InCites NEXT GENERATION:
SOME KEY USE CASES TO BENCHMARK AND ANALYSE RESEARCH

THIS DOCUMENT, PREPARED BY THOMSON REUTERS, HIGHLIGHTS HOW INCITES HELPS THE HIGHER EDUCATION AND RESEARCH ORGANIZATIONS IN AUSTRALIA AND NEW ZEALAND.

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THOMSON REUTERS™

BENCHMARK ORGANIZATIONS

With Incites users can compare the relative performance of more than 5,000 organizations worldwide. The global data of the platform enables local or worldwide assessments.

SORTING ORGANIZATIONS IN INCITES

The "*Organization explorer*" in InCites gives access to organization level information for over 5,000 leading research organizations, worldwide (March 2015). For each organisation, Thomson Reuters teams have currated the list of addresses to ensure information is exhaustive and accurate. For each organisation, we have associated research papers of all document types from 1980 and classified them is a series of disciplines, including the fine 251+ Web of Science categories or the ANZSRC Fields of Research.

These organisations can be listed in order to create new rankings based on selected indicators. Because each organisation can be classified by activities, it is possible to rank them by sector of activity such as Academic institutions, Government, Corporate, etc.

Organisations from 241 regions or countries are available.

Example: see Box #A

COMPARE WITH PEERS

The "*Organization explorer*" provides filters to enable the selection of specific disciplines, document attributes and collaborations. With this feature, it is possible to analyse a specific area in an institution in comparison with peers.

The selection of InCites Indicators, including the relative metrics using annual, category, and document type baselines, enables detailed analysis. Such indicators are also used in leading global ranking outlets.

Thus InCites enable the creation of dashboards used in specialised organisations or specialised areas in larger organisations (such as departments).

It is also possible to monitor progress in annual rankings or regular evaluations (internal or external).

Example: see Box #B

A - A list of the top 10 organizations by size of the research output (number of papers indexed in InCites for Australian organizations).
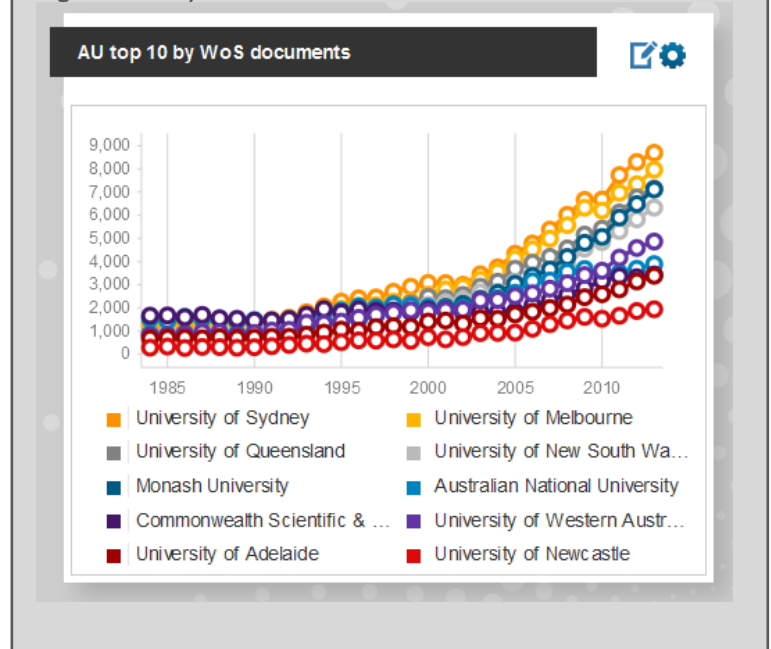
B - Evolution of the Normalized Citation Impact (NCI) between 2004 and 2013 for two universities in Biological Sciences (FoR 06). These values are also benchmarked for all universities in the region.
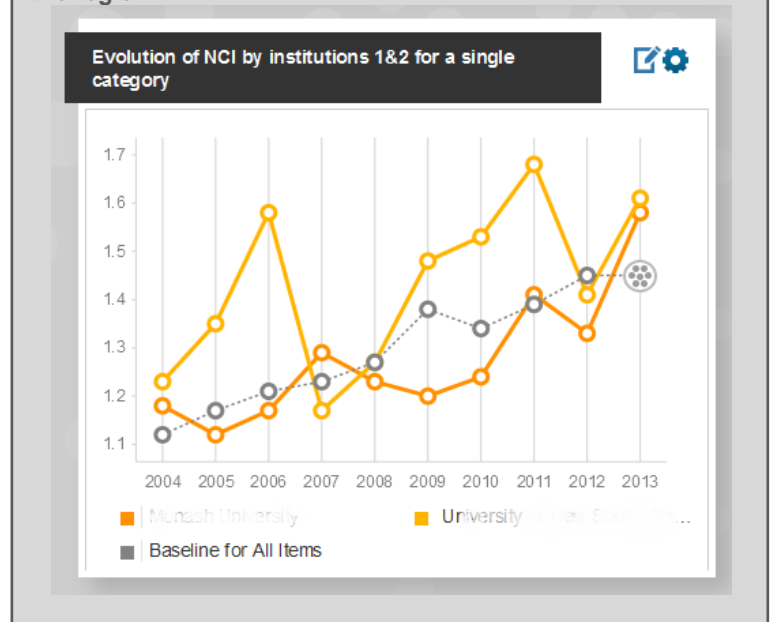
TARGET AND DRIVE COLLABORATIONS

Making the connections is a central part of the Web of Science. InCites enables the analysis of the collaborations between organizations, countries and people using the affiliation information from the Web of Science data.

INTERNATIONAL FOOTPRINT

An extensive body of knowledge shows that international collaborations drive academic impact as shown by a higher citation count. However this trend needs to be qualified in some countries, some disciplines and for some collaborations. Nevertheless, monitoring international collaborations is an important measure of an institution, and a country's outreach activities.

With InCites it is possible to measure the levels of international collaborations (number and percentage) and to identify key collaborators. InCites indicators give an indication on the intensity and return of such collaborations at a fine or broad level.

Example: see Box #C

COLLABORATION WHITE SPACE ANALYSIS

When mapping collaborations two elements are central to the strategy: the push forces (leverage existing links) and the pull forces (managing the attractiveness of the collaboration).

InCites enables users, at any level, to interpret how potential partners are collaborating and how these organisations may view future collaborations with a new institution.

Example: see Box #D. While UCLA is in the top 50 by number of collaborations in the Australian institutions listed in Box #C, the first NZ institutions is in the top 150, and the first Australia organization only in the top 250 of UCLA's key collaborators list.
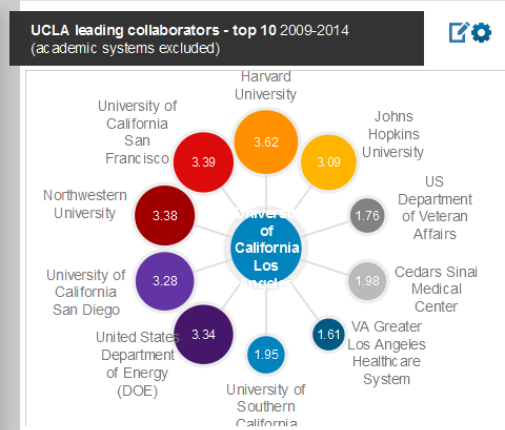
COLLABORATORS

Because collaborations are very different between departments and disciplines, the portal enables the review of collaborators at a finer level as well as the assessment of other metrics (for instance the opportunity to work with international or private companies).

Example: see Box #E. The percentage of industry collaborations is very variable with disciplines and collaborating partners. This graph shows these values for the top 8 disciplines between UCLA and the University of Toronto.

C - Evolution of the percentage of international collaborations in four Australian institutions between 2004 and 2013. The dotted line shows the national average (Australia & NZ).
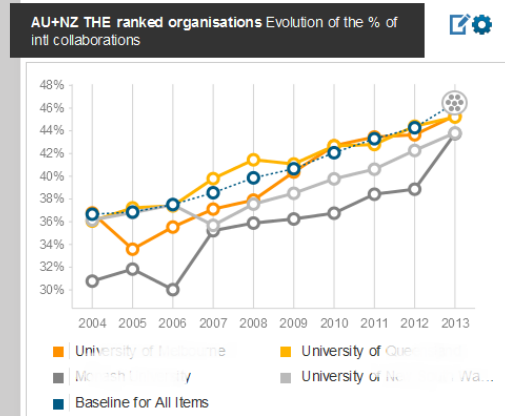
D - Leading collaborating organizations with UCLA in the USA. The numbers represent the Normalized Citation impact for each set of co-authored papers in the last 5 years.

E - Industry collaborations
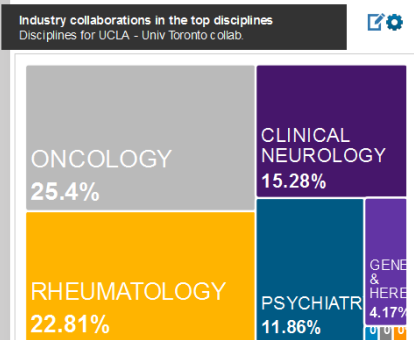
PROFILE RESEARCHERS' WORK

A key feature of InCites is to bring indicators at the level of the papers of all types in the Web of Science. Gauging these papers is crucial for securing funding, join a new team, and recruit domestically and internationally.

MY LEADING PAPERS OF THE LAST 10 YEARS

For individual researchers as well as for the research services and grant development staff, the identification of seminal work is an important step for tenure proposals as well as for grant submission. Major funding bodies identify track records of applications, including for large projects.

While the Journal Impact Factor can provide information about the quality of the journal, InCites provides indicators that are normalised at the article level. These metrics support the identification of the leading papers, even for cross disciplinary work.

InCites "*People Explorer*" as well as the direct export from the Web of Science help in the creation of accurate publication sets for this purpose. This information can be exported in a grant application.

Example: see Box #F

PUBLICATION PROFILES

All papers indexed in the Web of Science can be analysed together, across time, across disciplines or across publications (journal, books, and conferences) for an individual researcher of a small group. For internal teams, the "*Web of Science profile*" in InCites enables advanced slicing, but the review of the publication portfolio of any author (prospective candidate, partner investigators for instance), worldwide, is available in Incites main module.

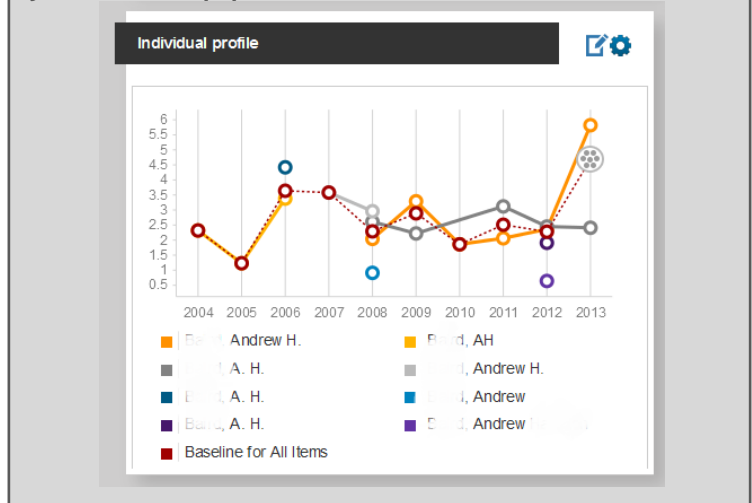**Example: see Box #G**

HIGHLY CITED RESEARCH

Tracking highly cited research is important to monitor the global influence of a body of work as well as for some of the global ranking of institutions. InCites data is now available from the Web of Science to find and track these papers (the data is also available from the Essential Science Indicators module).

Example: see Box #H

F - A list of web of science documents attributed to a group of authors. This list can be exported an incorporate article bibliographic elements and normalized citation counts or percentile values.

G - Evolution of the Normalized Citation Impact (NCI) between 2004 and 2013 for an individual author with different affiliations. The dotted line shows the performance for each year across all papers.

H - Highly cited papers in the Web of Science

PORTFOLIO MANAGEMENT

Entities such as groups, authors, departments, organizations, and countries or topics can be analyzed across disciplines and measured against peers. Internal KPI development and monitoring can easily be achieved.

ARE TWO INSTITUTIONS COMPLEMENTARY?

By combining tiles that detail a specific aspect of an institution's research activity, InCites dashboard can provide a window on the key performance indicators that can be benchmarked to peers. Elements that underpin productivity, academic impact and influence, collaborations, and specialisation can all be part of the mix. Once these elements are established, strategic directions or partnerships can be guided by comparing the performance at one organisation with the performance factors of other organisations: key local or regional competitors, new partner organisation for a bilateral agreement or MoU, new network partners in a specific economic sector.

Example: see Box #I

ANALYSIS OF A RESEARCH TOPIC

InCites explorers also offers a series of category scheme (currently nine) that can be applied across all publications in the Web of Science, making reporting to funding bodies or stakeholders easier. Using the "*Journal explorer*" ad-hoc categories based on journal can also be created.

In addition, InCites offers the ability to analyse very precise sets of articles by using the power of Web of Science search engine in order to retrieve information on a specific topic not easily identified by broad categories.

This approach offers a strategic tool to conduct metrics based systematic reference reviews for a new research theme or in preparation of a large review article.

By drilling down in the data publication from an institution can also be profiled with others to answer some key questions: how many papers are published in leading journals, are these papers well regarded, what disciplines are articles published in? Etc.

Example: see Box #J

I - A partial snapshot of the dashboard for a single institution that includes different sources of information.
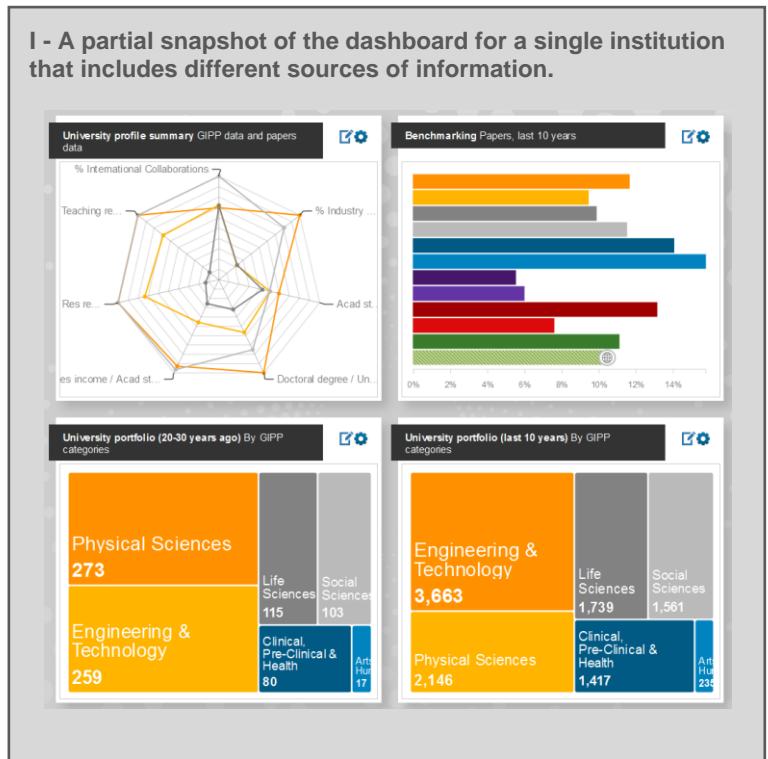
J - Articles extracted from a specific set ranked by their journal using the latest Journal Impact Factor. Articles in each journal can be analyzed for other factors, including the authors and InCites metrics can be associated with these reviews for individual articles.
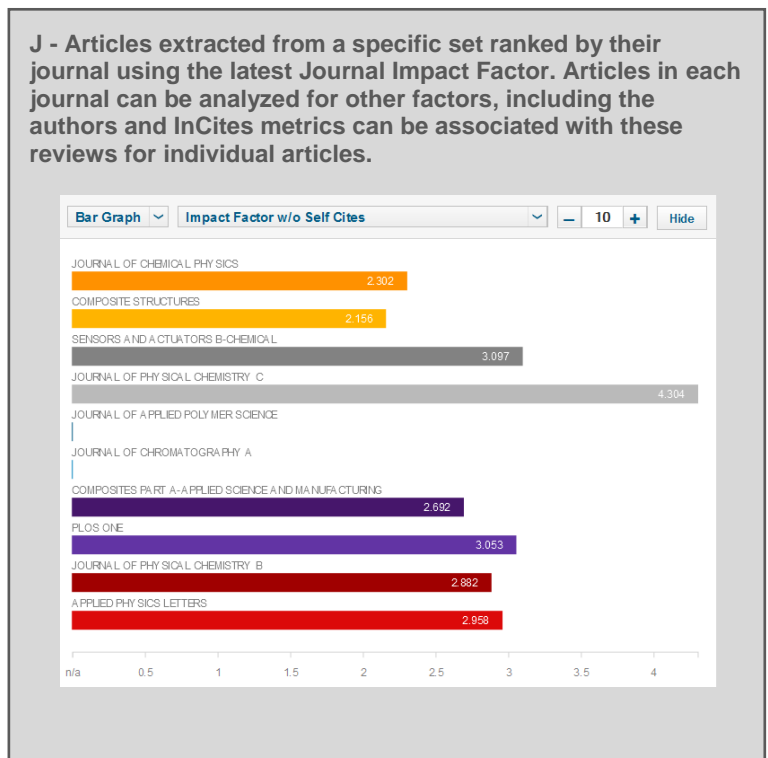
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