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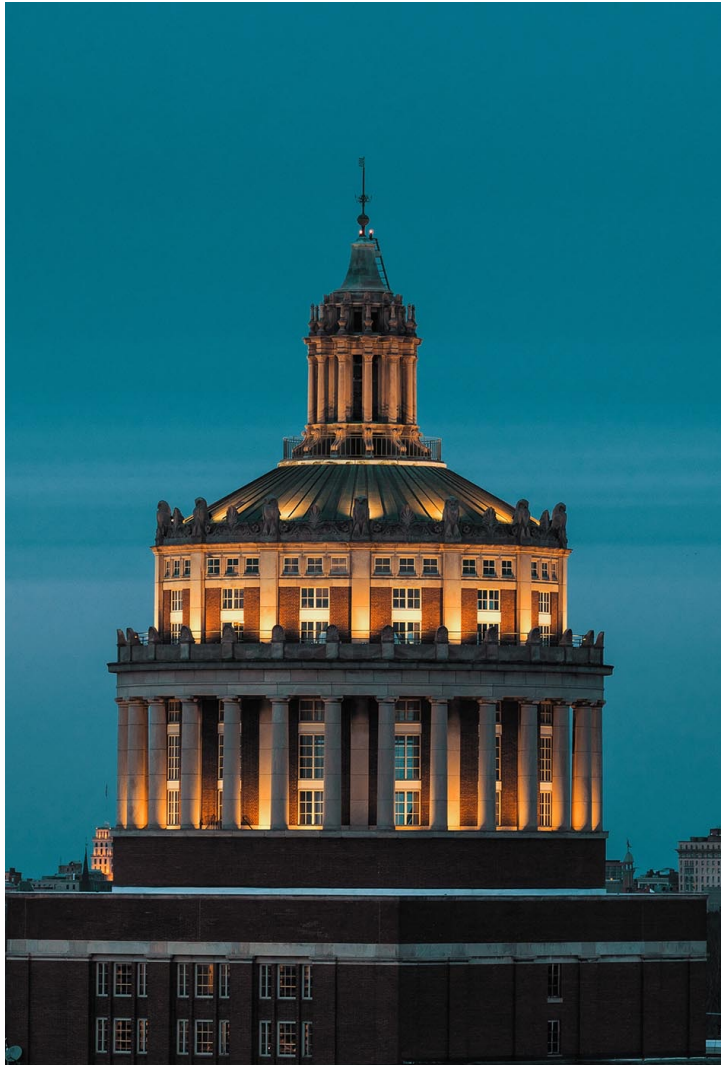
Connecting with departments through impact study: Nature Index analysis for the University of Rochester

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Agenda

- Nature Index
 - Nature Index
 - Data in Nature Index
- Nature Index Project
 - Project Scope
 - Project Phases
 - Dashboard Insights
- Feedback and Next Steps
 - Stakeholder Feedback
 - Learning and Next Steps

I. Nature Index | Definition & Application

The Nature Index is primarily a free database of author affiliation information that reveals global publication and collaboration patterns.

- It captures all author affiliation information of [primary research articles](#) published within a [group of selected journals \(n=82\)](#).
- It stores [whole article counts](#) (Count) and [fractional article counts](#) (Share) for each article.

Nature Index releases a set of country- and institutional-level tables based on counts of high-quality research outputs in the previous calendar year.

- [Fields of Research](#): Chemistry, Life Sciences, Physical Sciences, Earth & Environmental Sciences.

**Track top papers.
Explore collaborations.
Compare research
performance.**

Free, quick and simple access to your institution's current research profile.

*Using the Nature Index
Source: Nature Index*

I. Nature Index | Data in Nature Index

Data in the Nature Index:

- Updated periodically.
- Available for only a rolling 12-month period.
- Article-level information is available.

Profile Page of the University of Rochester:

- Data Range: Nov 2020 – Oct 2021
- Articles can be displayed by journals and then articles.

Data could be incomplete:

- A time lag between when your article is published and when it is added to the Nature Index.
- Articles may be missed due to technical issues.

University of Rochester (UR)

United States of America (USA)

Research

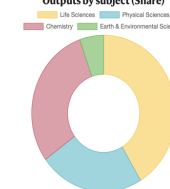
DATE RANGE: 1 November 2020 - 31 October 2021

Count	Share
208	69.62

Region: Global
Subject (journal group): All

The table to the right includes counts of all research outputs for University of Rochester (UR) published between 1 November 2020 - 31 October 2021 which are tracked by the Nature Index.

Outputs by subject (Share)



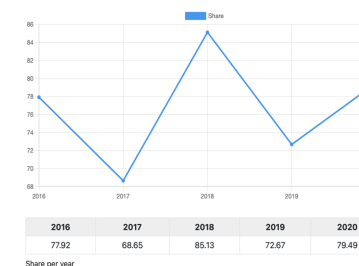
Hover over the donut graph to view the Share for each subject. Below, the same research outputs are grouped by subject. Click on the subject to drill-down into a list of articles organized by journal, and then by title.

Note: Articles may be assigned to more than one subject area.

Subject	Count	Share
Life Sciences	82	30.03
Physical Sciences	87	17.08
Chemistry	36	21.51
Earth & Environmental Sciences	15	3.90

Outputs by subject

Share output for the past 5 years



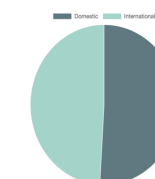
Share per year

Collaboration

DATE RANGE: 1 November 2020 - 31 October 2021

International vs. domestic collaboration by Share

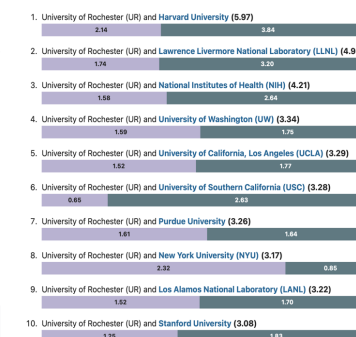
50.93% Domestic
49.07% International



Hover over the graph to view the percentage of collaboration.

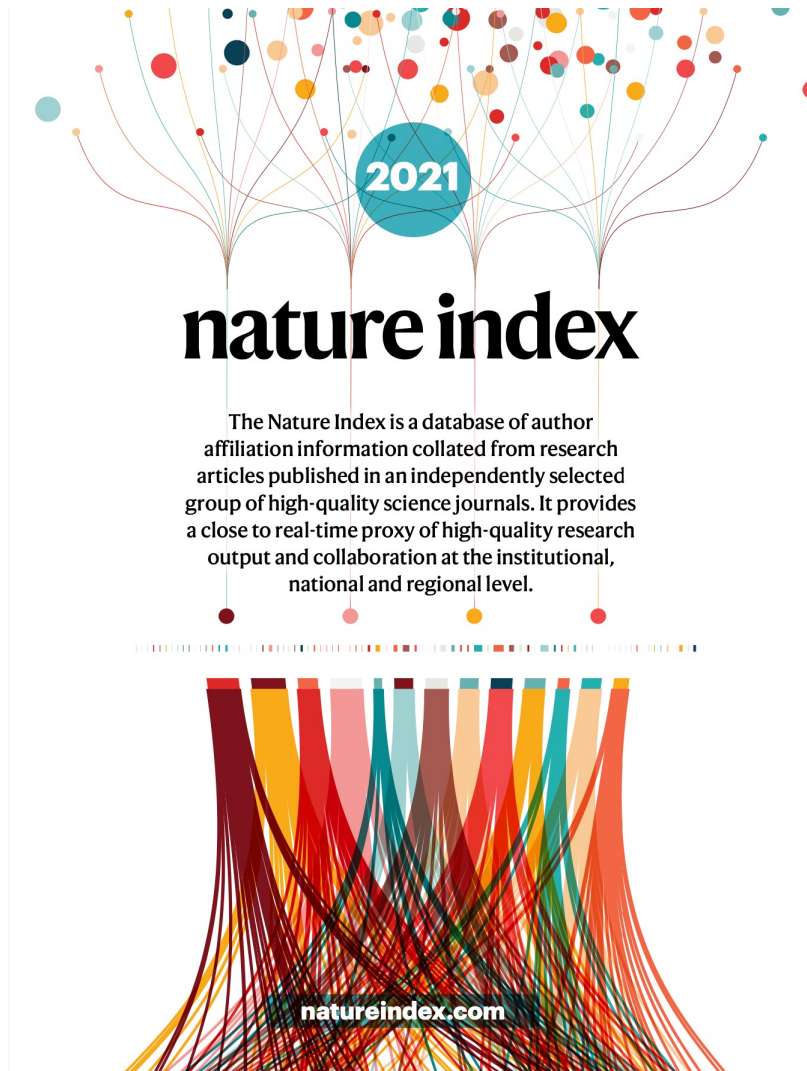
Top 10 domestic collaborators with University of Rochester (UR) by Share (306 total)

University of Rochester (UR), United States of America (USA)
Domestic institution



Nature Index Profile Page of University of Rochester ()

Source: Nature Index



Nature Index Project

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II. NI Project | Project Scope

Goal: Understand how the University of Rochester is represented in high quality research journals.



Journals

What are the journals selected by Nature Index?
Which journals are our researchers publishing in?



Publications

How many publications does UofR have in the selected journals?
How does the number of papers change over time?



Researchers

Who are the authors of those articles?
Are they primary authors?



Open Access

Do the selected journals provide open access options?
What types of open access articles do we have?



Funders and Research Organizations

Who and where are the funders?
Who and where are the collaborating research orgs, in terms of authorship?

II. NI Project | Project Scope

Pilot Project

- Field of Research: Earth and Environmental Sciences (EES)

Data Sources and Information

- Scopus (CY2011 – Aug CY2021): Publications, Open Access, Authors. Query by journal title
- Dimensions (CY2011 – CY2020): Funder, Research Organizations, Geolocation. Searched using NI filter

The screenshot shows the Dimensions database interface. The top navigation bar includes 'Dimensions', 'DOCUMENTS', 'Nature Index journals', 'Journal List', 'Save / Export', 'Workflow', 'Support', and 'JIEER CH...'. The left sidebar contains a 'FILTERS' section with various categories like 'GROUPS', 'PUBLICATION YEAR', 'RESEARCHER', 'FUNDER', etc. The main content area displays search results for 'Nature Index journals' with a total of 3,404,444 publications. It lists categories like 'PUBLICATIONS', 'DATASETS', 'GRANTS', 'PATENTS', 'CLINICAL TRIALS', and 'POLICY DOCUMENTS'. Two search results are visible: 'The cascading foreshock sequence of the Ms 6.4 Yangbi Earthquake in Yunnan, China' and 'Physical factors controlling the diverse seismogenic behavior of fluid injections in Western Canada'. The right sidebar shows 'ANALYTICAL VIEWS' with 'RESEARCH CATEGORIES' and 'OVERVIEW' sections. The 'OVERVIEW' section includes a line graph showing 'Citations' and 'Citations (Mean)' from 2013 to 2021, with a total of 201.0 M citations and a mean of 59.03.

The "Nature Index journals" filter under "Journal List" in Dimensions
Source: Dimensions

II. NI Project | Project Phase 1

Analysis

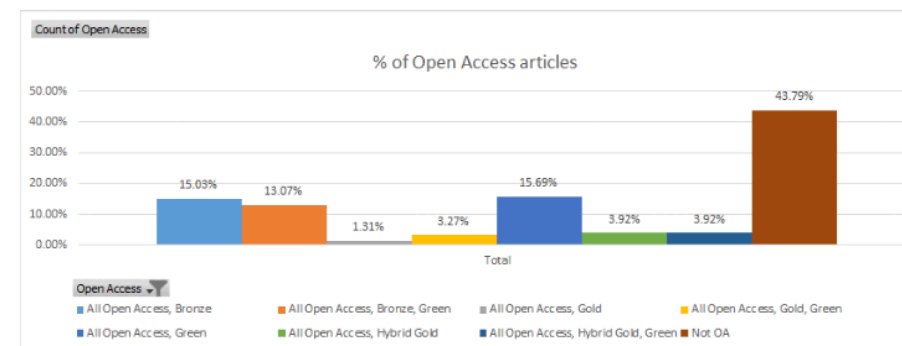
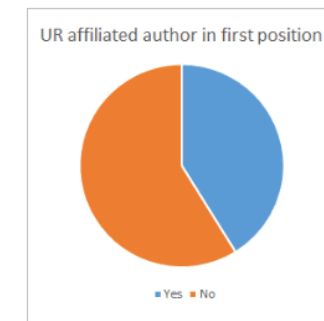
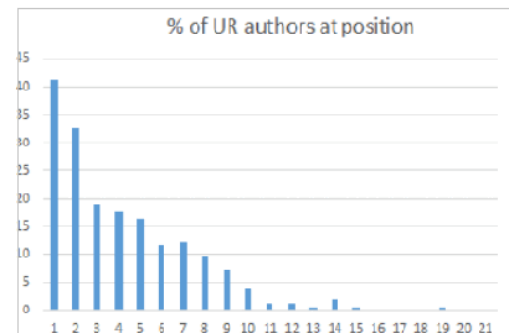
- Start with Scopus Data
- Spreadsheet Analysis
- Google doc Report
- Not very interactive & Too much information

Communication

- EES Department Chair
- Email conversations
- Introduction to Nature Index

Timeline

- 3 months (Aug '21 – Oct '21)



Graphics & Tables from the Google Doc Report
Source: RCL NI Project

II. NI Project | Project Phase 2

Analysis

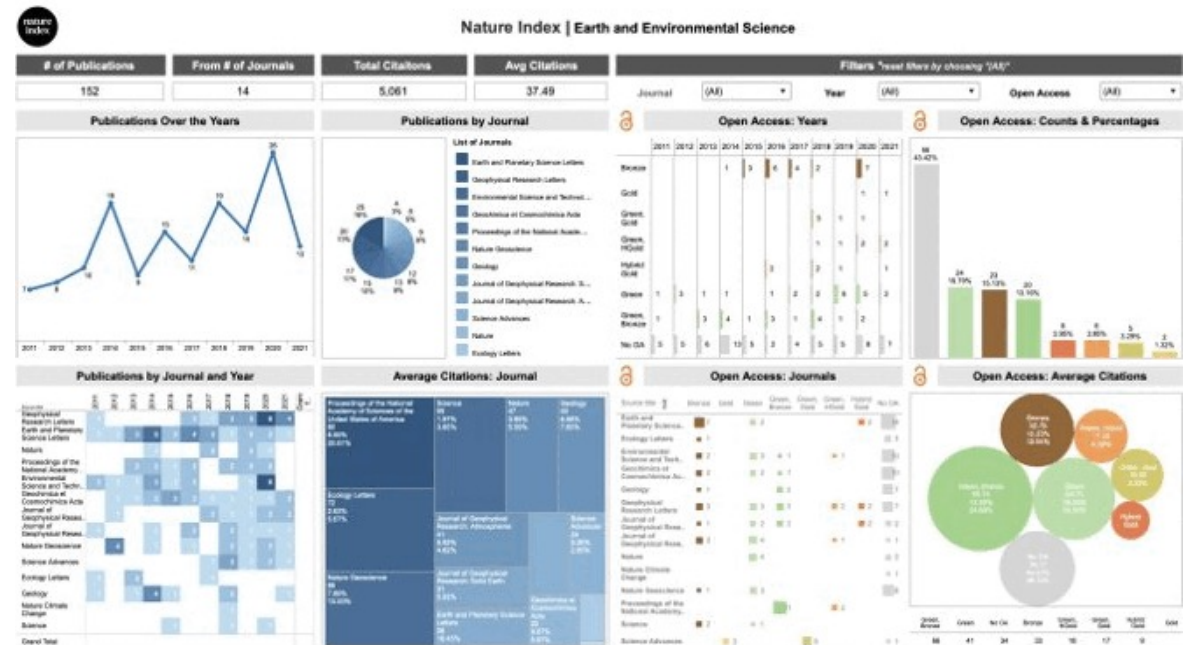
- Scopus Data & Dimensions Data
- Spreadsheet Analysis
- Translated into Tableau dashboards

Communication

- STEM Librarians: prepared slides for a deep dive into the dashboard
- EES Department Chair: Share dashboard with faculty via email

Timeline:

- 3 months (Oct '21 – Dec '21)



Initial Dashboards
Source: RCL NI Project

II. NI Project | Project Phase 3

Analysis

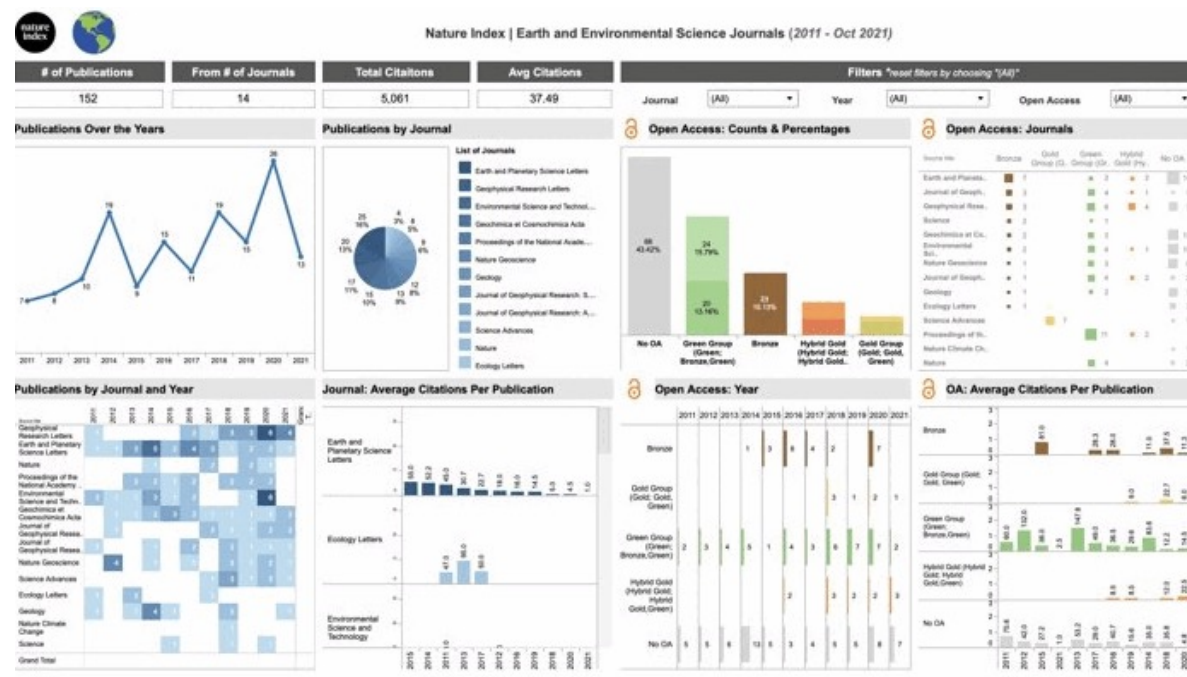
- Modified dashboards based on feedback, e.g. merged some OA categories in Scopus data

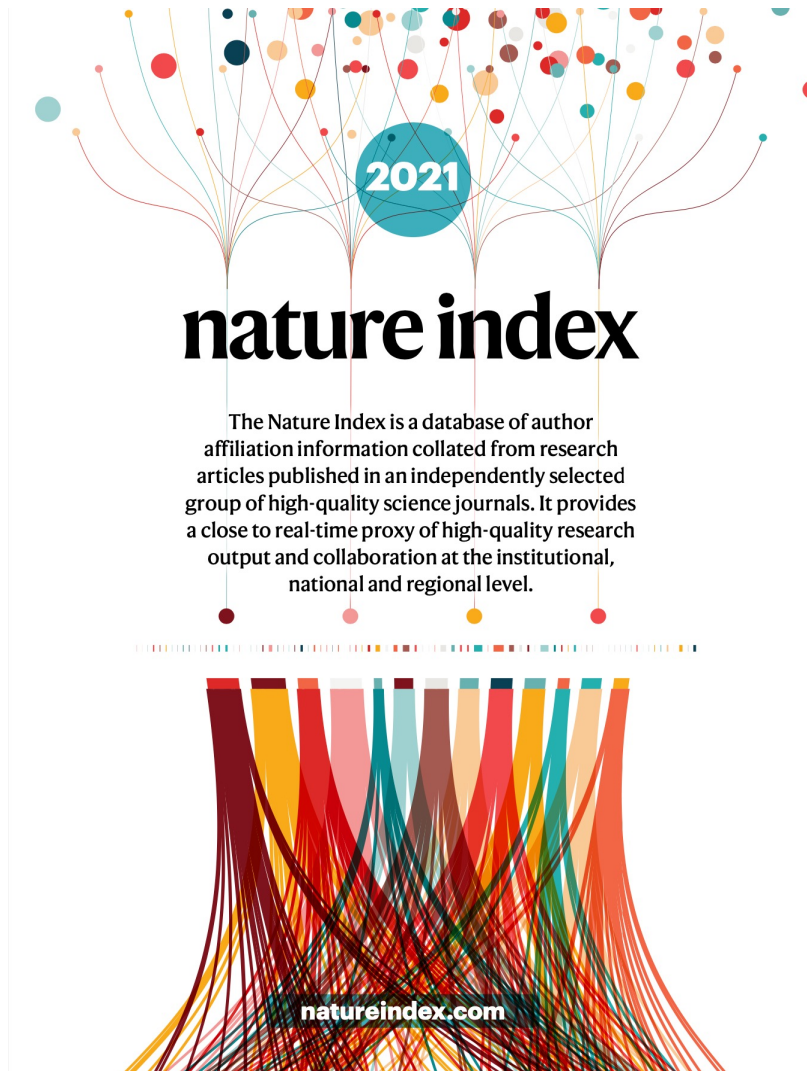
Communication

- Library Leadership and University Institutional Research: prepared slides for a deep dive into the dashboard
- EES Department Chair: Dashboard deep dive over Zoom

Timeline:

- 2 months (Feb '22 – Mar '22)

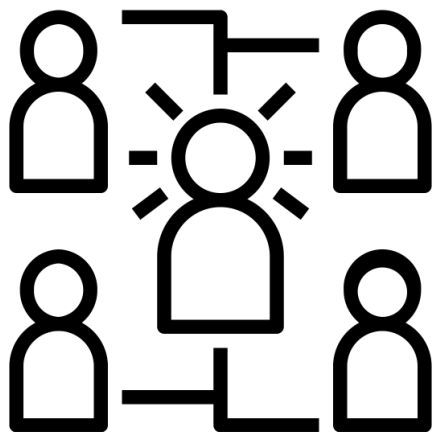




Feedback and Future Plans

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III. Feedback | STEM Librarians



*Artist: Sumit Saengthong
Source: Noun Project*

Helpful to know where our researchers publish

- Which journal is getting the most citations
- Does this align with our internal usage data

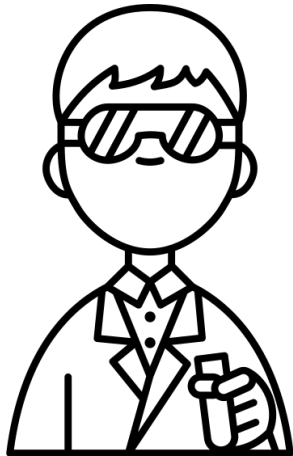
Helpful for pursuing transformative agreements

- Is Open Access being embraced by my department
- Trend in different types of Open Access

Skepticism/nervousness around funding data

- Possible sensitivity around interpretation of our intent
- With multiple researchers, cannot identify who received the grants
- Not very useful if researchers aren't eligible for a grant, e.g., federal grants in other countries

III. Feedback | Academic Department Chair



Artist: Amethyst Studio
Source: Noun Project

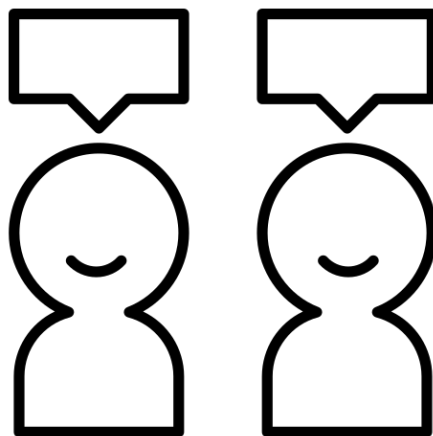
Feedback on the dashboards

- Asked to walk through the dashboard
- List of journals in Nature Index is good but doesn't cover 100% of the "top" journals (also subjective)
- Useful to show publication growth to senior leadership, with new faculty joining over the past few years
- Interested in the growth in Open Access publishing

Future developments

- Comparing the department's performance in Nature Index with other metrics. E.g., we rank much higher in Academic Analytics
- A normalized comparison with other UR departments, also comparing with other universities

III. Feedback | Library & University Leadership



Artist: Made X Made
Source: Noun Project

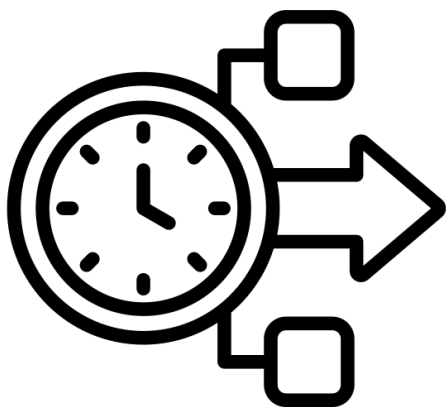
Feedback on the dashboards

- Good to show department chair multiple data sources
- Might create some noise due to discrepancies between data in dashboards and other tools/sources
- Ideas on revealing trends of "Share" metric and repeating co-authorship and collaborating research organization

Future developments

- Comprehensive dashboards that can answer a good set of questions for different audience groups
- Proactively choosing the data we want to show, also consider department chairs' feedback
- Suggestions on the subjects to work on, the academic department chairs to work with, and the units to collaborate with

III. Future Plans



Artist: Eko Purnomo
Source: Noun Project

Short-term Goals

- Content: add the trend of the Nature Index metric "Share" to the dashboard
- Journal List: expand the journal list to include other high quality EES journals suggested by the EES department head

Long-term Goals

- Content: identify repeating co-authors and their affiliation
- Journal List: Nature Index, UofR researchers commonly publishing and citing, Journals where others citing us in
- Collaboration: identify potential collaborators to work on the dashboards



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Thank you! Contact us for questions

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