LexisNexis *Academic* Features: SmartIndexing Technology

The new LexisNexis *Academic* exploits SmartIndexing Technology at every turn to help guide users to the information they need.

What Is SmartIndexing Technology?

Briefly stated, SmartIndexing Technology (or, simply, SmartIndexing) applies controlled vocabulary terms for several different taxonomies to all LexisNexis news and business content. (Legal content is also indexed, but by a different set of taxonomies developed specifically for legal researchers.) Sources are also indexed, making it easy to locate publications in the Source Selection tool by attributes such as publication type, language, geographic region, and main topics covered.

The taxonomies are built and maintained by the LexisNexis Taxonomies & Indexing team, comprised of information professionals, lawyers, subject matter experts and analysts. Index terms are assigned using a unique approach that combines the best features of human and automated indexing practices. Index term rules are developed and tested by the Taxonomies & Indexing team. These rules "read" incoming documents and assign relevant index terms automatically to documents and sources.

Point your browser to the LexisNexis InfoPro site for more information on this remarkable project: http://www.lexisnexis.com/infopro/smartindexing/. The site includes background information, practical advice, and search tips and tricks.

SmartIndexing in LexisNexis Academic

SmartIndexing plays a major role at each step of the search and retrieval process, including:

- Source selection
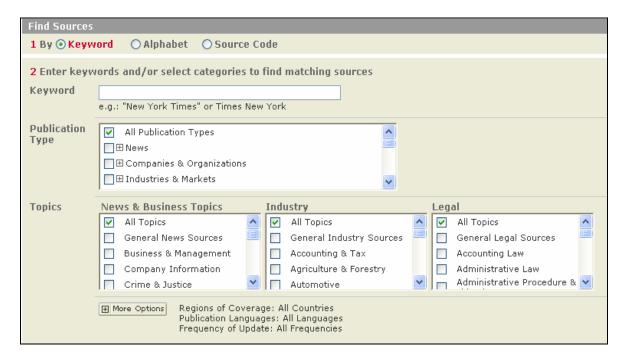- Query formulation
- Working with results

Source Selection: Browse
The Taxonomies & Indexing team has created a separate taxonomy to index
LexisNexis sources, which is consistent with the controlled vocabularies used to
index documents. The illustration below shows the "News and Business" topics
in the Source Selection Browse form. Three different taxonomies are available
on this form: geography, publication type, and topic.
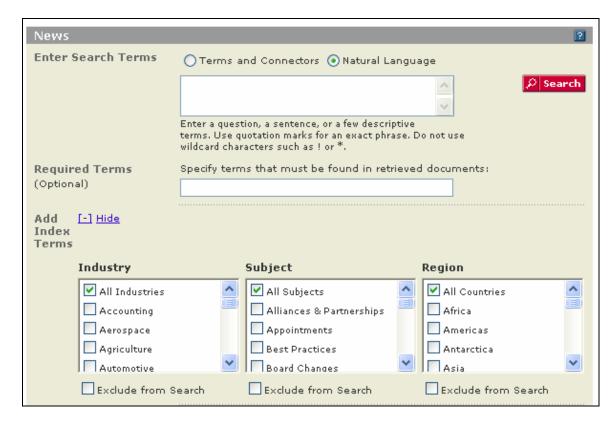
Source Selection: Find
The same source taxonomies, plus language and periodicity classifications, are available on the Source Selection Find form. (The geography, language, and periodicity choices are collapsed under "More Options" in the illustration.) Note that the publication type options expand, which allows you to select more specific types such as "newspapers" or "transcripts" within the "News" category.

You can combine the source indexing with keyword searching, or use it by itself. For example, without entering a keyword, you could use SmartIndexing to quickly produce a list of Spanish-language newspapers covering business and management topics.

Searching: News
The News Search form looks quite similar to the Source Selection Find form, in that it includes three boxes that let you quickly add SmartIndexing terms to your search. On this form, you can also use the "exclude" option, which has the effect of using the AND NOT operator with the selected term(s).
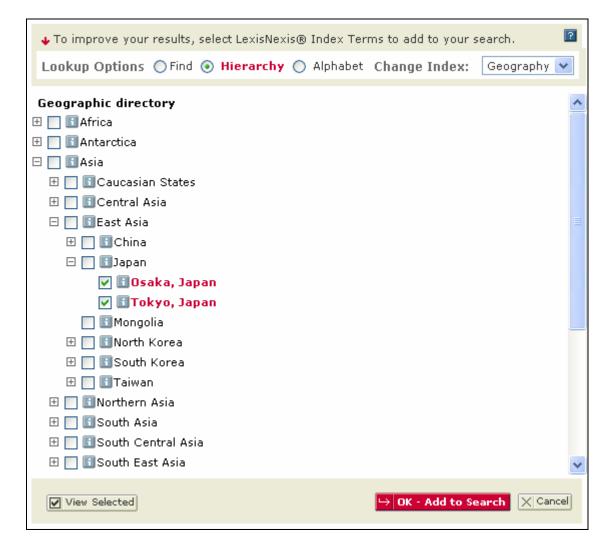
Searching: Power Search
The Power Search form has a SmartIndexing link that opens a special Index Term Lookup tool in a separate window. The tool allows users to search or browse for index terms from the following taxonomies:

- Company
- Industry
- Subject
- Geography

The geographic hierarchy is shown below. The tool is interactive, and is a great way for users to become familiar with the LexisNexis indexing approach as they find the correct terms for their searches.

Clicking the "Add to Search" button closes the Index Term Lookup Tool and returns you to the Power Search Form.

As shown below, a new box has been revealed in the Power Search Form to hold the SmartIndexing terms that have been selected. Additional search specification, such as full-text strings, date ranges, or particular sources can be added, but are not required.

The Boolean operator used between the index terms can be toggled between AND, OR, and AND NOT.
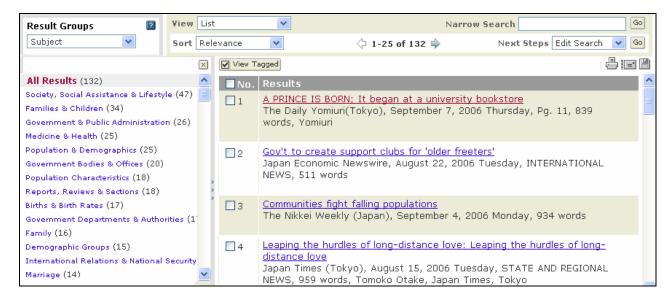
Check the Relevancy box to limit your search to major terms. This will restrict your results to documents for which the specified terms have a relevancy score of 85% or higher, indicating a significant discussion of the terms.

Narrower term roll up (hierarchical inclusion) is used in the search logic. Thus a search for "Asia" will also return documents indexed to the narrower term, "Tokyo, Japan." However, a search for a narrower term will not return documents indexed to broader terms.

Working with Results: Clustering
The results form in the new LexisNexis Academic uses clustering to help users work with their results set. The left side of the form includes a drop down box that lets you select which type of taxonomy to use for the clustering. Subject indexing is used in the example below. As a result set is returned, LexisNexis *Academic* analyzes the SmartIndexing terms assigned to the documents and uses them to create the groupings on the left side of the form. The number of documents indexed to each term is shown in parentheses, with the most frequently occurring terms at the top. Clicking on a term will filter the results set to show only those documents to which the term has been assigned.

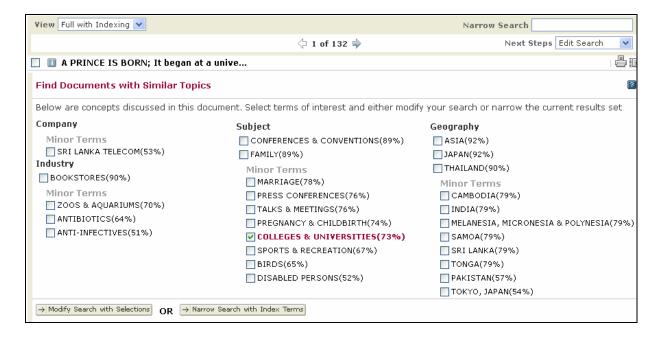The Results form also allows you to cluster your results set using these categories:

- Publication Category (or type)
- Publication Name
- Subject
- Industry
- Company
- Geography
- Language

Results clustering makes SmartIndexing convenient for novice users who would not consider adding index terms to their search. It allows them to search first and then easily sort through their results.

The use of SmartIndexing in Results Groups also provides an instant analysis of your search strategy, allowing you to see the distribution of your results set by publication type, geography, etc.

Working with Results: More Like This

SmartIndexing also appears when selecting the "Full with Indexing" view for the full text of news and business documents. Index terms are shown for all news and business documents, and in more recent documents you can select the terms occurring in the document to restrict the results set or revise your search.

Six Highlights of SmartIndexing

1. *Accuracy:* LexisNexis indexers and analysts run a battery of iterative tests on new index terms and periodically re-test and update existing index terms to ensure the highest levels of recall and precision.

2. *Consistency:* The same taxonomies are used throughout news and business content in LexisNexis *Academic*

3. *Currency:* Index terms and hierarchies change over time, but many databases have no practical method for re-indexing older documents to keep them in synch. The automated processes of SmartIndexing are run against all documents in the database on a quarterly schedule so that all indexing is current.

4. *Indexing to concepts, not words:* Behind the scenes, SmartIndexing uses indexing codes, not words. This means that changes in terminology, such as when a company or a country changes its name, can be made instantly.

5. *Language-neutral:* The same SmartIndexing codes are used in English- (US and UK), German- and French-language documents, so you can search for foreign-language sources and documents using English index terms.

6. *Narrower term roll up:* Subordinate terms are included in searches for higher level terms unless explicitly excluded by the user. This approach matches the natural assumption of most users that, for example, a search on (the broad term) Insurance Products should return an article indexed to (narrower terms) Automobile Insurance or Health Insurance.