From professional metadata indexation to customized research management solutions (Thomson Reuters)
From professional metadata indexation to customized research management solutions
THOMSON REUTERS RESEARCH MANAGEMENT SOLUTIONS

**Converis Workflow**
- Full Research Information Management
- Workflow modules for entire research lifecycle
- Fully-configurable
- Full integration with university and 3rd party systems

**Incites Analytics**
- Macro level view of country, institution, researcher performance and benchmarking
- Detailed collaboration analysis
- Institutional rankings and metadata
- Article level metrics

**Web of Science Profiles**
- Micro level view of unit, researcher scholarly activity
- Enables institutional management of publication records with Web of Science integration
- Detailed reporting and CV generation for external and internal purposes

**Thomson Reuters Data and Information**
The Web of Science Development

Citation Indexes for Science
A New Dimension in Documentation through Association of Ideas

Science 122 (3159), p.108-11, July 1955


Science Citation Index
Web of Science Launched
ISI Acquired
EndNote Acquired
Web Of Knowledge Launched
Century of Science Launched
BIOSIS Introduced
WoS Next generation launched
Incites Next Generation launched
Regional Citation Indexes launched
Emerging Sources Citation Index launched

Science Citation Indexes for Science
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The Web of Science Universe

WoS Core Collection
Russian Citation Index
Chinese Citation Index
Scielo Citation Index
Derwent Patent Database
BIOSIS Citation index
Data Citation Index
Medline
e.tc...

2500+ Active journals indexed
54 Million patents
115 Million publication records
5.5 Million Research data

1 BILLION+
Cited references
The Web of Science Core collection

Web of Science Core Collection

Citation content of the best quality and consistency, and metadata

The FOUNDATION of our analytical solutions and benchmarking metrics

116 years of Cited references
The Web of Science Core collection Development

JOURNAL SELECTION PROCESS

• The philosophy of the database is to offer content of the highest quality
• Selection is based on quality criteria established and developed for over 50 years
• Today, 18 FULL TIME editors fully dedicated are in charge of content selection and maintaining the quality and coherence of the database (150 Years of experience)
• 12% ACCEPTANCE RATE in 2014

INFORMATION PROVIDER, NOT PRIMARY PUBLISHER

• None of our editors are involved in journal edition or research publishing
• NEUTRALITY + OBJECTIVITY = SELECTION OF THE HIGHEST QUALITY
Emerging Sources Citation Index (ESCI)

An additional index in the Web of Science Core Collection to widen the window for research discovery

About 5000 journals by the end of 2016 (3170 in Core Collection today)

2500 Journals from Europe

45% Open Access (so far)

Keep the core criteria for selection:
- Peer Review
- Publishing Practices
- High Interest to a scholarly community
- Ability to meet our technical requirements

Same strict editorial policies for capture: Indexing of ALL publications, All authors, All affiliations, and Funding sources.

Once these journals gain influence (citations), some will become part of the main journal indexes and receive a Journal Impact Factor.
Without **consistent metadata**, no reliable analysis can be conducted and metrics will not reflect reality.

Journals are indexed **Cover-to-Cover**

All authors are indexed

All affiliations are indexed

All funding sources are indexed (2008)
Thomson Reuters effort to make organization more visible by enhancing the publication metadata

Unification rules, **MANUALLY created** for 6042 research organizations

Organization-Enhanced Name(s)
Sultan Qaboos University

Organization-Enhanced Name(s)
Sultan Qaboos University

Organization-Enhanced Name(s)
Sultan Qaboos University
WITH ACCESS TO THE INDUSTRY’S MOST TRUSTED DATA, TOOLS AND SERVICES, THOMSON REUTERS SERVES AS A HIGH-VALUE RESEARCH MANAGEMENT AND ASSESSMENT DECISION SUPPORT RESOURCE
EXAMPLES OF METRICS DERIVED FROM OUR PUBLICATION DATA
USING INDICATORS WISELY

NO SINGLE INDICATOR TELLS THE ENTIRE STORY

**ABSOLUTE INDICATORS**

Number of documents or citations, and derivatives (e.g., citation impact) will vary depending on subject category, time, and document type.

These can tell you about factors such as productivity but do not allow for meaningful comparisons across domains.

**NORMALIZED INDICATORS**

Performance against the set of documents normalized for subject/journal, publication year, and document type.

These can be used for performance comparisons.

Normalized indicators are based on averages and can be skewed by a single or small numbers of highly cited documents; use larger document sets and appropriate thresholds and filters. Caution should be applied to analyses of recent years as they may have low document and citation baselines.
INDICATORS AND METRICS

MULTIPLE INDICATORS FOR MULTIPLE QUESTIONS/ANGLES

PRODUCTIVITY & IMPACT
- number of WoS documents
- times cited
- citation impact
- % of documents cited
- impact factors
- H-Index, Eigenfactor, etc.

NORMALIZATION
- percentile/average percentile
- category normalized citation impact
- category expected citation impact
- highly cited papers
- hot papers
- journal normalized citation impact
- journal expected citation impact
- impact relative to the world

PERFORMANCE
- % of documents in top 1%
- % of documents in top 10%
- category expected citation impact
- highly cited papers

COLLABORATION
- % industry collab
- % internatl collab
- international collab
NORMALIZED INDICATORS

CATEGORY
citation patterns differ by subject category

e.g. nanotechnology vs law

TIME
citations accumulate over time and at different rates depending on article age and category

e.g. new articles may accumulate citations quickly, older ones more slowly or not at all

DOCUMENT TYPE
citations differ by document type within a journal

e.g. reviews are generally more heavily cited than articles, and editorials, book reviews etc. may go uncited

NORMALIZATION PUTS DATA INTO CONTEXT—IS AN ENTITY DOING BETTER OR WORSE THAN WOULD BE EXPECTED IN A CATEGORY?
NORMALIZATION AND BENCHMARKING 101

CONTEXT IS EVERYTHING

INDICATORS MUST BE PUT INTO CONTEXT TO BE USEFUL:

- CATEGORY, JOURNAL, PEERS, GLOBAL
  - NORMALIZED INDICATORS — for relative performance comparisons
  - PERCENTILES — where does it fall in the range of values?
  - BENCHMARKS — how does it compare with a group or globally?

IS 20 "good" or "bad?"
PERCENTILES AND QUARTILES

DISTRIBUTION OF VALUES

- QUARTILE 1
- QUARTILE 2
- Median
- QUARTILE 3
- QUARTILE 4

1st PERCENTILE

PERCENTILES can be defined either way, so an item in the 99th percentile may be better or worse than 99% of the group.

100th PERCENTILE
HOW AND WHERE DOES THOMSON REUTERS PROVIDE THESE METRICS?
Professional customized on-demand reports

These studies and reports can be one-offs or regularly delivered. They cover more than just literature and can include e.g. patent or financial data.
INCITES: ONE PLATFORM FOR ANALYTICS

InCites includes:

– **Journal Citation Reports** - comprehensive journal analysis
– **Essential Science Indicators** - top cited research from around the world
– **Benchmarking and Analytics (B&A)** - flexible benchmarking of institutions, journals, authors, funders and collaboration analysis across **35 years** of publication activities
– **Web of Science Profiles** - precise bibliometric analysis of your institution’s authors and departments
B&A Indicators: appropriate measures for any angle
A reports library helps you craft dynamic reports assessing/comparing:

- People
- Peer institutions
- Regions
- Research Areas
- Publications
A powerful combination of filters

Filter the world’s publications by:
Organization, Organization type, location, association, author names/profiles, document types, journals, Open Access, Publishers.
Sliders to limit results using thresholds and time period
Build your reports the way you need them

Do not only rely on absolute counts (e.g. Volume of papers), and use other measures (e.g. Normalized Impact)
Build your reports the way you need them.

Choose what you want to base your report on, then refocus your analysis on a different level.

Choose your angles/metrics.
Visualize your reports the way you want to
Drill on to article level metrics then access the record in the Web of Science Core Collection.
Configure dashboards and metrics relevant to your needs

Select report or create and develop your own templates

- Research Performance
- Collaborations
- Output
- Citation benchmarks
- Peer Comparisons
- Trends
- Funding
- Journal utility
- News Feeds
NEW in 2016: FUNDING AGENCIES EXPLORER

Demonstrate the productivity and impact of programs, by analyzing publications that they have funded or authored.
NEW in 2016: Local Journal Utilization Report

**IN WHICH TITLES DO THEY HAVE MOST IMPACT?**

**ARE THEY CITING NEW OR OLDER ARTICLES?**

**WHERE ARE THE THEIR AUTHORS’ PUBLISHING?**

**WHICH JOURNALS CITE THEIR AUTHORS?**

**WHICH JOURNALS DO THEIR AUTHOR’S CITE?**

**DO THOSE JOURNALS CITE NEW OR OLDER ARTICLES?**

AN INSTITUTION LEVEL ANALYSIS TOOL
An assessment of Thailand’s research institutions, using data exports of Incites:
Identification of Leaders

Normalized Citation Impact relative to Thailand average (Thailand average equals 1)

Share of publications normalized to Thailand average (Thailand average equals 1)
How do I use this data and metrics in my own repository/System?

Use the Web of Science Web Services via an API, and enrich your database, your repository, or your Current Research Information System with better bibliographic metadata.

Use Incites API to download all performance indicators in your system.
Once your internal system has received our **publication metadata**, as well as our **Incites metrics**, you can run **customized analytics** based on your internal structures, departments, people, projects, etc.
What if I do not have a system but would like to get a more granular and internal view of my organisation?

Web of Science Profiles

- Pre-populated with Web of Science publication data mapped to your institutional hierarchy
- Best-in-class research analytics – InCites normalized citation metrics
- Validated publication lists will be reflected in Web of Science and InCites
- Powerful tools for customized reporting
- Cloud-based so scholarly output is centralized and always accessible
What if I do not have a system but would like to get a more granular and internal view of my organisation?

Web of Science Profiles

Researchers profiles can be managed by them and/or admin. Your whole organisation’s structure can be represented.
What if I do not have a system but would like to get a more granular and internal view of my organisation?

Web of Science Profiles

CV’s can be generated from profiles in various format
What if I do not have a system but would like to get a **more granular and internal view** of my organisation?

Profiles are pre-populated with publications. Publications can be auto-suggested, imported via alerts, directly from Web of Science searches or via Endnote file uploads.
**WoS Profiles**: Get a granular and internal view of your organisation’s structure and performance

Analyse your Web of Science profiles data directly in Incites Benchmarks and Analytics. Run analysis on your internally validated publication activities, departments, researchers, etc.
WoS Profiles: Get a granular and internal view of your organisation’s structure and performance

<table>
<thead>
<tr>
<th>Name</th>
<th>Rank</th>
<th>Web of Science Documents</th>
<th>Category Normalized Citation Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of History - Philosophy and Religion</td>
<td>1</td>
<td>377</td>
<td>1.32</td>
</tr>
<tr>
<td>Department of Social Sciences</td>
<td>2</td>
<td>311</td>
<td>1.41</td>
</tr>
<tr>
<td>Department of Biological and Medical Sciences</td>
<td>3</td>
<td>294</td>
<td>1.93</td>
</tr>
<tr>
<td>Department of Psychology - Social Work and Public Health</td>
<td>4</td>
<td>213</td>
<td>1</td>
</tr>
<tr>
<td>Department of Computing and Communication Technologies</td>
<td>5</td>
<td>210</td>
<td>2.53</td>
</tr>
<tr>
<td>Department of Sport and Health Sciences</td>
<td>6</td>
<td>183</td>
<td>1.58</td>
</tr>
<tr>
<td>Department of Mechanical Engineering &amp; Mathematical Sciences</td>
<td>7</td>
<td>151</td>
<td>0.68</td>
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<tr>
<td>Department of English and Modern Languages</td>
<td>8</td>
<td>113</td>
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<tr>
<td>Department of Planning</td>
<td>9</td>
<td>78</td>
<td>1.85</td>
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<tr>
<td>Department of Clinical Health Care</td>
<td>10</td>
<td>76</td>
<td>1.26</td>
</tr>
<tr>
<td>School of Architecture</td>
<td>11</td>
<td>62</td>
<td></td>
</tr>
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Expected July 2016

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Expected July 2016
What if I need to go beyond publication management and use a full research management system?

CONVERIS:
SUPPORTING THE FULL RESEARCH LIFECYCLE

Evaluation, Analytics & Reporting
• Report at any time over any information
• Optimise: Allocate resources

Collecting & Converging Information
• Easy accessibility to all information
• Reuse information
• Reduce administrative burden
• Increase public visibility

Pro-active Research Management

Supporting workflows & processes
• Streamline and unify processes
• Faster and shorter workflows
Why CONVERIS?

• **Better management information:** CVs, collaboration analyses, publications & bibliometrics, research projects & applications, data exports, ... for internal decision-making and external demands.

• **Increased visibility:** Provide access over the web to information on the organisation’s researchers, units and their research activities and results.

• **Efficiency:** A more efficient, streamlined administrative process for managing research information for researchers & administrators.

• **Scalability:** A configuration module enabling the organisation without involvement from TR to ensure that the system can match its evolving needs over time.
CONVERIS: MODULAR SOLUTION SUPPORTING THE FULL RESEARCH WORKFLOW
CONVERIS: AN OPEN SOLUTION

COLLECT
- EXTERNAL DATA SOURCES
  - Web of Science, PubMed, etc.
- INTERNAL DATA SOURCES
  - HR, Finance, SIS, IR, etc.
- INDIVIDUALS

VALIDATE

UTILIZE
- MARKETING & PUBLIC WEB
- MANAGEMENT & ADMINISTRATION
- EXPORTING & REUSE
- REPORTING & ANALYSIS

CONFIGURABLE DATA MODEL
FLEXIBLE USER MANAGEMENT
INDIVIDUAL PROCESS SUPPORT
CONVERIS: CONFIGURATION MODULE. POWER TO THE USER
CENTRALIZE RESEARCH INFORMATION AT ALL LEVELS
EXAMPLE OF DATA IMPORT TO HIGHLIGHT CONFIGURATION

Populating list and edit view of publication with information from other systems in use (Almetrics)
The **Research Portal module** of Converis already allows for the public showcase of your institution’s research activities and people.

Through configuration of the Data export, you can also **populate VIVO profiles with Converis information**. Supports search, browse, and data visualization.
ADVANCED ANALYTICS FOR FLEXIBLE AND POWERFUL REPORTING

Create your own “drag and drop” reports on any data in the system.
Create your own “drag and drop” reports on any data in the system.
THOMSON REUTERS RESEARCH MANAGEMENT SOLUTIONS

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THANK YOU