



From Here to Integrity

The battle for trust in an increasingly complex research ecosystem

Christine Dunn, Research & Analytics | April 2025

A seismic shift of the world order

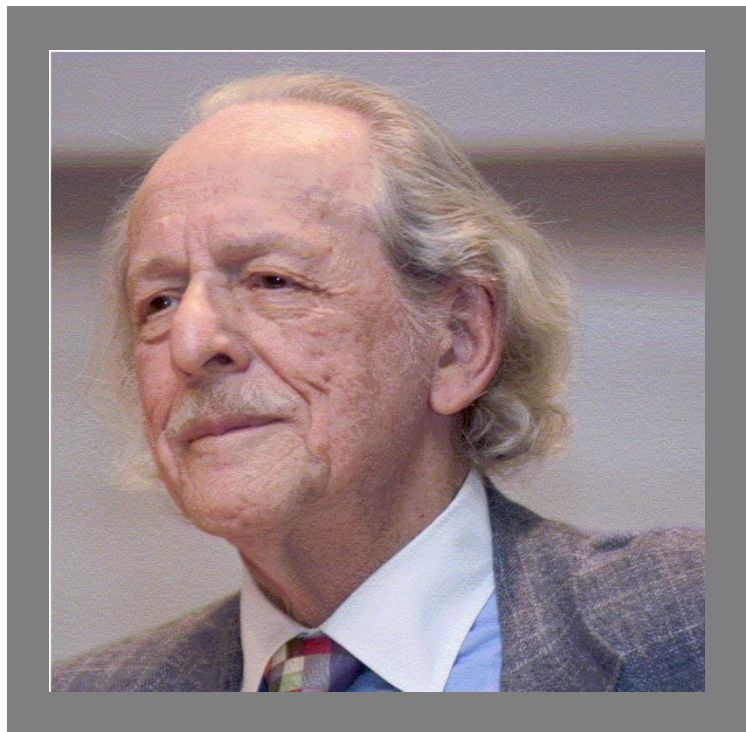
**Erosion of global trust
and alliances**

**New technologies,
shifting powers**

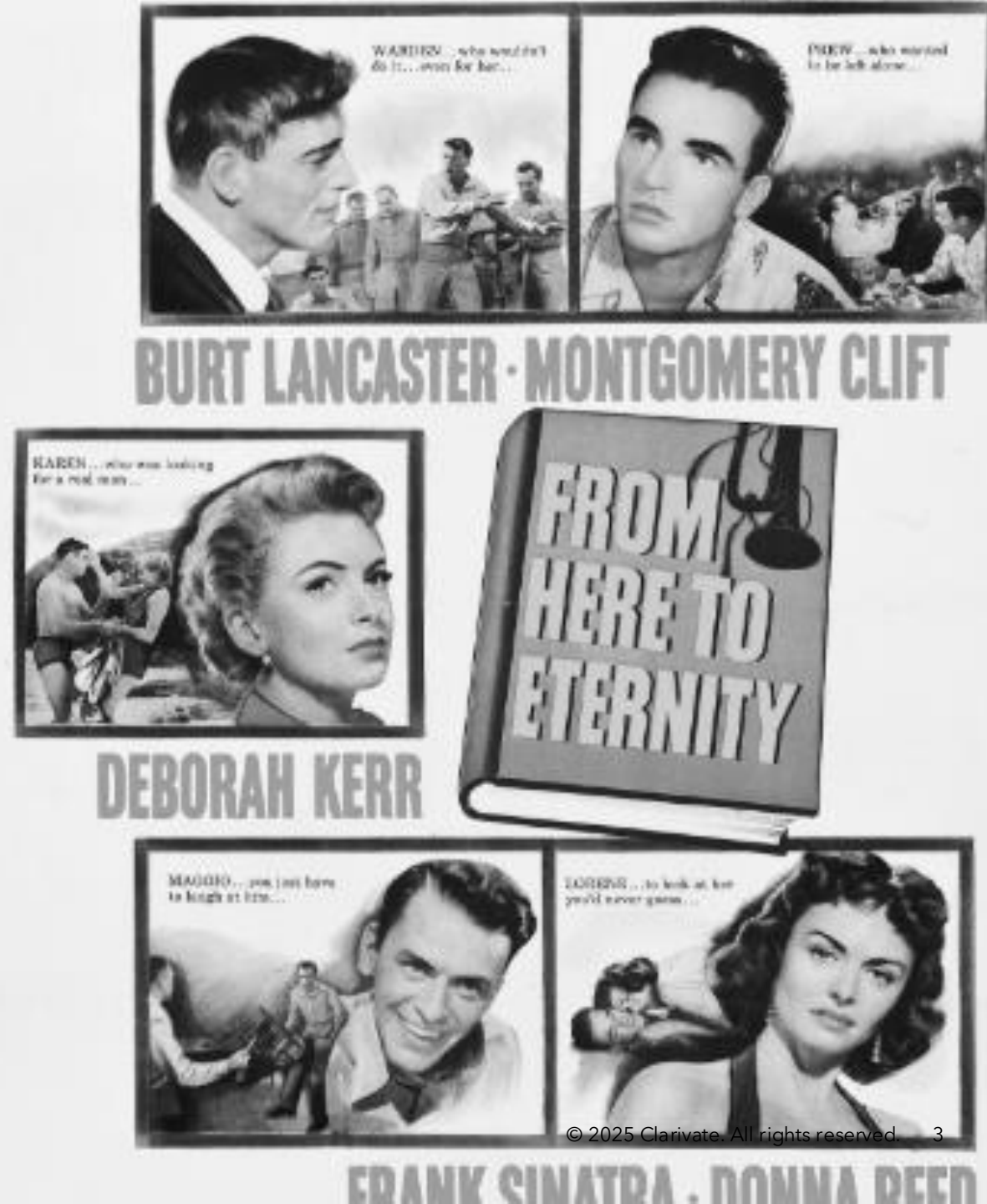
**Abundance of information,
uncertain intention**



A good story needs good characters

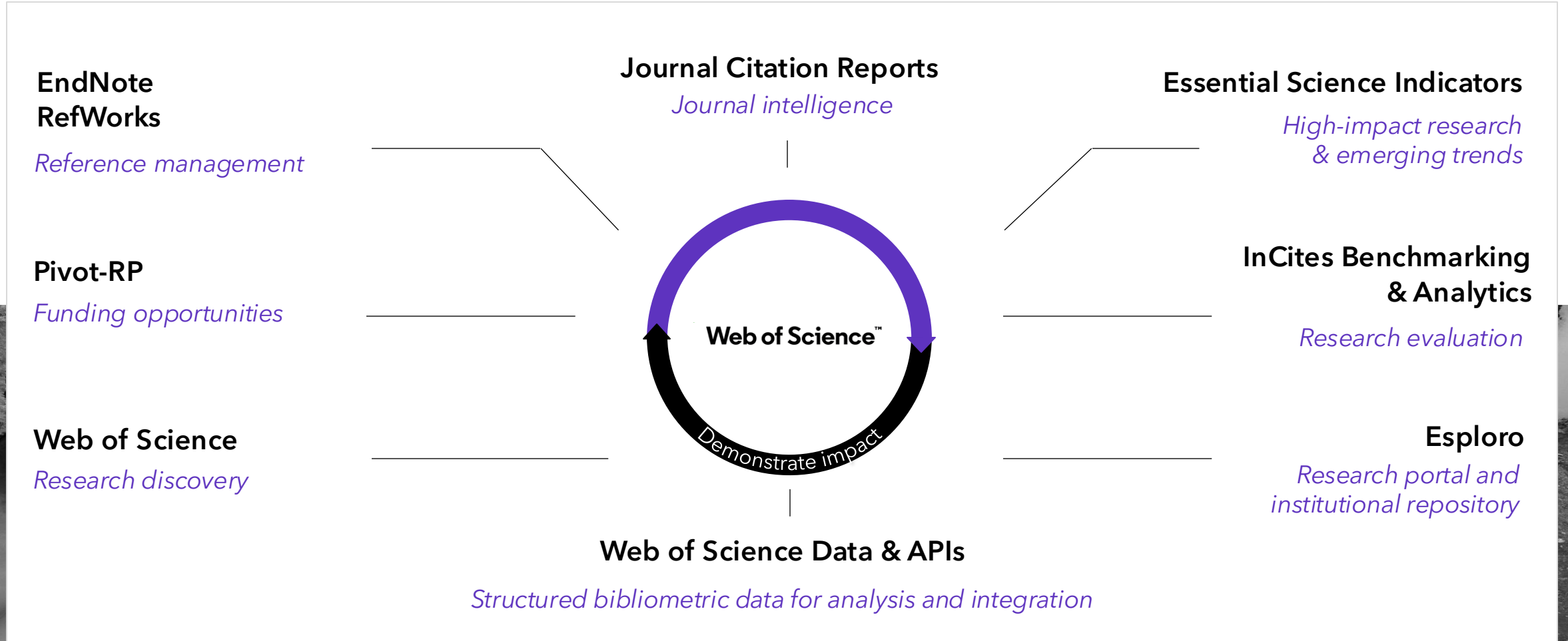


*...a citation index...tends to bring together material that would never be collated by the usual subject indexing. It is best described as an association-of-ideas index...”, **Dr. Eugene Garfield, Science, 1955***



Our Research and Analytics Infrastructure

Connecting data, solutions, and expertise



Web of Science Editorial | Institute for Scientific Information (ISI) | Research Professional News | Consulting

Our R&A Strategy is straight-forward

Strengthen trust, work with our partners, innovate with purpose

Trust & integrity

**Safeguarding research integrity
by providing responsibly
designed solutions**

Journal selection

Web of Science data excellence

Trust markers

Collaboration & openness

**Solving systemic problems by
actively engaging the research
community in product
development**

Open research

Development partners

User communities

Innovation & impact

**Implementing next-gen
capabilities to accelerate
research and its societal impact**

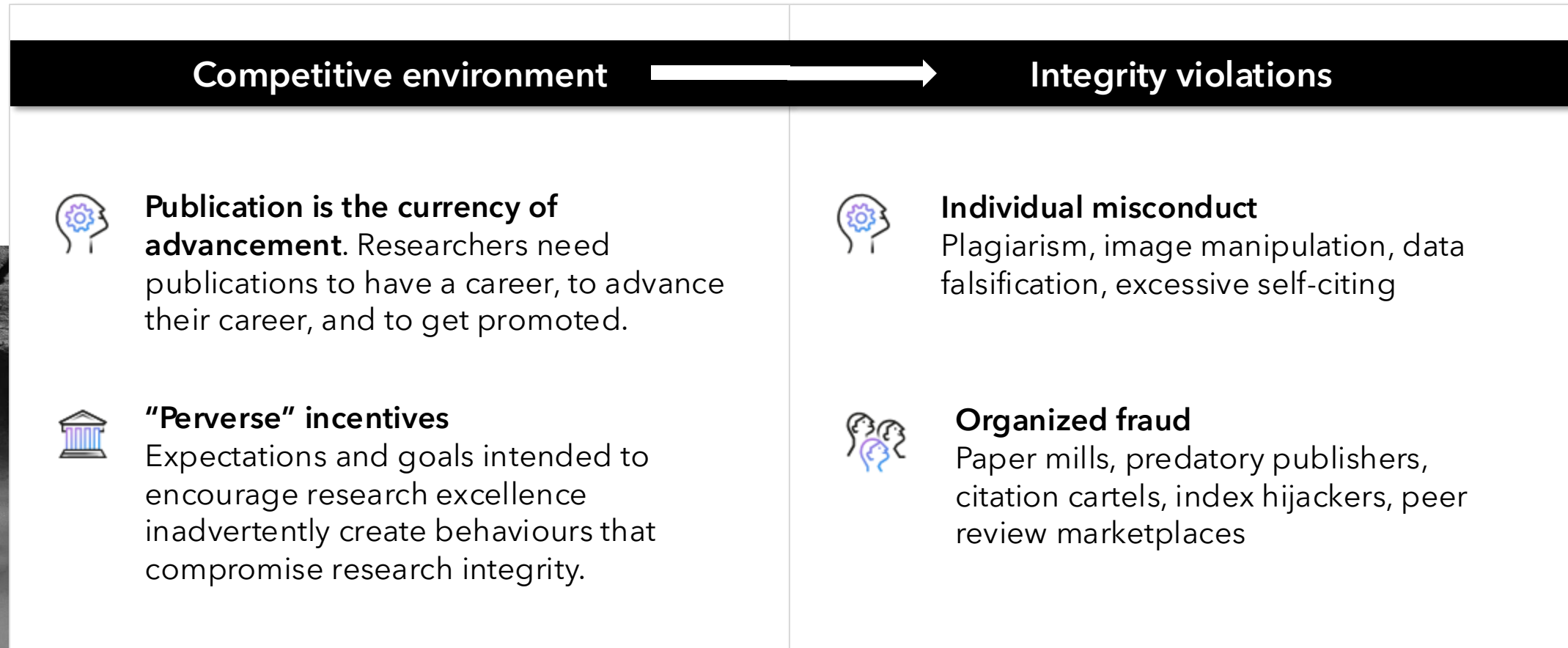
Academic AI

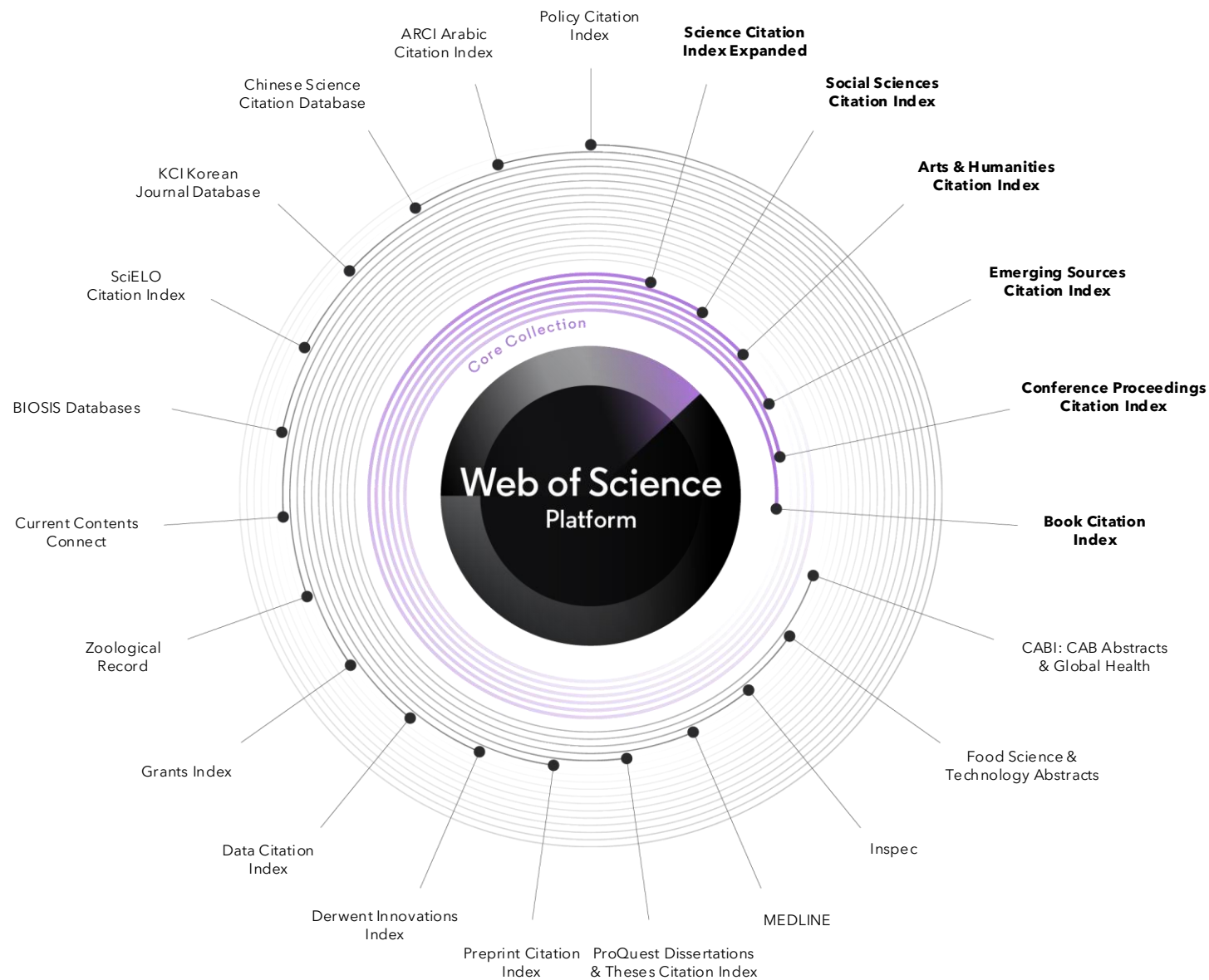
Societal impact of research

WoS Research Intelligence

Metrics are meaningless, if you can't trust the data behind them

Academia is driven by prestige and pressure and increasingly, integrity issues arise

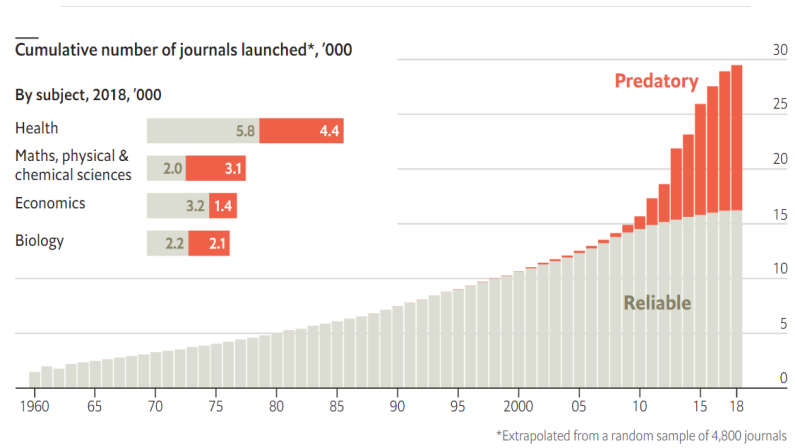




Web of Science Platform

- 235 million records
- 2.9 billion cited references
- 34,865 journals, ~22K in WoSCC
- 254 subject categories
- 6.1 million dissertations and theses
- 2.4 million preprints
- 128 million patents for 66 million inventions
- 16.9 million data sets and studies
- 5.6 million awarded grants

Finding the cracks before the permanent damage is done

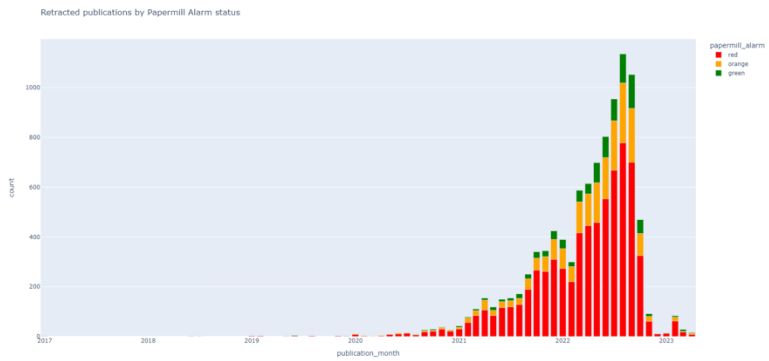
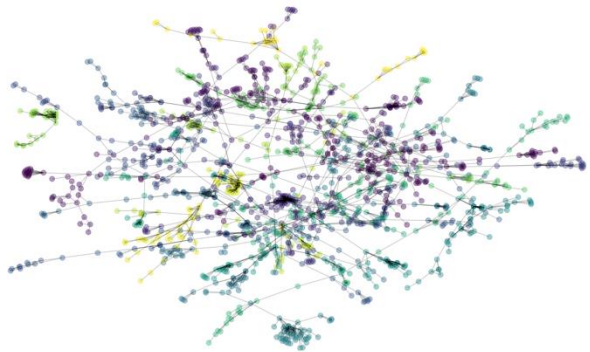


JOURNAL SUMMARY JOURNAL EXPLORER

Journals Summary (journals over 1k articles analysed within timeframe)
Selected timeframe: 2014 - 2025

Journal	Publisher	# Analysed	# Retractions	# High Risk	Retractions per ...	High Risk per 10k
New Microbes and New Infe...	Elsevier BV	1487	0	399	0	2078
Journal of King Saud Univer...	Elsevier BV	2927	1	283	3	966
Saudi Journal of Biological ...	Elsevier BV	3613	2	292	5	808
Waves in Random and Com...	Taylor & Francis	2184	1	115	4	526
Webology	University of Tehran Press	1077	0	44	0	408
International Journal of Foo...	Marcel Dekker	2264	4	91	17	401

UNITED2ACT
AGAINST PAPER MILLS



HEALTH • PUBLIC HEALTH

The Vaccine-Autism Myth Started 20 Years Ago.
Here's Why It Still Endures Today

A scientist's fraudulent studies put patients at risk
A physician with nearly 100 retracted papers may have misrepresented risks of an intravenous fluid.

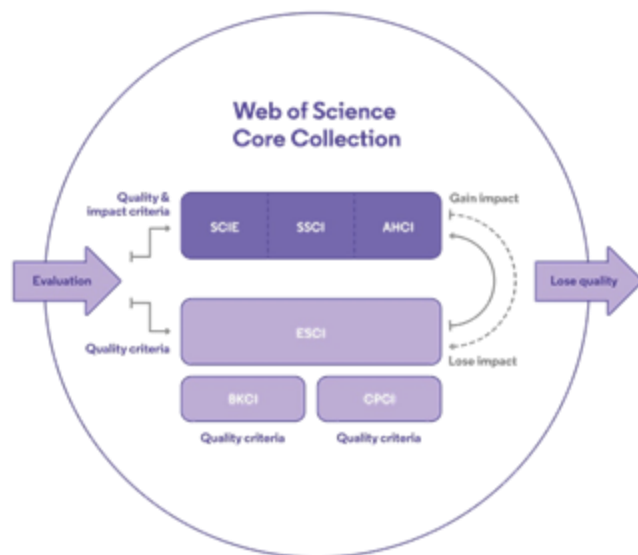
Harvard professor who studies dishonesty
is accused of falsifying data




Nearly 20 Hindawi journals
delisted from leading index amid
concerns of papermill activity

Nineteen journals from the open-access publisher Hindawi were removed from Clarivate's Web of Science Monday when the indexer re-freshed its Master Journal List.

WILEY
Hindawi

Ensuring the Web of Core Collection is a trust marker for the research community



 28 selection criteria in total	 24 quality criteria to select for editorial rigor and publishing best practice	 4 impact criteria to select for the most impactful journals
1. Initial Triage		
2. Editorial Triage		
3. Editorial Evaluation		
Quality Criteria		
<ul style="list-style-type: none">✓ ISSN✓ Journal Title✓ Journal Publisher✓ URL (online journals)✓ Content Access✓ Presence of Peer Review Policy✓ Contact Details		
<ul style="list-style-type: none">✓ Scholarly Content✓ Article Titles and Article and Abstracts in English✓ Bibliographic Information in Roman Script✓ Clarity of Language✓ Timeliness and/or Publication Volume✓ Website Functionality/Journal Format✓ Presence of Ethics Statements✓ Editorial Affiliation Details✓ Author Affiliation Details		
<ul style="list-style-type: none">✓ Editorial Board Composition✓ Validity of Statements✓ Peer Review✓ Content Relevance✓ Grant Support Details✓ Adherence to Community Standards✓ Author Distribution✓ Appropriate Citations to the Literature		
Impact Criteria		
<ul style="list-style-type: none">✓ Comparative Citation Analysis✓ Author Citation Analysis✓ EBM Citation Analysis✓ Content Significance		

Any journal that fails to meet all 24 quality criteria will be removed from the Web of Science Core Collection

- Rigorous, transparent **publisher-neutral** editorial evaluation
- Indexed journals are **subject to** periodic **re-evaluation**

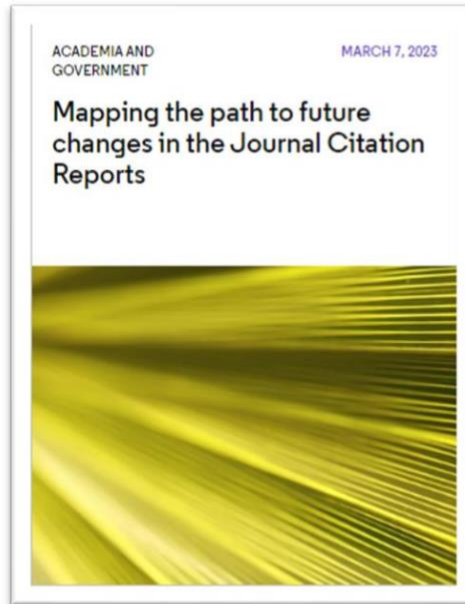
- **AI Surveillance Tool** helps find article -level anomalies for prioritized review
- **Partner** with leading integrity experts and community groups (U2A), **staying ahead of organized fraud perpetrators**

As journals evolve, so do we

Whitepapers available on our website



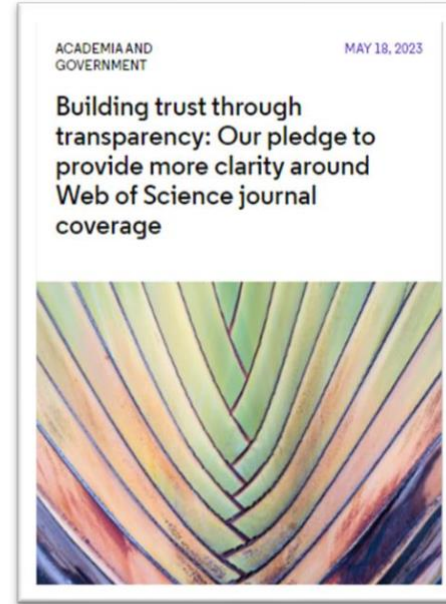
[Read the report](#)



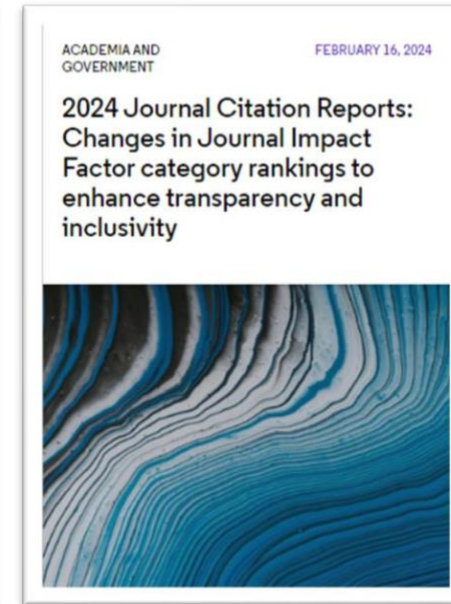
[Read the report](#)



[Read the report](#)

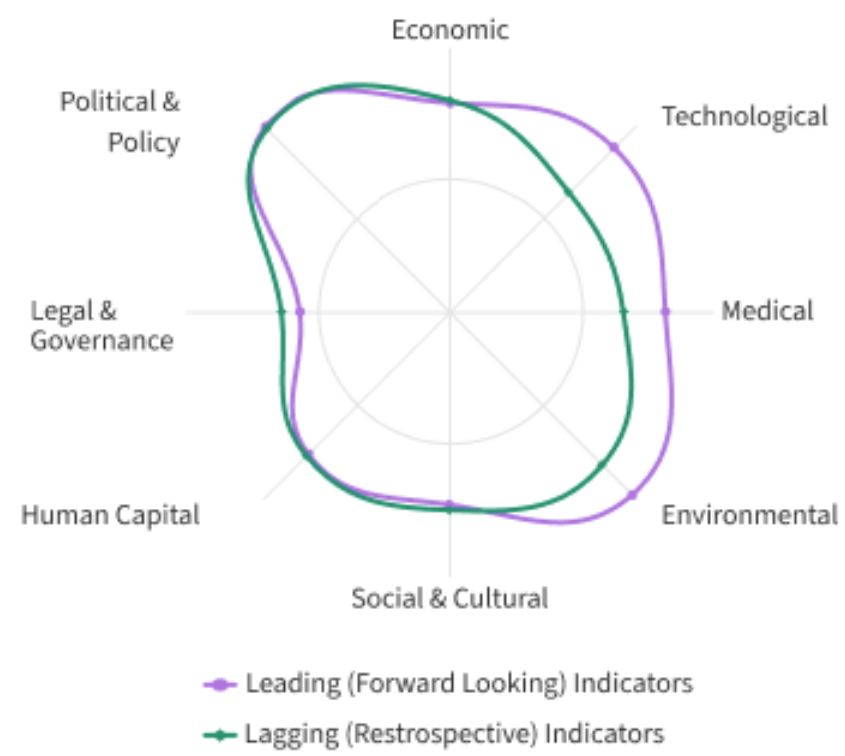


[Read the report](#)



[Read the report](#)

Societal impact framework for research evaluation

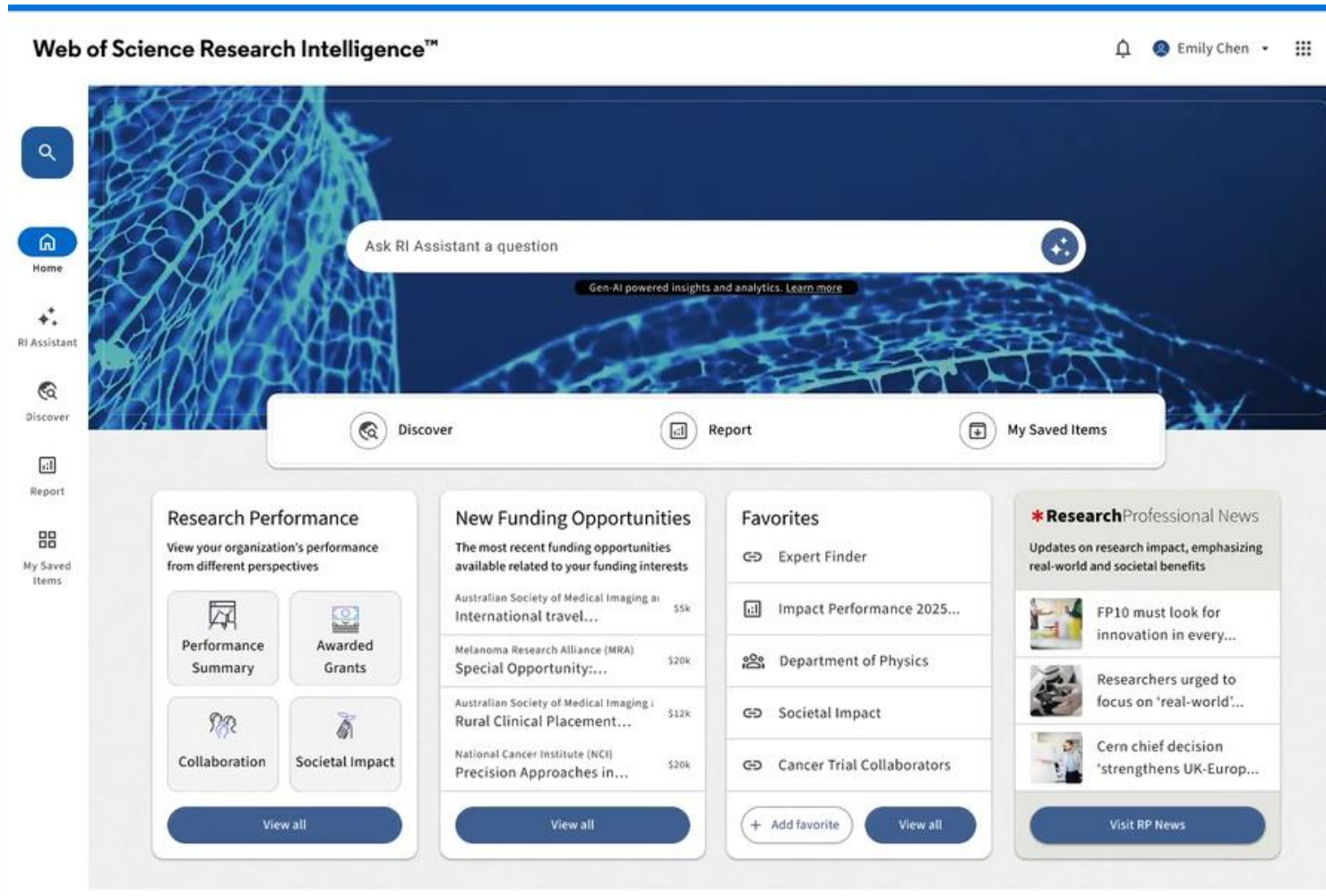


[Read the report](#)



Web of Science Research Intelligence

Lead research forward in a changing world



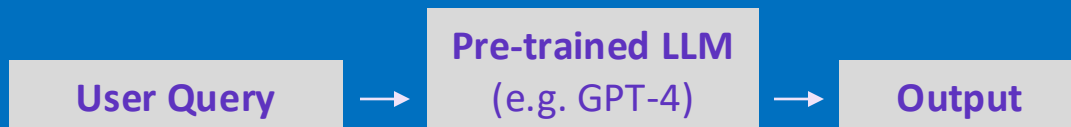
Transformational, AI-native software solution that enables research institutions to **accelerate innovation** and **showcase research impact**:

- Multiple research output types in one intuitive platform
- Analytics workflows guided by agentic AI
- Comprehensive societal impact framework and indicators

General-purpose LLM

Training data: “The Web”

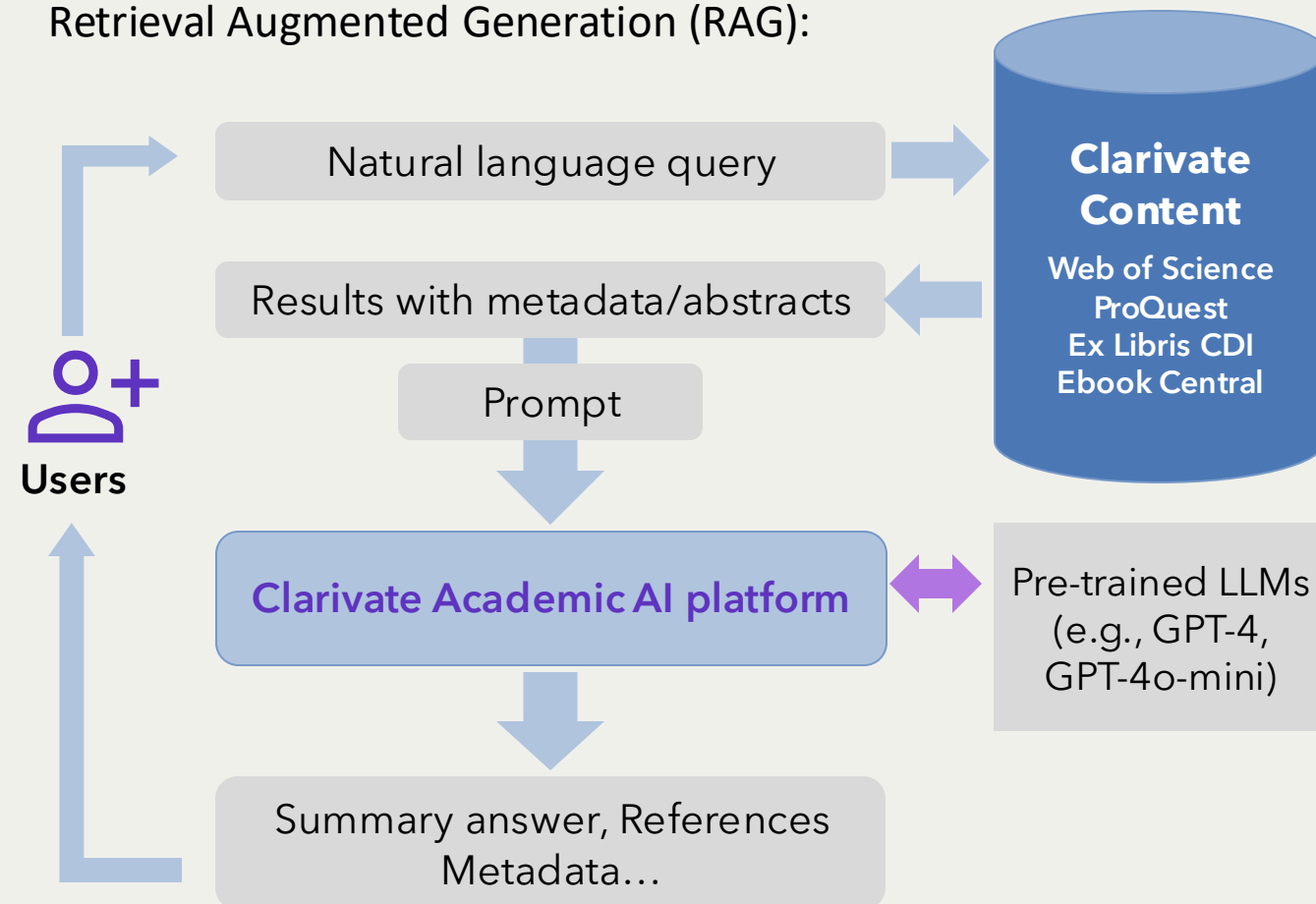
- Unspecific, not transparent
- BUT, effective at training the LLM to:
 - Understand patterns
 - Create coherent text outputs
 - Translate



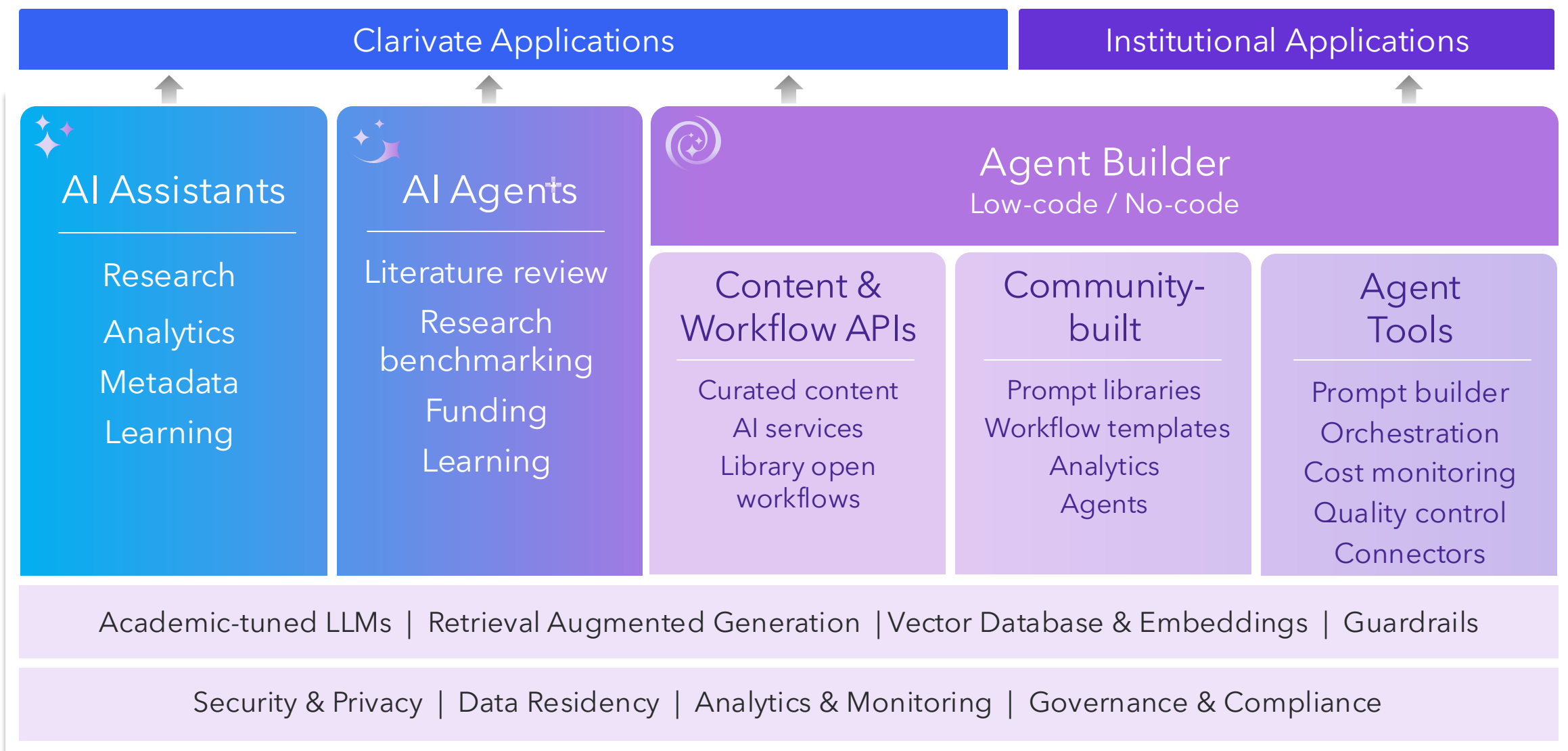
Academic AI: Grounding output in trusted content

- Results are based on trusted facts & information
- Minimizing hallucinations and bias

Retrieval Augmented Generation (RAG):

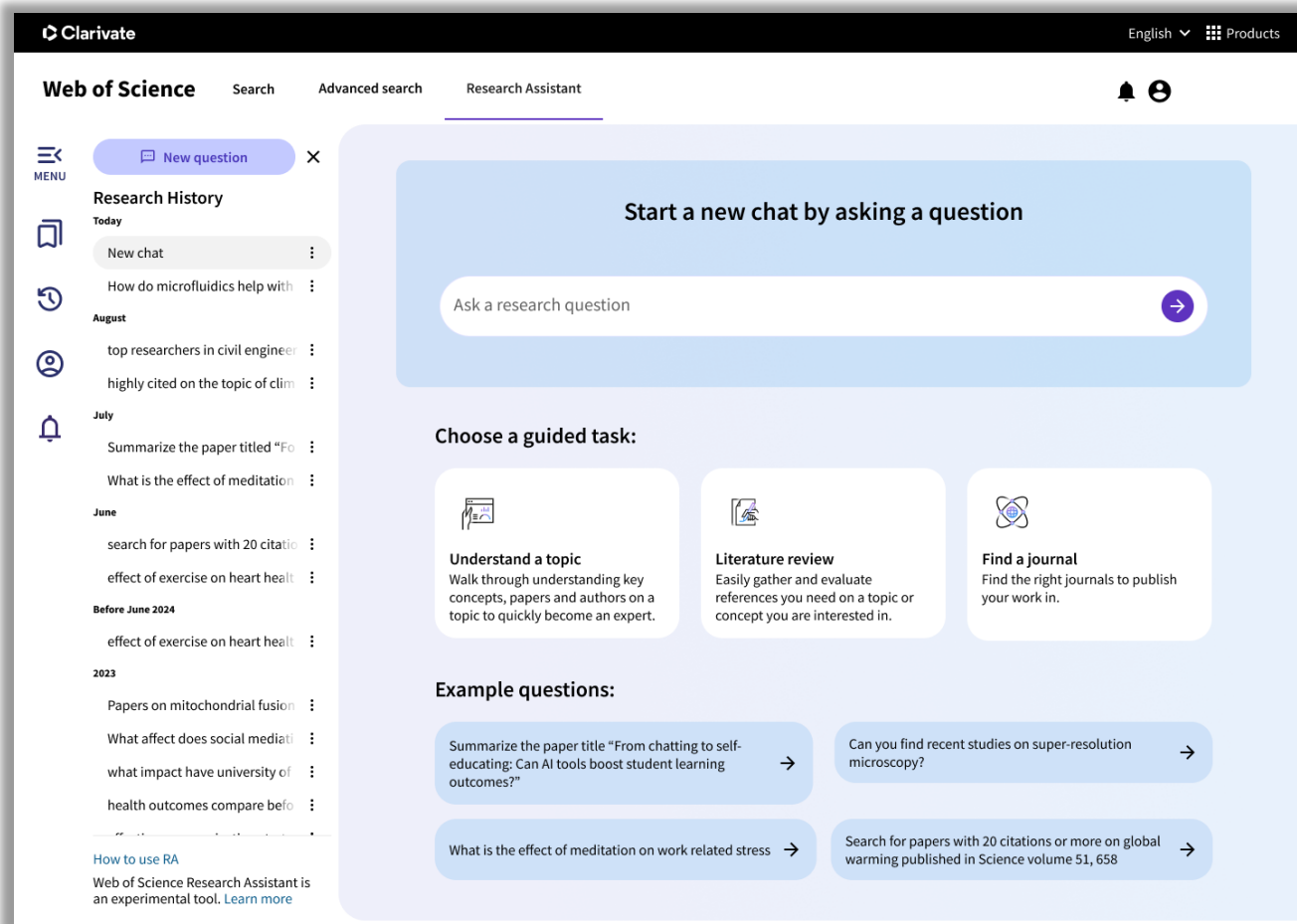


Clarivate Academic AI Platform



Web of Science Research Assistant

September 2024




- ✓ Natural language, multilingual search
- ✓ Concise, referenced overviews in your search language
- ✓ Verifiable responses
- ✓ Over 120 years of research in scope
- ✓ *Intelligent discovery*
- ✓ *Task-based guidance*
- ✓ *Responsible AI*



AI literacy for information literacy

How do we design AI in products that promote use of AI effectively and responsibly in academic and research context?

Academic rigor	User experience	
Information literacy	Fast, frictionless UX	
Critical thinking	'Nudge' users to explore, validate and evaluate	
Academic & Research ethics		

Designing for AI literacy: What we've learned so far



Transparency: Highlighting sources, enabling users to validate and cite, in context

Explainability: Making it easy to develop, adapt and re-produce research strategy

Trusted: Grounding outputs in vetted scholarly content

Critical thinking cues: prompting users to go deeper and explore assumptions


Keeping humans in control

Prompt design and quality testing

Evaluation of outputs

Promote user engagement vs. black-box automation


Reinforcing AI literacy principles through product design



How are these results generated? ▲

Overview

The impact of climate change on biodiversity is multifaceted, encompassing "changes in species diversity and ecosystem functions", "the role of anthropogenic factors", and "the importance of ecological restoration". These themes highlight how climate variability and human activities are reshaping ecosystems and the urgent need for effective management strategies.

How does climate change impact biodiversity? 

How are these results generated? ▼

Using your query, I searched the Web of Science Core Collection for documents with topic "(climate change OR global warming OR climate variation OR climatic changes OR climate variability OR climate crisis OR climate emergency OR greenhouse gases OR anthropogenic climate change OR carbon emissions) AND (biodiversity OR species diversity OR ecosystem diversity OR biological diversity OR ecological diversity)" and found 74,787 results.

responses 6.

The role of anthropogenic factors:

- Anthropogenic impacts, including habitat alteration and pollution, exacerbate the effects of climate change on biodiversity, as seen in the Gokceada Salt Lake, where human activities have led to significant changes in aquatic species diversity 7.
- The Hindu Kush Himalayan region is experiencing biodiversity losses due to rapid climatic warming and unsustainable resource use, highlighting the critical intersection of human activity and climate change 5.
- The interaction between natural climatic events and human-induced changes has been shown to lead to biodiversity losses over time, particularly in estuarine environments 1.

The importance of ecological restoration:

- Effective ecological restoration is essential for maintaining biodiversity amidst climate change, as it can help overcome barriers to plant community recovery 2.
- The conservation of non-crop habitats in agricultural landscapes has been identified as a strategy to enhance ecosystem resilience and support biodiversity

Web of Science
Research Assistant

Reinforcing AI literacy principles through product design



Create a detailed literature review about global income distribution



To create a detailed literature review about global income distribution, you need a clear search strategy. Given the broad scope of the topic, it's best to start with a general search and then narrow it down.

- Historical trends in global income distribution
- Factors influencing global income inequality
- Economic inequality and its impact on development
- The impact of globalization on income distribution
- Policy interventions to address global income inequality

Could you please let me know what specific aspects of global income distribution you would like to explore? This will help me tailor the search strategy to your needs.

Enter your question here



Let's also add Trade and inequality as subtopic



Great addition! Including "Trade and inequality" as a subtopic will allow us to explore how international trade affects economic inequality between countries.

Here's the updated search strategy:

Main Topic: Economic inequality between countries

Subtopics/Synonyms:

- Income disparity between nations
- Cross-country income inequality
- International economic inequality
- Global wealth distribution
- Economic divergence
- Developed vs. developing countries income gap
- Trade and inequality
- Impact of international trade on inequality
- Trade policies and income distribution

Enter your question here



Reinforcing AI literacy principles through product design

What are the effects of income inequality on political stability?

Sources

1 ARTICLE

Political instability, economic inequality and social conflict: The case in Italy
Ippolito, Marzia et al. 2019

2 ARTICLE

The erosion of democracy in an age of wealth inequality: Unravelling the impact of subjective socioeconomic stratification
Han, Seungwoo 2024

3 ARTICLE

Income Shocks, Inequality, and Democracy
Kotschy, Rainer et al. 2021

4 ARTICLE

Income Inequality and Political Trust: Do Fairness Perceptions Matter?
Bobzien, Licia 2023

5 ARTICLE

How does income inequality affects economic growth at different income levels?
Shen, Chengfang et al. 2023



View more results from your library search

Overview of sources

Income inequality has significant implications for political stability, as evidenced by various studies. Rising economic inequality can lead to a contraction of political stability and an increase in social conflict. This phenomenon is explained by the theory of relative power, which posits that the distribution of incomes affects political participation. The relatively wealthy may use their power to maintain the status quo, while the relatively poor may withdraw from political engagement when they perceive their demands will not be addressed. This dynamic can alter the distribution of votes among political factions, ultimately disadvantaging the poorer segments of society and affecting their political influence ¹

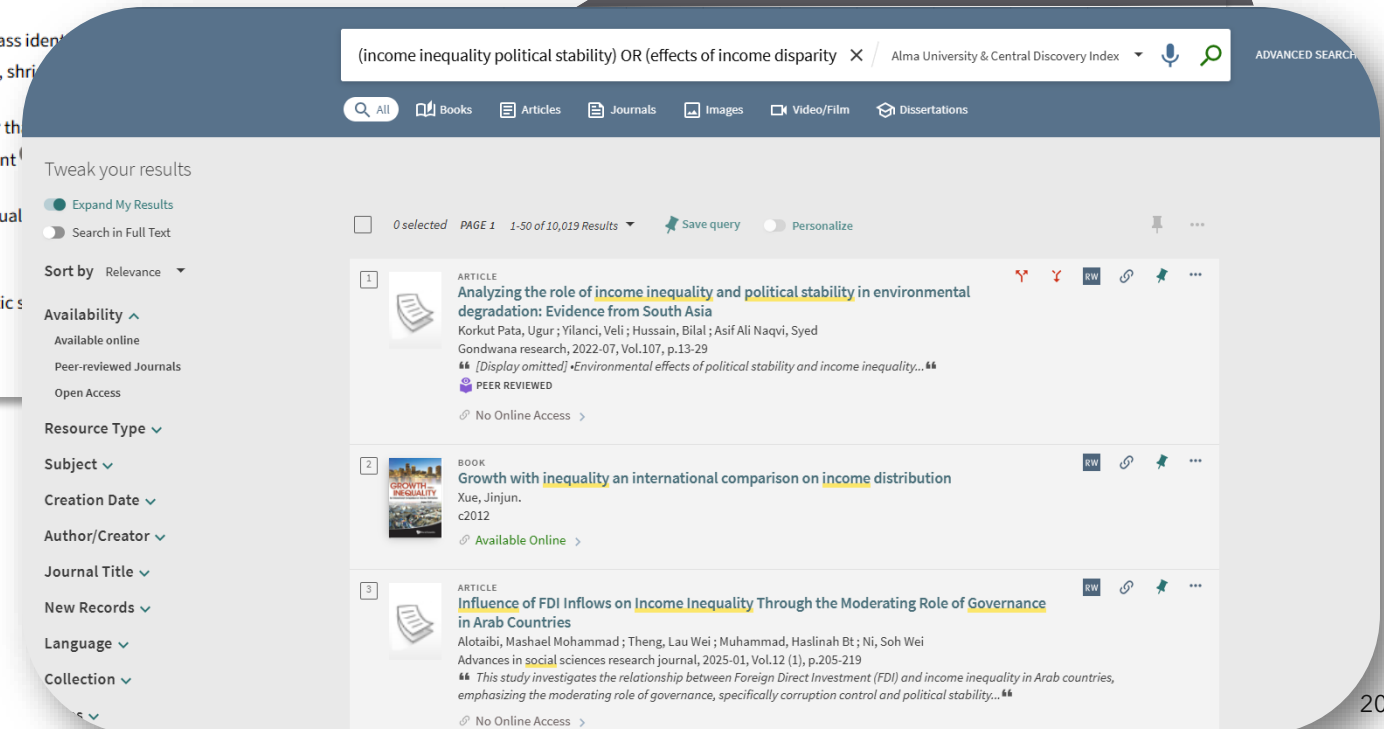
Furthermore, the erosion of democratic institutions is linked to increasing wealth inequality. As disparities in wealth grow, class identity becomes more pronounced, which poses risks to democratic stability, particularly as the subjective middle class, which traditionally upholds democratic values, shrinks.

Additionally, the relationship between income shocks and democracy suggests that significant fluctuations in income, rather than stable income, may undermine democratic quality, indicating that the effects of economic conditions on political stability are complex and context-dependent ²

Political trust, a crucial element for the stability of democracy, is also influenced by perceptions of income inequality. Individual-level trust in political institutions can be undermined by perceived income inequality, which in turn affects political participation and stability ³

In summary, income inequality affects political stability through mechanisms that influence political participation, democratic quality, and political trust.

Primo Research Assistant



Reinforcing AI literacy principles through product design

Alethea Tasks Library Reader Contact us

Tasks > Harari - The Humanist Revolution

TASK
Harari - The Humanist Revolution

Highlight Review Answer

Review your question highlights, rearrange them as you see fit and add titles

- What, for Harari, are the key features of humanism?
Highlighting is mandatory
- From where is meaning derived under humanism? Explain one of Harari's examples.
Highlighting is mandatory
- Give a brief account of the three main branches of humanism that Harari identifies.
Highlighting is mandatory

Review highlights

The subject to replace god as source of meaning/value

The antidote to a meaningless and lawless existence was provided by humanism, a revolutionary new creed that conquered the world during the last few centuries. The humanist religion worships humanity, and expects humanity to play the part that God played in Christianity and Islam, and that the laws of nature played in Buddhism and...

Show more

The problem of reflexivity

Humanism assumes that each human has a single authentic inner self, but when I try to listen to it, I often encounter either silence or a cacophony of contending voices. In order to overcome this problem, humanism has upheld not just a new source of authority, but also a new method for getting in touch with authority and gaining true...

self reliance

convincing us that before the highest what's what, we

ing from
m of humanist life
qual, emotional
ron Humboldt - o...

How do you think this quote relates to the key features of humanism according to Harari?

The shifting of source of all meaning from 'god' to 'subject', and more particularly - the subject's own freewill

Alethea Academic Coach

Student engagement:

54 min

Average time per assignment

41 min

Average reading time per session

26 min

Average conversation time with the AI coach

AI literacy micro-course: A joint program by ACRL-Choice & Clarivate



Support libraries in developing foundational AI competencies through practical content that can be adapted for staff training and AI literacy programs.



- 8-week asynchronous learning modules
- Introductory explainers, curated readings, skill-building activities, case studies, interviews
- Tailored for varied skill levels: AI novice, intermediate, advanced



- Launching summer 2025
- Advisory feedback sessions coming soon—contact us to get involved!

Many Thanks