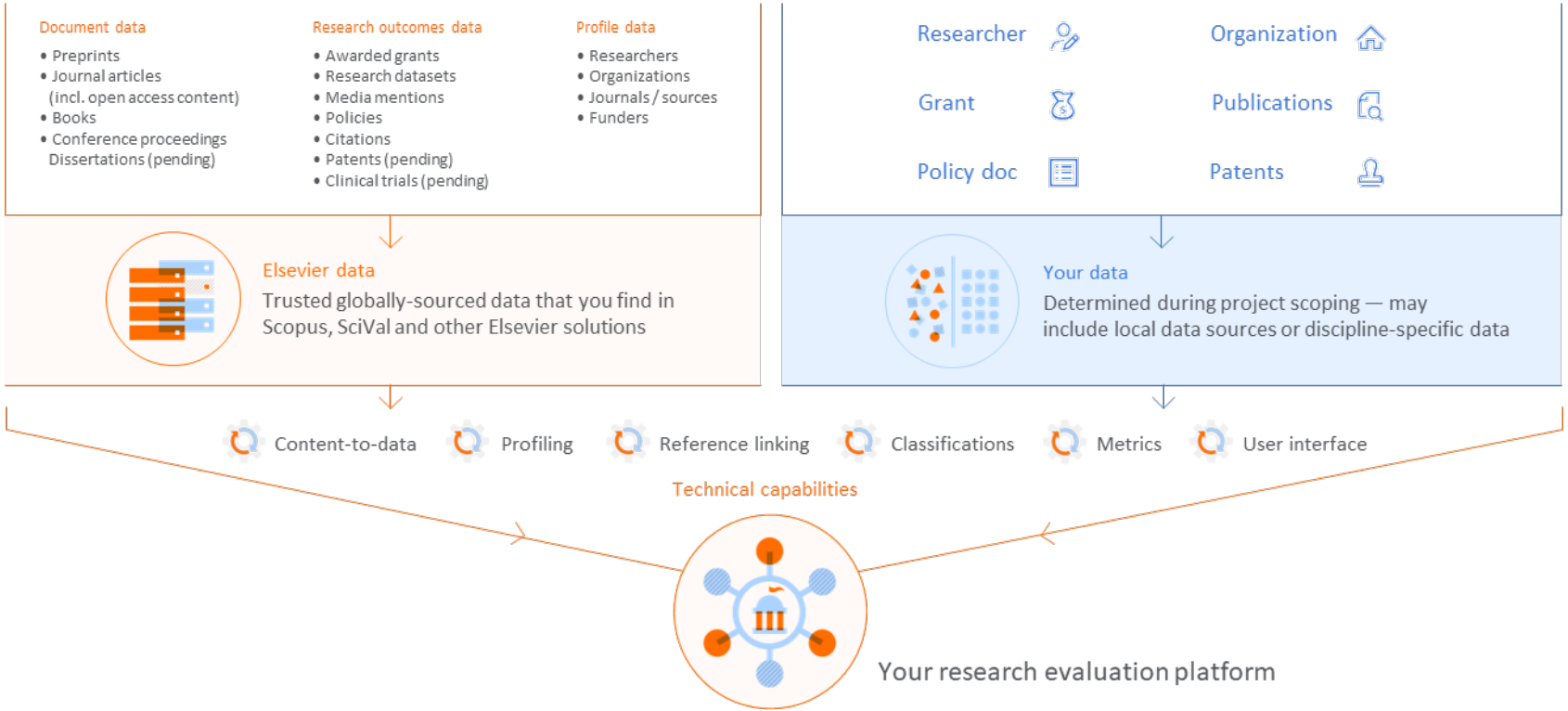
Opportunity

We are supporting the research community by addressing these drivers using National Research Evaluation Platforms

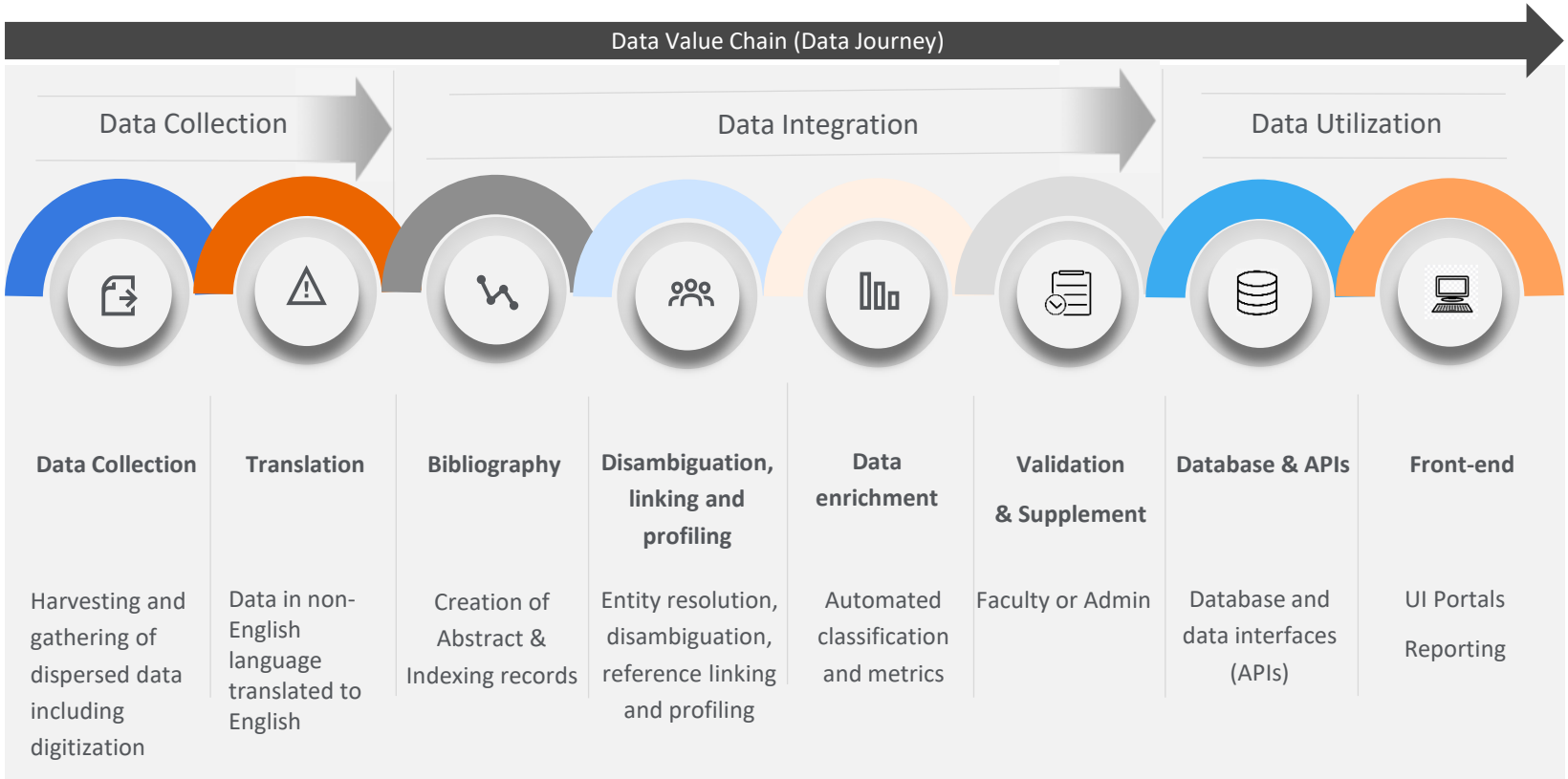
A tried and tested approach

What is a National Research Evaluation Platform? A platform that provides a knowledge network to support high value decisions



The knowledge network delivers an integrated view of relevant research data, ensuring client high-value decisions are based on an inclusive, true and impartial picture of their nation's research ecosystem.

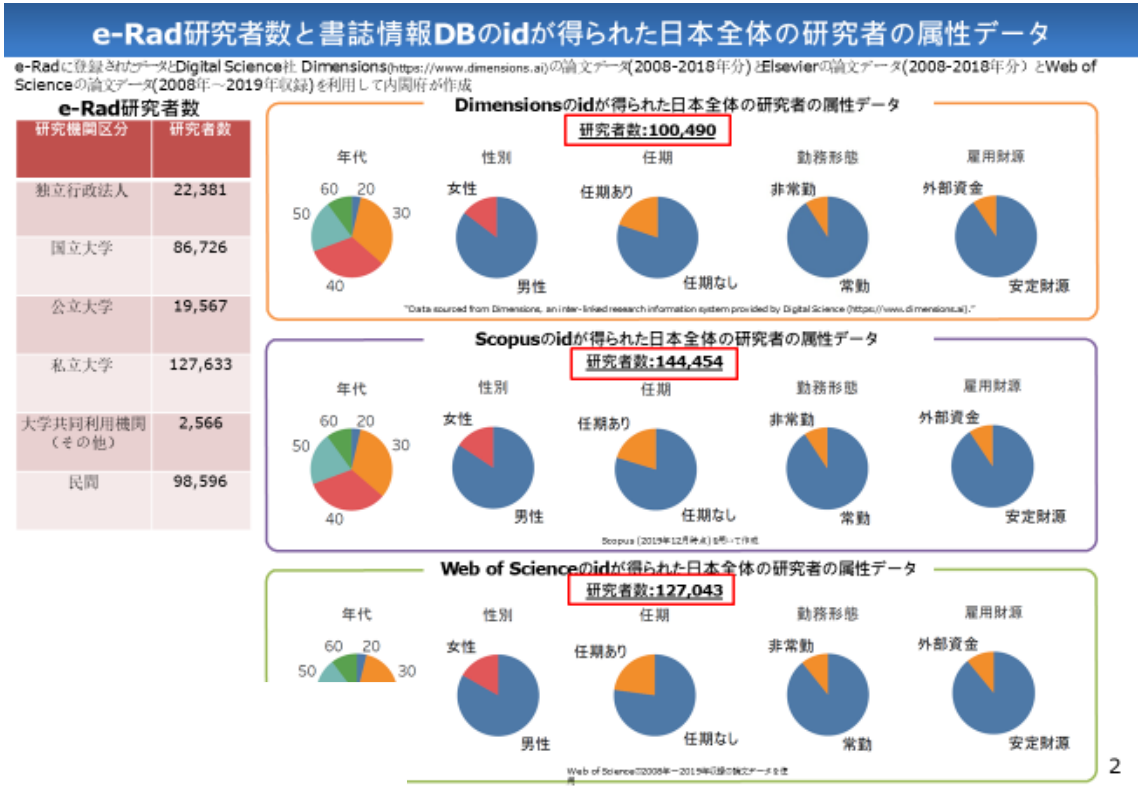
A modular National Evaluation Big Data Platform



Case study 1: The Cabinet Office (CAO), Japan

Japanese Cabinet Office

CAO's e-CSTI: An evidence based system to evaluate research in Japan



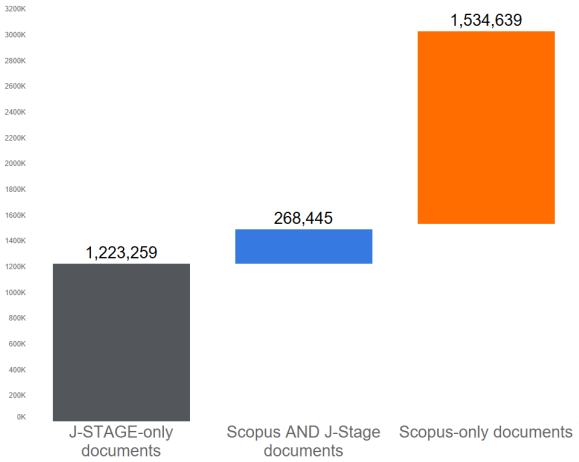
Researchers profiled

Dimensions
100,490

Scopus
144,454

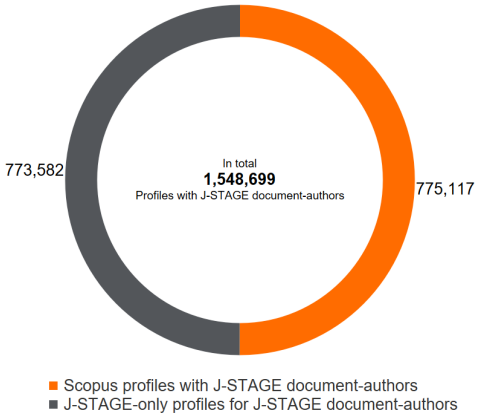
WoS
127,043

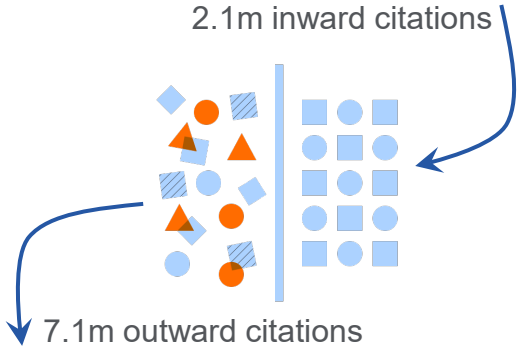
Integration of J-Stage data has **significantly increased** the number of papers overall, profiles and citations to provide a **comprehensive overview** of the Japanese research landscape



Japanese research output augmented by **66%** through the inclusion of local data (J-Stage)

49.5% of Japanese author profiles originate from local data (J-Stage)





Local data (J-Stage) publications have received over **2.1m** citations, while have given over **7.6m** citations to J-Stage and Scopus publications

Integration with J-Stage data has **significantly increased** the number of papers in many fields, especially in the **humanities and social sciences**

J-STAGEデータの追加による日本語論文を含めた書誌データの活用

- 書誌情報データベース（Scopus（Elsevier））にJ-STAGE（科学技術振興機構（JST））のデータを追加し、分析対象を日本語論文にまで拡大
- J-STAGEの追加により、**研究分野別では人文学・社会科学分野の論文数の捕捉率が大きく上昇**

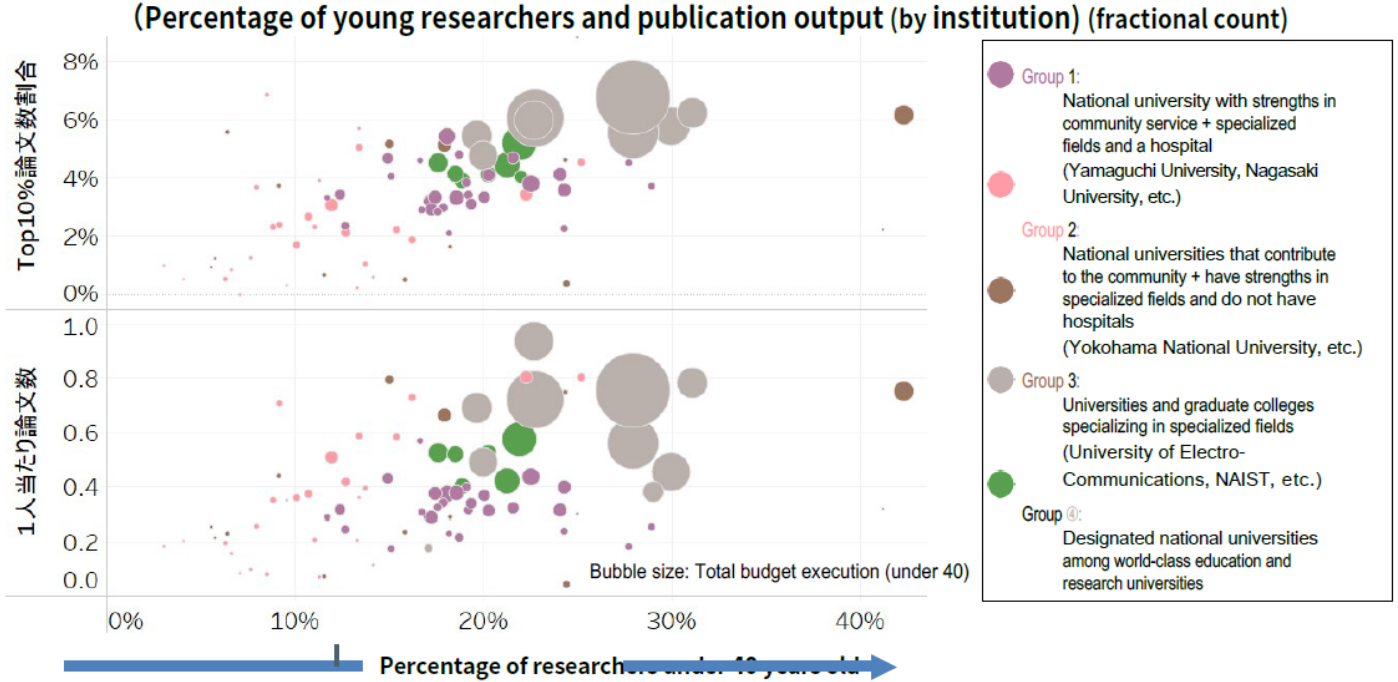
国立大学の論文数（2018-2020年）

研究分野（科研費大区分）		論文数 Scopus のみ	論文数 Scopus +J-STAGE	増加率	[参考] 研究者数
全分野		270,615	348,245	**29%**	79,535
大区分A	人文学・社会科学	9,631	20,518	**113%**	15,223 (19%)
大区分B	数物系科学	41,895	51,876	24%	6,653 (8%)
大区分C	工学（機械、電気電子、土木等）	38,477	59,332	54%	5,949 (7%)
大区分D	工学（材料、ナノ、応用物理等）	32,812	40,368	23%	3,774 (5%)
大区分E	化学	26,862	29,402	9%	3,595 (5%)
大区分F	農学	17,999	24,163	34%	4,182 (5%)
大区分G	生物学	25,209	28,832	14%	5,757 (7%)
大区分H	薬学	18,008	20,368	13%	3,213 (4%)
大区分I	医・歯学	79,383	95,437	20%	22,569 (28%)
大区分J	情報学	23,572	28,837	22%	3,236 (4%)
大区分K	環境学	6,134	8,517	39%	982 (1%)

※論文数の数値は国立大学86大学の論文数（整数カウント）の合計であり、大学間の共著論文は複数回カウントされている。
※研究者数は2018-2020のいずれかの年度に予算執行があった国立大学86大学の研究者数である。
※A～Kの科研費大区分の分野名については文部科学省のホームページを参照。

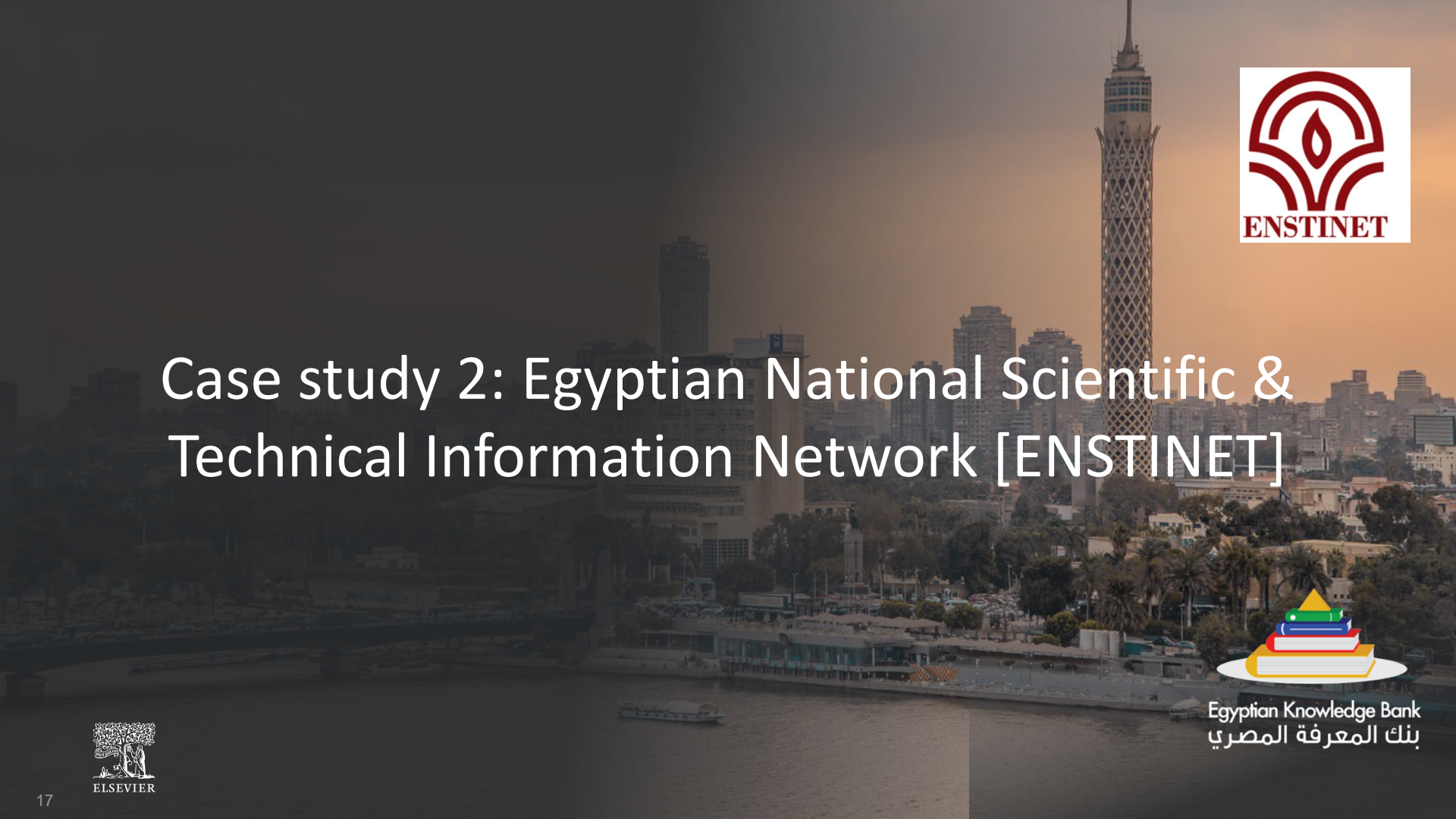
From data to metrics to Insights: Paper output distribution by researchers' age per funding size per institution

■ Universities with a higher percentage of researchers under 40 also tend to have a higher percentage of Top 10%

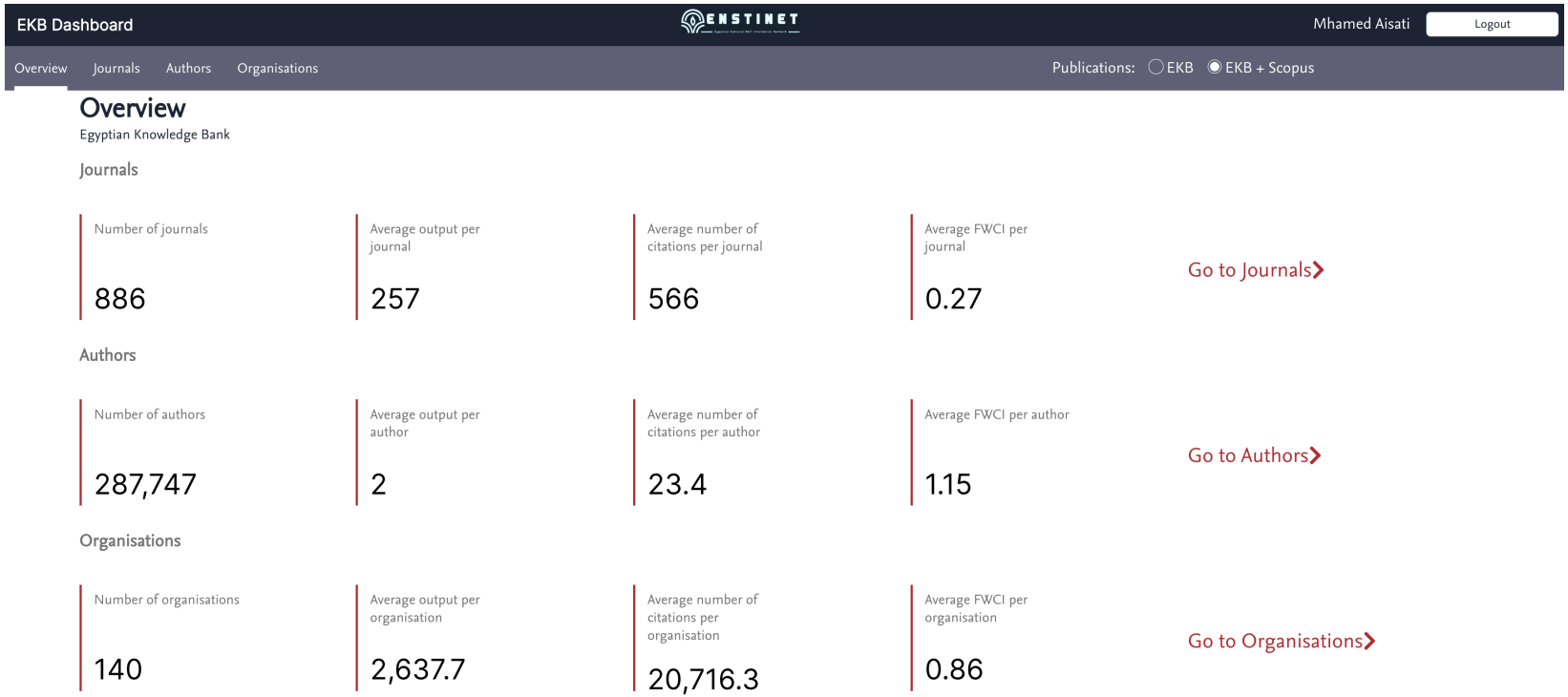


Data collected based on the "Guidelines for the Promotion of Data Standardization to Contribute to the Analysis of Research Power" (2018-2020) and article data (articles with publication years 2018 and 2020, integrated Scopus and J-Stage data purchased from Elsevier (as of December 2021)) Prepared by the Cabinet Office using data. The data are for researchers affiliated with national universities. Researchers are classified into nine categories according to the main source of their research funds, of which four categories, "more than 50% funded by subsidy, more than 50% by Grant-in-Aid for Scientific Research, more than 50% by other competitive funds, and more than 50% by government funds," are included in the analysis.

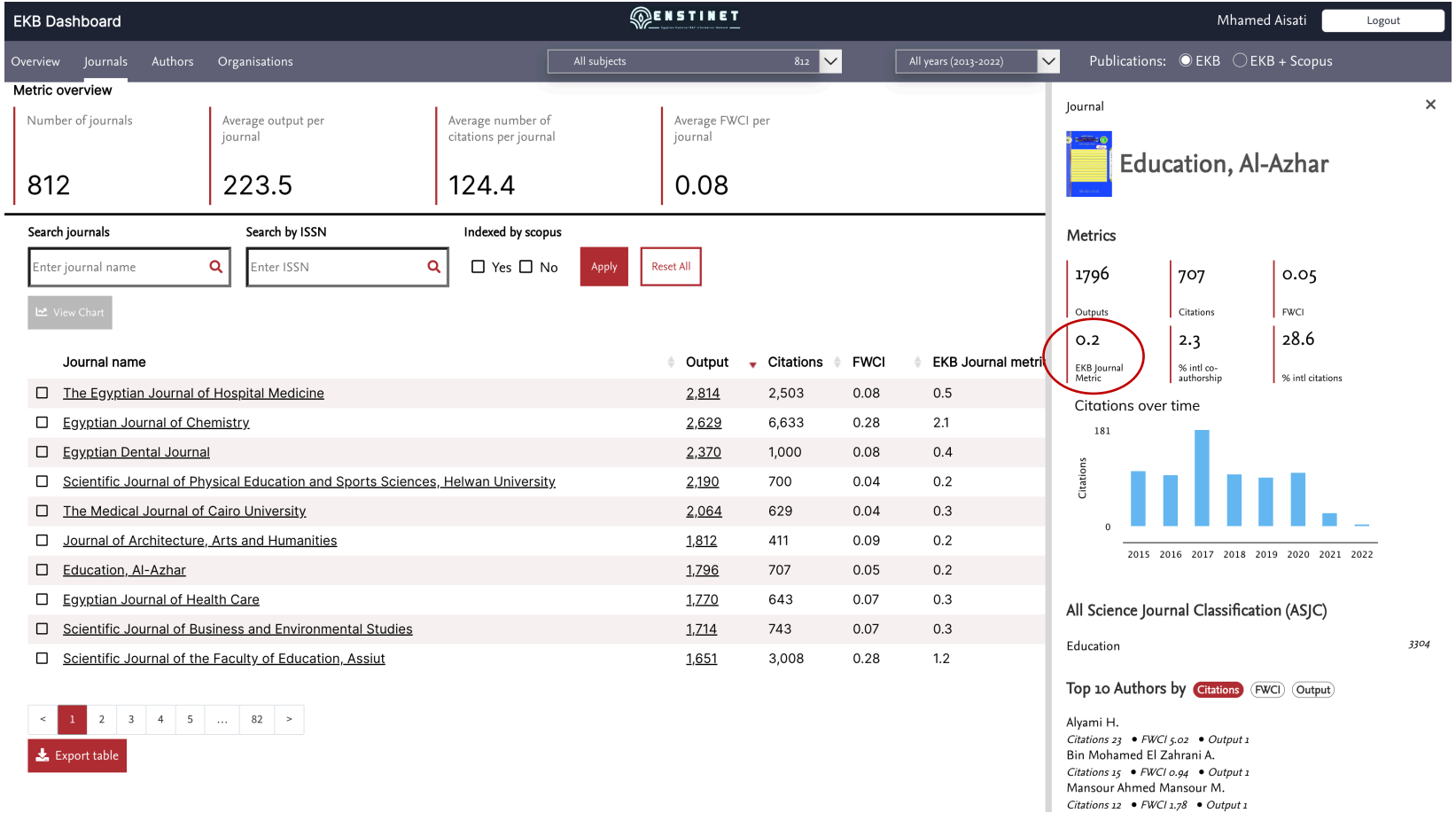
Case study 2: Egyptian National Scientific & Technical Information Network [ENSTINET]



3 main use cases in Phase 1 of the project

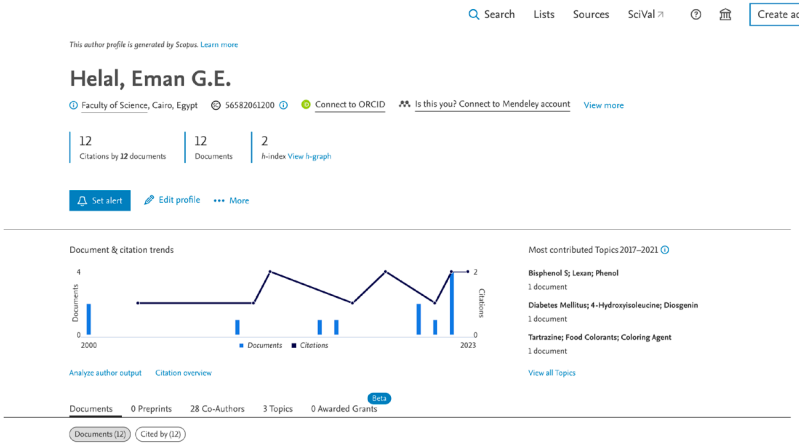


Overview of Research Journals in Egypt (EKB + Scopus)



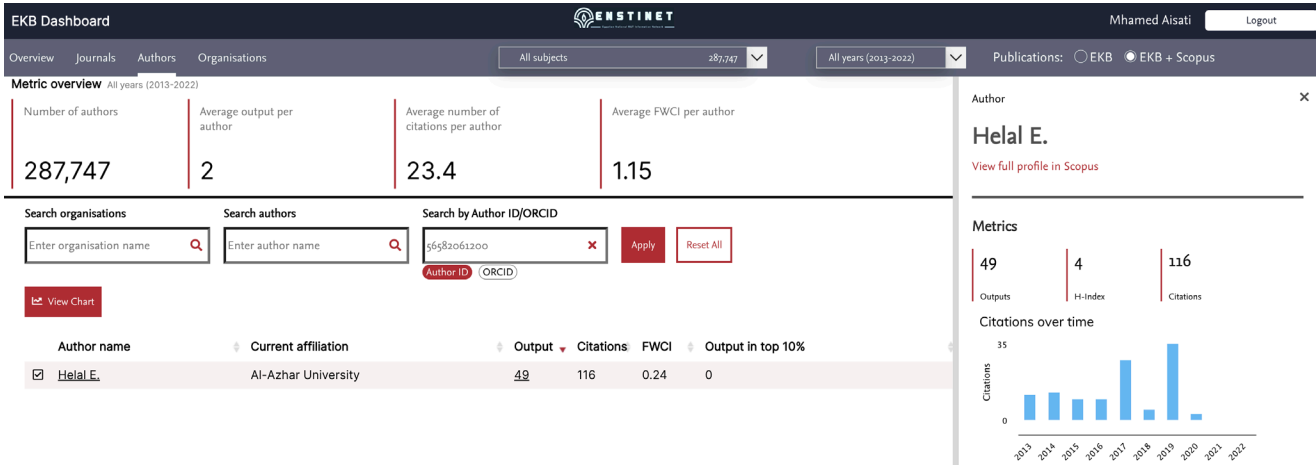
Comprensive profiles for stronger informed decisions

Scopus

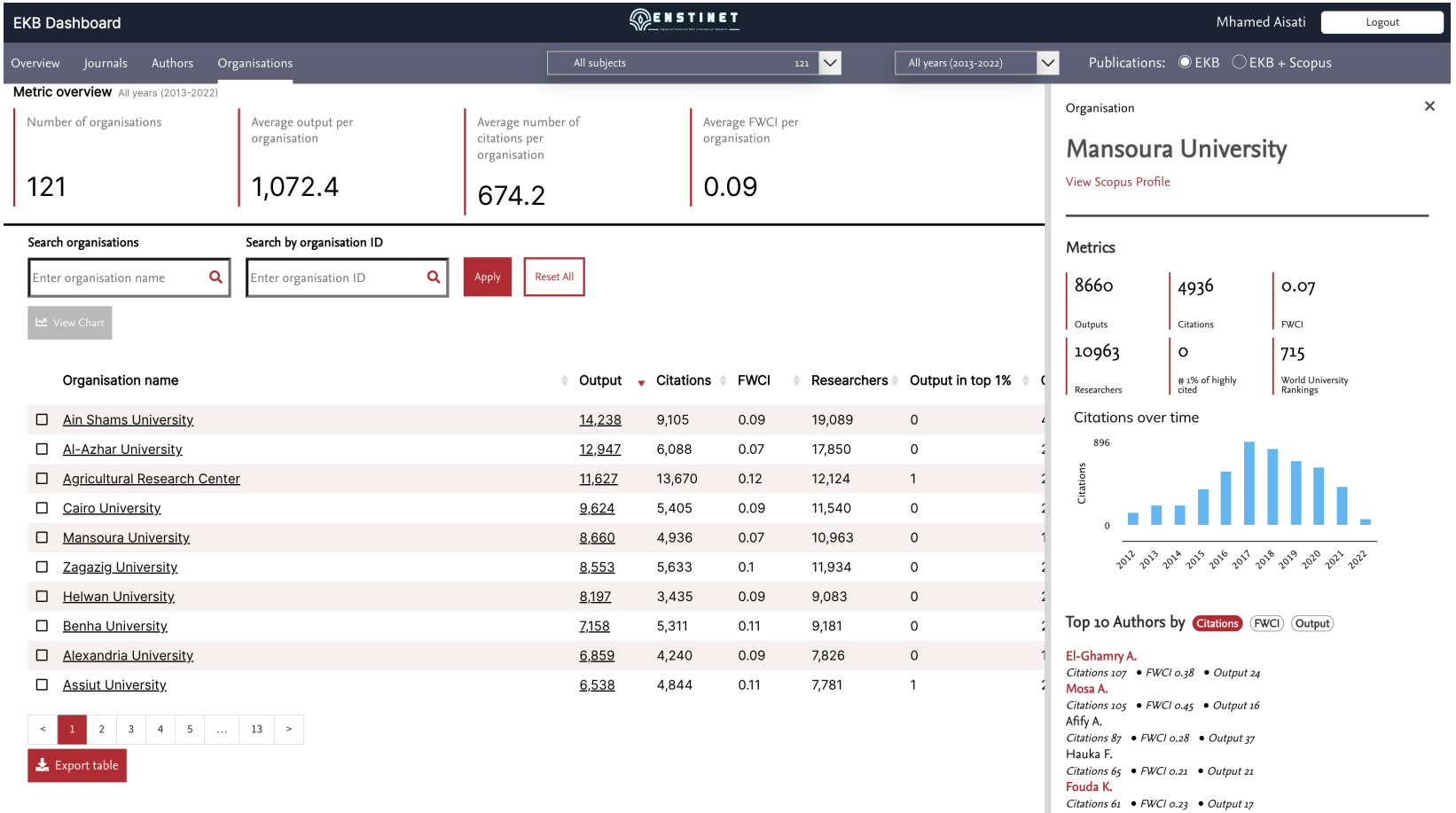


Scopus profile

EKB + Scopus profile



Research Organisations in Egypt Ranked By Number of Outputs (EKB + Scopus)



Bringing the Interplay between global and local impact to life

Source: https://www.timeshighereducation.com/blog/maximum-impact-universities-must-play-their-strengths

Thank you

Questions?

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