

## Business & Careers

### New tools are making mining mountains of data easier



**Luigi Benetton**  
Hi-Tech

Attorneys will always need to participate in discovery. One secret to saving money on fees is to limit the number of documents they need to handle.

Fortunately, even as document collections continue to expand to mind-boggling proportions, technologies used to pare these collections down are maturing and gaining acceptance in legal circles.

Getting a handle on available technology means first understanding the concepts that underpin the available tools.

A document retention policy can

help an organization control the volume of documents it has, and by extension the volume of documents it must search and produce during a discovery project.

A network collection tool scans multiple data sources, like Share-Point file servers and Exchange servers, to collect specific data.

When discovery teams begin to cull document collections, they de-duplicate by flagging all documents whose contents are the same. They also take near-duplication into account, flagging documents that are very similar to each other, such as different versions of the same contract.

"You don't want to make people review the same document 10 different times," says Martin Felsky, a lawyer and partner with Harrington LLP in Toronto.

Keyword search involves looking for specific words or phrases in a document collection and is "a good place to start, just to get your arms

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**Martin Felsky**  
Harrington LLP

around some of the key issues and documents in a case," says Matt Nelson, senior e-discovery counsel for Symantec in San Francisco and author of *Predictive Coding for Dummies*.

Discussion threading, a method of visually grouping messages by topic, can bolster understanding of what the truly important topics are.

Hacking away at document col-

lections using keyword search alone may do more harm than good. For instance, if correspondents speak of a company takeover, lawyers who use the search keyword "takeover" risk false negatives (relevant documents that are not retrieved because they aren't responsive).

They may miss documents that contain synonyms such as "buyout" and "purchase." Synonymy's grammatical cousin, polysemy, can flood search results with false positives (responsive documents that are retrieved, yet prove irrelevant). Does "stock," for instance, refer to an equities market, a store's back room or a soup ingredient?

Concept searching helps lawyers deal with synonymy and polysemy. It recognizes conceptual similarities between documents by noticing how words relate to each other, how often they appear together or near each other, how far apart they tend to be and how often they do or do

not appear in other documents.

Steps to cull the initial collection aim for greater precision (proportion of retrieved documents that are relevant) but no tool will filter all false positives or prevent all false negatives.

"It becomes a matter of proportionality and risk that the client is willing to take," and the client must weigh "the cost and any delays," says Dominic Jaar, a partner and national leader of KPMG's information management and e-discovery practice in Montreal.

Technology-assisted review (TAR), also referred to as predictive coding, involves letting machines do most of the heavy lifting during review, the costliest part of the e-discovery process.

The TAR process starts with humans reviewing and coding a "seed set" of documents. "They flag documents as relevant or irrelevant," says Felsky.

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The National Capital Regional Office and the Ontario Regional Office of the Public Prosecution Service of Canada (PPSC) are seeking private-sector lawyers and/or law firms to assume responsibility for conducting prosecutions under various federal statutes, and to assist the Regional Offices in the following judicial districts:

**Ontario Regional Office:**

1. Welland and Fort Erie (Niagara South Region) (Ref ON01)

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2. The United Counties of Prescott-Russell, including L'Orignal (Ref ON02).
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Applications will be accepted from **February 15, 2013 to March 8, 2013**

We are seeking counsel with experience prosecuting or defending criminal and regulatory matters as the responsibilities will include all prosecution-related activities associated with the conduct of criminal and regulatory prosecutions of all levels of complexity, including court work, advice to enforcement agencies, disclosure and related tasks, the preparation of legal documents, briefs and argument.

Information on requirements, application process and forms, is available on the PPSC Agent Affairs website at: <http://www.ppsc.gc.ca/eng/aaf-man/index.html>.

Please submit your completed application to:

**Chantale Tremblay**  
National Agent Coordinator  
Agent Affairs Unit  
Office of the Director of Public Prosecutions, PPSC  
284 Wellington Street  
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fax: (613) 957-8478  
[Chantale.Tremblay@ppsc-sppc.gc.ca](mailto:Chantale.Tremblay@ppsc-sppc.gc.ca)



Le Service des poursuites pénales du Canada (SPPC), Bureaux régionaux de l'Ontario et de la Capitale nationale recherchent des avocats ou des cabinets de secteur privé pour prendre en charge la conduite de poursuites découlant de l'application de diverses lois fédérales, afin d'assister les bureaux régionaux dans les districts judiciaires suivants :

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3. Les Contés unis Stormont, Dundas et Glengarry, y compris Alexandria, Cornwall, et Morrisburg, (Ref ON03)
4. Contés Leeds & Grenville, compris Brockville, Gananoque, et Kemptville, (Ref ON04).
5. Conté Lanark, y compris Perth et Smith Falls (Ref ON05).
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Les applications seront acceptées du **15 février 2013 au 8 mars 2013**.

Nous recherchons des avocats ayant de l'expérience en poursuite ou en défense d'affaires criminelles et réglementaires car les responsabilités incluront toutes les activités reliées aux poursuites associées à la conduite de criminelle et poursuites en matière réglementaires de tous les niveaux de complexité, dont la Cour fonctionne, conseils aux autorités policières, divulgation et tâches connexes, la préparation de documents juridiques, les mémoires et les arguments.

Pour de plus amples renseignements sur les exigences, les processus de demande et les formulaires, veuillez consulter le site internet du SPPC: <http://www.ppsc-sppc.gc.ca/fra/man-aaf/index.html>

Veuillez soumettre votre demande dûment complétée à:

**Chantale Tremblay**  
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Bureau du directeur des poursuites pénales, SPPC  
284, rue Wellington  
Ottawa (Ontario) K1A 0H8  
Télécopieur: (613) 957-8478  
[Chantale.Tremblay@ppsc-sppc.gc.ca](mailto:Chantale.Tremblay@ppsc-sppc.gc.ca)

## Business & Careers

### Discovery: The science of filtering info

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The documents and coding are then fed to the system, which uses this information to extrapolate decisions on the remaining documents. Reviewers iteratively code more sample documents and/or give feedback to the system on documents it codes, thus “tuning” the system and improving its precision.

“The program can go through a million-document collection and flag the remaining documents in the same way the legal team flagged the samples,” says Felsky.

TAR may be new in legal circles, but other industries have long relied on similar algorithm-driven systems. For instance, credit card fraud prevention starts with computers tracking where credit card holders use their cards, what they buy and other data. The computers then build a profile for each credit card holder. Using customer profiles, they “can then predict whether a transaction fits a profile or not,” says Jaar

E-discovery tools can handle review prioritization as well, something most lawyers know from legal databases or consumer tools like Google in which the search tool prioritizes results.

Prioritization can come about in several

visual formats. Front-end analytics tools give clues to reviewers of where to look, what might be relevant, what to capture and what to leave behind. They can cluster results using graphics like bubbles, heat maps, old-fashioned graphs, even what Don Cameron, a Toronto-based partner with Bereskin & Parr, likens to “a petri dish, those things they put little flecks of germs on and allow them to grow into circles and lines on the dish.”

In one case, Cameron’s graphic resulted from intelligent categorization of 3,000 documents, which Bereskin & Parr staff had reduced from 10,000. He liked the visualization of the software’s sophisticated algorithm. “If this was a table of contents, your eyes would cross pretty quickly,” he says.

Such graphics “help you focus on what you’re looking for,” Felsky adds. “You get a visual map of the data and you can see where documents are clumped together or relate to one another.”

Since document collections frequently consist of files in different formats (like .doc, .pdf, e-mail), tools that can handle diverse data sets are quickly becoming a must.

“We need more discussion about what tools people use, how they use them, how reliable they are,” Felsky says.



#### Toronto, ON

The Ombudsman is an independent and impartial Officer of Ontario’s Legislature. The Ombudsman investigates the administrative conduct of provincial government organizations. The Ombudsman is also responsible for investigating complaints that the municipal open meetings law has been contravened.

#### LEGAL ADVISOR REF# 12/13-10

(Full-time Temporary Position: 12 months)

The Legal Services Team is seeking a temporary Legal Advisor for a 12-month period. The successful applicant will have an LLB or JD with membership in good standing as counsel in the Law Society of Upper Canada. He or she will have a minimum of two years recent relevant experience. Experience in the areas of administrative law, and providing legal advice and support in the conduct of administrative investigations in an Ombudsman or similar oversight environment, is preferred.

Under the general direction of Senior Counsel, the Legal Advisor is a member of the legal team responsible for a range of legal services, including legal advice and research, investigation of complaints, particularly municipal closed meeting complaints, legal representation, policy development, and outreach.

Salary Range: \$75,265 to \$103,603

Please view full position details at [www.ombudsman.on.ca](http://www.ombudsman.on.ca) (About Us – Careers)

If you have the relevant experience, an ability to work effectively both independently and as part of a team, and strong interpersonal, analytical and excellent written and oral communication skills, please reply in confidence with a cover letter and detailed resume to:

Human Resources  
Office of the Ontario Ombudsman  
Bell Trinity Square, 483 Bay Street, 10th Floor, South Tower  
Toronto, Ontario M5G 2C9  
Fax: (416) 586-3400, Email: [careers@ombudsman.on.ca](mailto:careers@ombudsman.on.ca)

Accommodation will be provided in accordance with the *Ontario Human Rights Code*.

All applications must be received by **February 28, 2013**.

**Please Note:** Only applicants selected for interview will be contacted. Moving expenses will not be paid.



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#### EARLY RESOLUTIONS OFFICER REF# 12/13-09

(3 Contract Positions: 6 to 12 months)

The Ombudsman’s Office is currently seeking applicants for opportunities that are available for the position of Early Resolutions Officer. The requirements for this position are:

**Education:** Post secondary education in the social sciences or in a related field or an acceptable combination of education and experience.

**Experience:** Minimum of 2 years of recent experience in providing intake, complaint handling and resolutions services along with referral information in an Ombudsman or similar type organization.

Salary Range: \$62,971 - \$78,715

Please view full position details at [www.ombudsman.on.ca](http://www.ombudsman.on.ca) (About Us – Careers)

**Note:** This is a unionized position. New hires will be paid at the starting rate of \$62,971.

#### INVESTIGATOR REF# 12/13-11

(2 - Twelve Month Contract Positions)

The Ombudsman’s Office is currently seeking applicants for opportunities that are available for the position of Investigator. The requirements for this position are:

**Education:** University degree in a field related to one of the following: law, social science, political science, psychology or public administration or an equivalent combination of education, training and experience.

**Experience:** Proven and demonstrated recent experience (within last three years) in administrative and similar investigations in an oversight function.

Salary Range: \$73,116 - \$91,396

Please view full position details at [www.ombudsman.on.ca](http://www.ombudsman.on.ca) (About Us – Careers)

**Note:** This is a unionized position.

Interested candidates must submit their application outlining how their skills and abilities meet the requirements of the position, along with an up to date resume to:

Human Resources  
Office of the Ontario Ombudsman  
Bell Trinity Square, 483 Bay Street, 10th Floor, South Tower  
Toronto, Ontario M5G 2C9  
Fax: (416) 586-3400, Email: [careers@ombudsman.on.ca](mailto:careers@ombudsman.on.ca)

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