Introducing the new SciVal

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Agenda

1. Elsevier overview
2. Elsevier Research Intelligence portfolio
3. SciVal overview
4. What can SciVal do for you?
5. Appendix
   • Pure overview
   • Analytical Services overview
Solutions that help professionals across industries make better decisions, get better results and be more productive
Lead the way in advancing science, technology and health

Galileo’s last and greatest work, published in 1638 by Elzevir, Discorsi e Dimostrazioni Matematiche
Content + Technology and Analytics = Improved Outcomes
User needs addressed by Elsevier Research Intelligence

Competitive research landscape

- 7 million researchers
- Emerging research nations
- National and international collaboration

Decisions on research

Competitive behavior fuelled by

- Research drives sustainable economic development
- Grants requiring international collaboration
Decisions by “triangulating” information

Elsevier Research Intelligence

Reliable data

Strategic Planning for Research

Your Scientists

External Review

Expert opinion

Peer review
Elsevier Research Intelligence portfolio

What we offer

CORE

SciVal (External View)
Ready-to-use tools to analyze the world of research, and to establish, execute and evaluate optimized strategies for the research organization.

Modules:
- Overview
- Benchmarking
- Collaboration
- Funding

Pure (Internal View)
Comprehensive research information management system to enable evidence-based decisions, promote collaboration, simplify administration and optimize impact.

Modules:
- Administration
- Reporting
- Import
- CV
- Award Management
- Assessment
- Portal (Experts, Institutional)

Analytical Services
Customized analysis, reports and services.

- Analytical Report Services
- Data Integration Services
- Reviewer Finder
- Custom Solution for Funders
- Scopus Custom Data
- Author Profile Refinement Services
- Fingerprint Engine

COMPLEMENTARY TOOLS AND RESOURCES

Scopus
The largest abstract and citation database of peer-reviewed literature; the broadest source of global, relevant scientific research, with tools that track, analyze and visualize research.

Mendeley
A free reference manager and academic social network that can help organize research, collaborate with others online, and discover the latest research, as well as other meaningful trends in global research activity.

What we support

ENABLE RESEARCH
- Develop Strategy
- Identify/Recruit Researchers
- Secure Funding

CONDUCT RESEARCH
- Search, Discovery, Read, Review
- Collaborate, Network
- Experiment

SHARE RESEARCH
- Manage Data
- Publish, Disseminate
- Commercialize
- Promote

Who we support

- Research Institutions
- Funders
- Policy makers
  - Provosts
  - Vice Chancellors
  - Research Administrators/Development Professionals
  - Researchers
  - Research Managers
  - Department Heads
  - Librarians
  - Students
  - Communications Professionals
  - Technology Transfer Officers
  - Grant Managers
  - Legislators
  - Economic Development Officers

www.elsevier.com/research-intelligence
SciVal overview
SciVal Spotlight and Strata – the first generation

**Spotlight**
- Innovative
- Pre-defined structure, ready-to-go
- Overview / snapshot
- Updated annually
- Institutions & countries
  - Show only strengths

**Strata**
- Traditional
- Flexible set-up, view and interrogation
- Detailed / granular
- Updated weekly
- Researchers & groups
  - Show everything

**Approach**

**Framework**

**Level**

**Data**
SciVal in a nutshell

SciVal offers quick, easy access to the research performance of 220 nations and 4,600 research institutions worldwide, and groups of institutions.

Visualize research performance

Benchmark your progress

Develop collaborative partnerships

Ready-made-at a glance snapshots of any selected entity

Flexibility to create and compare any research groups

Identify and analyze existing and potential collaboration opportunities
The layers of SciVal

Using advanced data analytics super-computer technology, SciVal allows you to instantly process an enormous amount of data to generate powerful data visualizations on-demand, in seconds.

- Scopus data only
- 1996 onwards
- Weekly update

Query around 75 trillion metric values
About Scopus®

- The largest abstract and citation database of research information with over 53 million records
- Updated daily, includes:
  - 21,000+ titles from more than 5,000 international publishers (independent review board)
  - 20,000+ peer-reviewed journals (including 2,800 open access journals)
  - 367 trade publications
  - 421 book series
  - 30,000 books (75,000 by 2015)
  - 5.5 million conference papers
  - "Articles-in-Press" from more than 3,750 journals and publishers

- Coverage of:
  - Life Sciences
  - Health Sciences
  - Physical Sciences
  - Social Sciences
  - Arts and Humanities

- Cited Reference expansion of pre-1996 references (back to 1970 by 2016)
- Independent journal metrics:
  - SNIP: The Source-Normalized Impact per Paper
  - SJR: The SCImago Journal Rank
- Connectivity with ORCID
What can SciVal do for you?
Benefits for a broad range of users

SciVal supports the needs of a broad range of institutional users by providing ready-made, at-a-glance snapshots for flexible, institution-specific insight.

**Vice chancellors of research**
- 360 degree Performance Overview to inform strategic planning
- Identify institution’s strengths and short-comings

**Research administrators**
- Create management-level reports
- Accelerate institutional and cross-institutional collaboration
- Support and win large grants

**Department heads**
- Evaluate researcher and team performance for recruitment and retention decisions
- Model-test scenarios by creating virtual teams

**Researchers**
- Raise visibility and highlight achievements
- Expand networks
- Locate collaborators and mentors
What are the questions addressed using SciVal?

“How can we demonstrate excellence in a way that best shows our unique strengths to secure funding and attract students?”

“My VC is going to China; who do our academics collaborate with there and how can we expand?”

“I want to explore the various scenarios I’m considering to set up a centre of excellence. How can the data provide me with insights?”

“I want to benchmark my institute, and my departments want to benchmark themselves. How can we all do this according to our different realities?”
“How can we demonstrate excellence in a way that best shows our unique strengths to secure funding and attract students?”

View the disciplinary focus of your institutions and your top researchers
Look through different metrics to identify ones that demonstrate your institution’s research excellence.

See how many of your publications fall into the top 1% and 10% of the most cited articles in the world.
Look through different metrics to identify ones that demonstrates your institution’s research excellence.

View Field-Weighted Citation Impact that normalizes citation behavior for differences in size, field and publication-type.
“I want to explore the various scenarios I’m considering to set up a centre of excellence. How can the data provide me with insights?”

Test scenario by creating virtual teams and compare using multiple metrics
17 sets of metrics at your disposal

Slice and dice your data from multiple angles to identify your core strengths and weaknesses

**Productivity metrics**
- Scholarly Output
- $h$-indices ($h$, $g$, $m$)

**Citation Impact metrics**
- Citation Count
- Citations per Publication
- Cited Publications
- $h$-indices ($h$, $g$, $m$)
- Field-Weighted Citation Impact
- Publications in Top Percentiles
- Publications in Top Journal Percentiles

**Collaboration metrics**
- Authorship Count
- Number of Citing Countries
- Collaboration (geographical)
- Academic-Corporate Collaboration

**Disciplinarity metrics**
- Journal count
- Journal category count

Snowball Metric; [www.snowballmetrics.com/metrics](http://www.snowballmetrics.com/metrics)
SciVal Metrics Guidebook

This comprehensive metrics guidebook is intended to be a straightforward, practical companion for you to find the right metrics to meet your objectives.

- **Understanding metrics**
  - Scopus as data source

- **Selection of appropriate metrics**
  - What affects their values, besides performance?

- **For each metric**
  - Situations in which they are useful
  - When to take care and how to address short-comings
  - Worked examples

“My VC is going to China; who do our academics collaborate with there and how can we expand?”

Drill into the Google map to identity your collaboration partners in China
Identify existing and potential collaboration partners

Collaboration by Northwestern University

Source: Scopus data up to 24 Feb 2014

Current collaboration

Institutions collaborating with Northwestern University

<table>
<thead>
<tr>
<th>Institution</th>
<th>Co-authored publications</th>
<th>Co-authors at Northwestern University</th>
<th>Co-authors at the other institution</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peking University</td>
<td>314</td>
<td>269</td>
<td>339</td>
<td>5,872</td>
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<tr>
<td>CAS - Institute of High Energy Physics</td>
<td>225</td>
<td>130</td>
<td>182</td>
<td>6,774</td>
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<td>University of Science and Technology of China</td>
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<td>96</td>
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<td>Xi'an Jiaotong University</td>
<td>140</td>
<td>202</td>
<td>237</td>
<td>819</td>
</tr>
</tbody>
</table>

276 collaborating Institutions  2,641 co-authored publications
Assess the activity level and identify researchers
“I want to benchmark my institute, and my departments want to benchmark themselves. How can we all do this according to our different realities?”

SciVal provides an option to:

1. create your own researcher groups (publication groups soon), or
2. as an optional paid service, have pre-populated groups of researchers added to SciVal as your institution’s pre-defined entities. Elsevier will perform the manual refinement of researcher profiles to ensure appropriate matching of Scopus records to each identified researcher.

You can easily benchmark departments and teams by pre-populating the organizational hierarchy in SciVal.
SciVal - Solution to your strategic planning challenges

Gain immediate access to view and analyze the world’s research to:

• View the ready-made, at-a-glance snapshot of your research performance
• Benchmark your performance against any set of peers.
• Model test scenarios by creating virtual teams and newly emerging research areas...
• Establish collaborative partnerships locally or globally
• Track and monitor weekly to stay up-to-date with changes in the market

www.elsevier.com/research-intelligence
Pure: Comprehensive research information management

Consolidate
• Simplify research information management and reduce administrative overhead
• Capture data across the world of research

Validate
• Certify your research information as validated and reliable

Profile
• Create rich researcher profiles and publication lists on the fly
• Generate and share personalized CVs
• Achieve precise, current, reliable researcher profile publication lists with minimal effort

Analyze
• Track progress towards research milestones for groups and individuals
• Identify subject experts through the Elsevier semantic Fingerprint Engine™

Monitor
• Monitor your research grant life cycle and success rates

Showcase
• Pure’s portals promote accomplishments and facilitate collaboration through expertise profiling and research networking

Pure combines internal systems, external data sources and legacy data into a single platform, providing a comprehensive view of your institution’s research activities

Pure, Consolidate, Validate, Profile, Report, Analyze, Monitor, Showcase
Pure Experts Portal

Showcase and Discover Expertise:

- Demonstrate researcher activities and accomplishments to attract potential collaborators
- Discover more about the content written by other researchers
- Identify other researchers' distinctive expertise and find potential partners
- Facilitate collaborations by exposing publishing connections and make researchers' accomplishments readily discoverable

Every researcher profile delivers a comprehensive list of publications, coauthor and institutional networks, a list of similar experts and a semantic index, or Fingerprint™ visualization, of the researcher's distinctive expertise
SciVal Analytics – Tailored data and report services for measuring research performance

Make more informed decisions related to funding allocations, research policies and strategies

• Provides in-depth analyses in areas such as international comparative performance, ROI of funded projects, research excellence initiatives and research landscape studies

• Offers flexibility to choose data sources, select the time period, and identify who to benchmark against (peers, country, region and world)

• Select datasets from Scopus Custom Data to build an in-house database and perform your own analysis

BIS Report: www.bis.gov.uk
Customized analysis and reports to measure research performance

UK’s national Research Excellence Framework assessment program, 2014

International Comparative Performance of UK Research Base, UK (BIS), 2011 & 2013

National Excellence in Research for Australia assessment program, 2012

The Water & Food Nexus, 2012

Science Europe report on European research collaboration and researcher mobility, 2013

Stem Cell Research, 2013
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Thank you!

For product info, please visit: www.elsevier.com/research-intelligence