# Indexing & Taxonomies: The LexisNexis® Perspective

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- History of Indexing at LexisNexis
- Coverage & Statistics
- Taxonomy Development
- Index Term Development
- What's New? What's Next?



## **LexisNexis Indexing History**

Early 90s = Computational linguists & engineers develop technology = Company indexing released

Mid 90s = Geographic & topical indexing released = Branded as LexisNexis SmartIndexing Technology<sup>™</sup>

Late 90s = Indexing surfaced in nexis.com interface

**Early 00s** = Indexing extended to German & French

**2005** = Taxonomy Solutions for customer data launched

2006 = New Nexis service released with many features driven off LexisNexis SmartIndexing Technology Content LexisNexis

### **Coverage & Statistics**

- News and business controlled vocabularies
  - Companies (330,000<sup>+</sup>)
  - Industries and Subjects (3,500<sup>+</sup>)
  - Geographic Locations (900<sup>+</sup>)
  - US/UK English, German and French
- Legal controlled vocabularies
  - US taxonomy (16,000<sup>+</sup>)
  - UK taxonomy (400<sup>+</sup>)
- Specialized and custom vocabularies
  - Built as needed for internal products and on customer request



#### **Taxonomy Development**

- Team in US and Europe designs and builds taxonomies
  - Research topical areas and existing standards
  - Consult customers and subject specialists
  - Debate language equivalencies
- Taxonomy specifications
  - 28 industry categories
  - Mapped to major industry coding schemes
  - 17 subject categories
  - Down to six levels deep
  - Polyhierarchical



## Industry Taxonomy

Agric, Forestry, Fishing & Hunting

**Automotive** 

**Banking & Finance** 

**Chemicals** 

**Computing & Information Technology** 

Construction

**Consumer Products** 

**Defense & Aerospace** 

Electronics

**Energy & Utilities** 

**Entertainment & Arts** 

**Fashion & Apparel** 

Food & Beverage

**Health Care** 

#### Insurance

Manufacturing

Marketing & Advertising

Media & Telecommunications

**Mining & Extraction** 

Paper & Packaging

**Personal & Business Support Services** 

**Pharmaceuticals & Biotechnology** 

**Professional Services** 

**Real Estate** 

**Retail & Wholesale Trade** 

**Transportation & Warehousing** 

**Travel, Hospitality & Tourism** 

Waste Mgmt & Remediation



#### Subject Taxonomy

**Company Activities & Management** 

**Crimes, Law Enforcement & Corrections** 

**Economy & Economic Indicators** 

**Education & Training** 

**Environ, Natural Resources & Land Use** 

**Government & Public Administration** 

**International Relations & Natl Security** 

Labor & Employment

Law & Legal System

**Medicine & Health** 

**Population & Demographics** 

Safety, Accidents & Disasters

Science & Technology

Society, Social Assistance & Lifestyle

**Sports & Recreation** 

**Trade & Development** 

Trends, Events & Content Types



### **Index Term Development**

- Human expertise + automated processing
- Information professionals build rule sets
  - Identify vocabulary (strong vs. ambiguous)
  - Weigh document segments
  - Look for multiple occurrences of words/phrases
  - Require co-occurrence
- Perform a battery of iterative tests
- Regular reindexing keeps archive up to date



## **Example Topic**

- Topic identified
  - EXECUTIVE MOVES
- Write scope note
  - Targets hiring, promotion and appointment to executivelevel positions
- Conduct research to identify significant and frequently co-occurring vocabulary
  - LexisNexis
  - Web
  - Other resources



#### **Identified Vocabulary**

Synonyms

Strong Associations

Related Associations

Ambiguous Associations announces new CEO, CFO appointed vice president, VP

new chairman, CEO to be its chief executive will head the company

as senior VP promoted to the position to the top post

hired, resigned, retired CEO, COO, CFO, exec

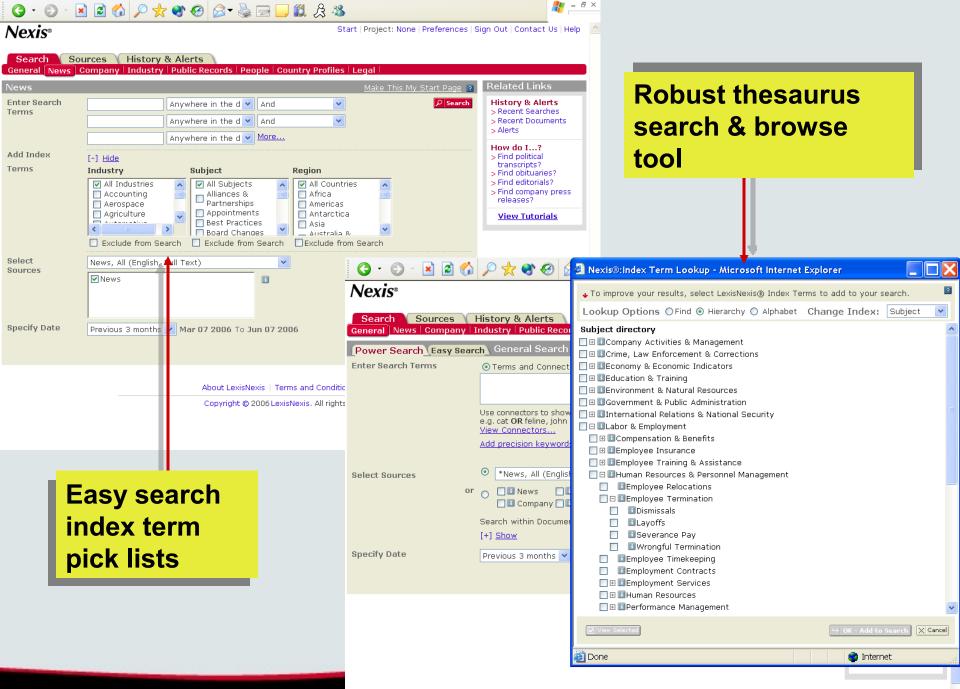


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| Moore most recently was associate general counse<br>recruitment, retention, and relations for Baylor He<br>Baylor, Moore held the position of manager of cor-<br>physician management corporation. Moore was re<br>contracting, billing enrollments, coding and proce<br>Moore is a member of the American Bar Associatio<br>Lawyers Association. | physician management corporation. Moore was responsible for the supervision of managed care<br>contracting, billing enrollments, coding and processing of medical records.<br>Moore is a member of the American Bar Association, Texas Bar Association, and the American Health |                                                                                                                                         |                                                                 |                    |
| Cirrus Health is a healthcare development and ma                                                                                                                                                                                                                                                                                                  | Cirrus Health is a healthcare dev<br>surgery centers and short-stay h                                                                                                                                                                                                           | elopment and management compa<br>ospitals.                                                                                              | ny specializing in ambulatory                                   |                    |
|                                                                                                                                                                                                                                                                                                                                                   | This article was prepared by Mar<br>2006, Managed Care Law Weekly                                                                                                                                                                                                               | aged Care Law Weekly editors from<br>via LawRx.com.                                                                                     | n staff and other reports. Copyrigh                             | t                  |
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### What's New?

- Taxonomy Solutions
  - Licensing LexisNexis SmartIndexing Technology to customers for internal use
- Indexing critical to new interface features
  - Easy search pick lists
  - Power search thesaurus tool
  - Answer set navigation
  - "More like this" indexing





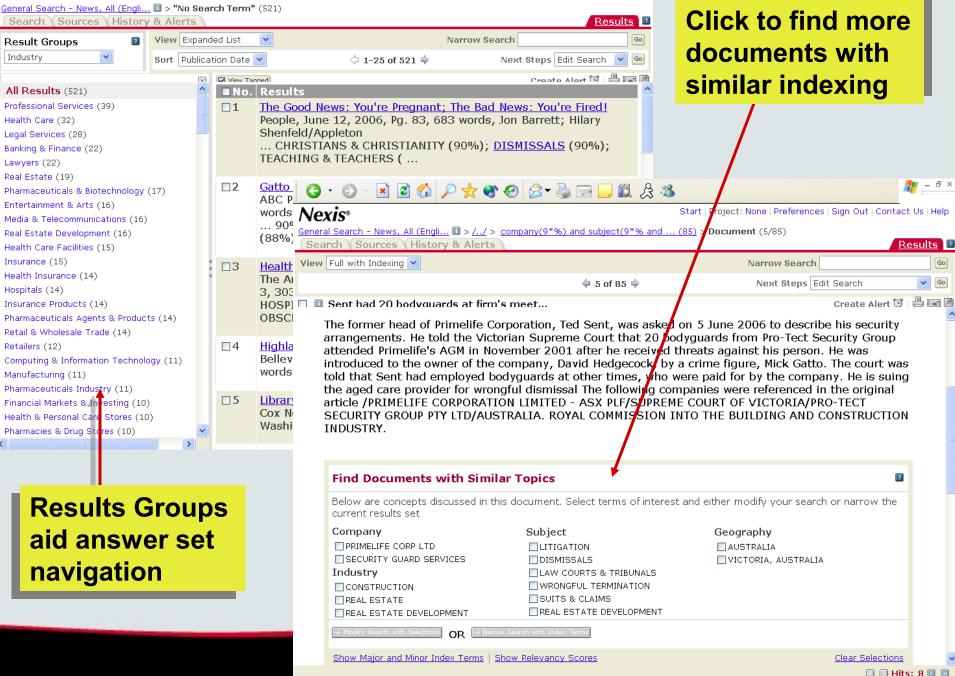
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#### What's Next?

- Focus on customization
  - Tools for customers to create their own index term rules
- Focus on linking and metadata
  - More complex relationships between terms, content and taxonomies



# Thank you!

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