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or several years now, we have been inundated by news and opinion pieces about the transformation of law taking place because of technological advances. However, this is not the only time in the history of law that has been viewed as transformational. For example, in 1977, Morton J. Horwitz wrote *The Transformation of American Law, 1780–1860*. In it, Horwitz posits that significant changes in approaches to common law and private law profoundly changed the law’s role in U.S. economic growth. The shift he describes, as well as its consequences, are dramatic.

Is the transformation of law we are seeing now unique, or is it just another in a long line of the law’s response to changes in society and how we work? I think it is both, and an understanding of the cycle of the diffusion of innovation and change management principles can help us successfully navigate the changes.

From a 10,000-foot perspective, the changes we are seeing in the business of law now are just the latest evolutionary steps. However, the current transformation differs in pace than previous iterations. Today’s changes are happening faster than ever before. The challenge is that, in general, people don’t like change. They resist change because of the inherent uncertainty and fear of being unable to learn new skills or technologies. Change management experts generally agree that change is easiest when it is incremental—people have more time to adjust and can take smaller steps that seem more manageable. However, the pace of change we are currently seeing in the legal field is not moving at a measured, incremental pace. Rapid, massive changes are harder for people to process and can lead to greater resistance.

How does an innovative idea spread and become more mainstream? Some of you may be familiar with Everett Rogers’s 1962 book *Diffusion of Innovations*, now in its 5th edition. Rogers’s research sought to understand and describe how a successful innovation gets adopted more widely (or diffuses) until it is accepted by the majority. Rogers identified five types of adopters distributed along a bell-shaped curve. Each group is influenced by the group before it and members of a group tend to display similar characteristics. Rogers described these groups as innovators, early adopters, early majority, late majority, and laggards.

In his article “Professional Formation as a Social Movement,” William (Bill) Sullivan describes how an individual’s impetus to change is tied to how the need or situation is presented. When a challenging situation is described as inevitable, support for the change typically wanes. However, when the situation is described as an opportunity to implement positive change, people are energized and excited about innovating. Sullivan calls this framing and says, “At moments of disruption, reframing becomes one of the defining tasks of leadership.”

Where is your team on Rogers’s adoption curve? Are they in the right place? If not, consider how you can reframe the opportunity and encourage innovation adoption.

Kristina L. Niedringhaus
krisn@gsu.edu
PUTTING ARTIFICIAL INTELLIGENCE TO WORK IN LAW FIRMS
How librarians are using AI to increase efficiency and productivity.
BY ED WALTERS & MORGAN WRIGHT

DATA-DRIVEN DECISION-MAKING: GETTING STARTED WITH REFERENCE TRACKING SYSTEMS & DATA ANALYTICS
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BY AMY ATCHISON & JUNE H. LIEBERT

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LEGAL CAPITAL, 4th Ed
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Legal Capital is widely credited with pioneering the introduction of the balance sheet and equity solvency tests, as well as other reforms in the Model Business Corporation Act and corporation statutes in more than 30 states. This edition adds new historical material, updates the statutes and caselaw on dividends and other distributions in the U.S., and compares the evolution of legal capital in countries around the world. ISBN 9781599417721

"Legal Capital turns on a basic tension around the corporate form – how the concept of limited liability can place creditors’ and shareholders’ interests at odds, and how that tension is resolved through statute, case law, and private contracting. It is a must-read for corporate law students, academics, and practitioners, and a must-have for law firm and university libraries.”

- Charles K. Whitehead
Myron C. Taylor Alumni Professor of Business Law
Cornell Law School
am constantly amazed by the adaptability, resilience, and creativity of law librarians and legal information professionals in a constantly changing environment. The saying “What doesn’t break you makes you stronger” is surely our narrative. Even as law libraries and legal information centers have been faced with declining budgets, disruptions in technology, and threats of irrelevance, we have remained resilient and strong. Our skills and expertise in data analysis, curation, organization and retrieval, as well as our keen ability to instruct and impart knowledge, have positioned us well for both the present and future.

The recently concluded AALL Annual Meeting, with its theme “From Knowledge to Action,” was a testament to our strengths. The three pillars of our strategic plan—knowledge, community, and leadership—were solidly woven into programming. The popular Innovation Tournament made a return with novel contributions ranging from the winning submissions of the University of Chicago D’Angelo Law Library’s “Superseed” (a solution for navigating complex legislative history by developing a browser extension to determine the version of a cited statute), to the University of Missouri-Kansas City Law Library’s adaptation of an open source platform as a case management tool.

In the age of Big Data, the meeting appropriately included multiple presentations and “Deep Dives” that focused on the tools for and benefits of, harnessing data for decision-making, including legal analytics, artificial intelligence, and data mining. Other sessions focused on data privacy, electronic surveillance, and weaponizing social media. Overall, the conference continued to reinforce the shift toward embracing and utilizing non-traditional technology in our industry. Robert Ambrogi refers to this shift in his LawSites blog as “the changing role of law librarians and the radical transformation of information science by technology.” Also remarking on this transformation, Stephen Embry of TechLaw Crossroads states, “One of the more interesting things about the conference is the demographics: it’s much younger than some but more female than any other tech show I’ve been. It’s refreshing to see a show focused on tech with so many women present.”

This issue of AALL Spectrum focuses on changes in how we provide services to our stakeholders. It also demonstrates how the knowledge garnered at the conference can be put into action. Authors Amy Atchison and June H. Liebert demonstrate how data-driven decision-making can help us better understand our stakeholders, particularly in the area of reference statistics. You will also read about how artificial intelligence is being used in firms to increase productivity and efficiency. As law schools continue to focus on experiential education and developing practice-ready students, librarians have rushed in to fill the gaps. This issue also contains an article on how to teach technology in law schools, with practical advice from five academic law library directors who have successfully deployed law and technology courses in their law schools.

Let’s keep the momentum going! I look forward to an amazing year as President of AALL as we continue to work collectively to transform our Association and profession, capitalizing on our unique strengths, skills, and expertise.

Femi Cadmus
femicadmus@cornell.edu
AALL thanks its generous sponsors for helping to make the 2018 AALL Annual Meeting & Conference a success.
TRENDING LIBRARIAN SCHOLARSHIP

Need ideas for how to fit scholarship into your work life? The AALL Academic Law Libraries Special Interest Section (ALL-SIS) Research & Scholarship Committee shares highlights from two surveys, one of AALL members and the other of academic directors. Both explore interests, requirements, obstacles, and support relating to research and publication.

SURVEY OF AALL MEMBERS
85% of respondents are in academic settings. Half have scholarly requirements for work, and 57% of employers provide some support.

BIGGEST BARRIERS TO PRODUCING SCHOLARSHIP

89% of respondents say scholarly leave is very or somewhat important, but only 65% of those directors report their institutions could provide even limited forms of this type of support.

ACADEMIC DIRECTORS’ OPINIONS ON IMPORTANCE OF SCHOLARSHIP TO THE WORK OF LAW LIBRARIANS

Additional academic directors’ survey results are available at bit.ly/ALL-SISdirectors.

SCHOLARSHIP SUPPORT DESIRED
63% Scholarly leave from other work
47% Mentoring network for feedback
45% Deadlines and other structure
43% Information about publication
38% Quantitative analysis, training, etc.
37% Workshops for drafts
29% Additional publication options
27% Grants and other funding

Additional membership survey results are available at bit.ly/ALL-SISmember.
What book or resource has helped you keep current on rapid changes in the legal environment?

1. **THE ACCIDENTAL LIBRARY MARKETER** by Kathy Dempsey (Information Today, Inc., 1 edition, July 7, 2009). “The title of this book may evoke tones of marketing and outreach; however, it contains so much more. The content ranges from basic concepts to deeply thoughtful insights—a user can find it as useful as the amount of effort and thought they are willing to invest. A few sections that stood out to me were, ‘How to Get Staff Buy-In,’ ‘How to Properly Assess your Current Situation,’ and ‘Applying Return on Investment Concepts to the Library.’ Checklists are provided throughout the book that are also helpful.”

   - Brian C. Barnes; Law Library Director & Associate Professor; Loyola University New Orleans College of Law; New Orleans, LA

2. **LAW 360** (A LexisNexis Company, Portfolio Media, Inc., 2018). “Law360 is a source I look at every day. For me, it is an effortless way to keep up with change because I read it for the work stories. Stephen King once said, ‘People love to read about work. God knows why, but they do.’ I am one of those people. Law 360’s Q&A series, where notable people discuss their careers, is my favorite. Many of the interviewees are the creative outliers who predict, make, or implement the change that everyone else is trying to track.”

   - Amy Atchison; Associate Law Librarian for Public Services; University of California, Irvine School of Law; Irvine, CA

3. **ASIL INSIGHTS** (The American Society of International Law, Washington, DC, 2018). “ASIL Insights are authored by persons with expertise in international law. They provide concise, objective, and timely background information for recent developments of interest to the international legal community. The articles cover a wide variety of international legal topics and refer to primary legal sources and other supporting documents that relate to each article. The articles are available for browsing, including archives that you can browse by year. There is also a search function for keyword, tag (assigned category), and year that is available by clicking on the ‘Expand Search Filters’ button. ASIL Insights are freely accessible on The American Society of International Law website.”

   - Wanita Scroggs; International Law Librarian; Stetson University College of Law; Gulfport, FL

4. **AMERICAN BAR ASSOCIATION ANNUAL LEGAL TECHNOLOGY SURVEY REPORT** (American Bar Association, Chicago, IL, 2018). “For about a dozen years, I have co-taught a course that aims to give law students an overview of the role of technology in legal practice. Keeping current on law firm trends is made possible by the annual ABA Legal Technology Survey Report. The survey is published in six volumes and covers basics and security, law office technology, web and communication technology, and online research, among other topics. One can purchase separate volumes or the entire set, which can be expensive ($1,600 for the full set for ABA members in 2017). But the information is crucial to understanding what our students will be facing when they join legal employers. If you want to help your students navigate through the changing world of legal practice technology, this is a must-have.”

   - Kenneth J. Hirsh; Director of the Law Library and Professor of Practice; University of Cincinnati College of Law; Cincinnati, OH
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The General Business Meeting was held July 16 during the 2018 AALL Annual Meeting & Conference in Baltimore. During the meeting, the Executive Board considered a number of agenda items and took the following actions:

- Approved the appointment of Kathleen Brown, Charleston School of Law, to serve as chair of the Annual Meeting Program Committee for the 2020 Annual Meeting & Conference in New Orleans.
- Approved the appointment of Past President Catherine Lemann and Francis Norton, Jr., Law Library of Louisiana, to serve as co-chairs of the Annual Meeting Local Arrangements Committee for the 2020 Annual Meeting & Conference.
- Approved the Executive Board Strategic Directions action plan for the 2018–2019 Association year.
- Approved the operating budget for the 2018–2019 fiscal year, which begins on October 1.
- Approved a new fund, the AALL Strategic Initiatives Fund, for the purpose of funding programs and initiatives in support of the Association and the profession.
- Approved a dues reduction, at the student rate, of up to three years for members who are serving as U.S. active duty military personnel.

The Executive Board book and related materials are available on AALLNET at bit.ly/AALLboard0718.

General Business Meeting Actions

The General Business Meeting was held July 16 during the 2018 AALL Annual Meeting & Conference in Baltimore. The meeting kicked off with reports from AALL President Greg Lambert and President-elect Femi Cadmus. The update included a review of progress on AALL’s strategic plan as well as plans for the coming year. Greg and Femi also introduced AALL’s Body of Knowledge (BoK), which sets forth the core domains, competencies, and skills needed by today’s information professionals. Learn more about the BoK on page 40.

Following the Association highlights, AALL Executive Board Treasurer Jean L. Willis presented her treasurer’s report to the membership regarding the Association’s financial statement for the 2017 fiscal year. To view the entire report visit bit.ly/MJ18Treasurer. Immediately following her presentation, AALL Executive Board Secretary Luis Acosta introduced the newly elected Executive Board Members:

- **Vice President/President-elect**
  Michelle Cosby
- **Executive Board Members**
  June H. Liebert & Karen Selden
  Continuing on the board will be:
  - **President**
    Femi Cadmus
  - **Past President**
    Greg Lambert
  - **Secretary**
    Luis Acosta
  - **Treasurer**
    Jean L. Willis
- **Executive Board Members**
  Beth Adelman, Jean P. O’Grady, Mary Jenkins & Meg Kribble

Acosta also introduced the candidates for the 2019 Executive Board election. The election will be open to all members from October 1 to October 31, 2018.

Read more about the candidates at bit.ly/JA18Q_A, and view their statements and bios at bit.ly/AALLbios2019.

Certificates of Appreciation Awarded to Five Honorees

President Greg Lambert presented five certificates of appreciation to recognize exceptional contributions to the Association or to the profession.

Honorees were:

- Cassie DuBay for her leadership as the Awards Creation and Review Special Committee Chair.
- June H. Liebert for her leadership and generosity for hosting the Competitive Intelligence classes at Sidley Austin LLP’s Chicago Office.
- Elizabeth Outler for her leadership as the Guide to Fair Business Practices & Licensing Principles Special Committee Chair.
- Gail Warren for her leadership as the AALL Executive Director Search Special Committee Chair.
The AALL Body of Knowledge Launch

The AALL Body of Knowledge (BoK) launched at the 2018 AALL Annual Meeting & Conference in Baltimore. The BoK—designed to serve as a blueprint for career development—defines the domains, competencies, and skills today’s legal information professionals need for success.

The BoK covers six crucial domains where law librarians and legal information professionals need to excel:

- **Professionalism + Leadership at Every Level**
- **Research + Analysis**
- **Information Management**
- **Teaching + Training**
- **Marketing + Outreach**
- **Management + Business Acumen**

Each domain is defined by the requisite competencies and skills for mastery. Through these elements, the BoK assists legal information professionals in identifying strengths and opportunities. Members will also find enormous value in the application of these standards in crafting job descriptions, writing performance evaluations, designing curricula, and developing training programs. All AALL professional development content—including Annual Meeting & Conference programs, publications, webinars, and resources—will now identify applicable domains.

The AALL Executive Board and staff are excited to roll out the BoK as the universal benchmark for legal information professionals and to deliver professional development resources, programs, and tools to meet these needs.

Learn more at www.aallnet.org/bok.

### 2018-2019 CALENDAR

#### SEPTEMBER 2018

- **04** 2019 AALL Annual Meeting Call for Proposals issued
- **27-29** Western Pacific Chapter, American Association of Law Libraries Annual Chapter Meeting
- **28-29** Association of Law Libraries of Upstate New York 64th Annual Meeting

#### OCTOBER 2018

- **01** AALL Executive Board election opens
- **01** 2019 AALL Annual Meeting Call for Proposals closes
- **11-13** Mid-America Association of Law Libraries Annual Meeting
- **17-19** Ohio Regional Association of Law Libraries Annual Chapter Meeting
- **31** AALL Executive Board election closes

#### NOVEMBER 2018

- **01** AALL Executive Board election results announced
- **01** AALL Fall Finance & Budget Committee Meeting

#### MARCH 2019

- **21-23** Southeastern Chapter of the American Association of Law Libraries Annual Meeting

#### JULY 2019

- **13** AALL Executive Board Summer Meeting
- **13-16** 112th AALL Annual Meeting & Conference, Washington, DC
AALLL Champions /Ambassadors to the Profession & AALL

Thank you to our champions.*

Luis Acosta
Justin Brownstone
Kathy Carlson
Emily Carr
Cattleya Concepcion
Daniel Cordova
Michelle Cosby
Andre Davison
Amy J. Eaton
Mark E. Estes
Emily R. Florio
Eugene M. Giudice
Edward T. Hart
Mary Jenkins
Timothy G. Kearley
Meg Kribble
Amy Latalladi-Fulton
Charles J. Lowry
David S. Mao
Mike Martinez Jr.
Brooke K. Moynihan
Savanna Nolan
Holly M. Riccio
Clarence Robertson II
Anna Russell
Karen Selden
Merle J. Slyhoff
Julia E. Stahl
Keith Ann Stiverson
Maryruth Storer
Gretchen Van Dam
Ed Walters
Gail Warren
Jean Wenger
Ronald E. Wheeler Jr.
Andrew Winston
Cornell H. Winston

Learn More at bit.ly/AALLchampion

* AALL Champions as of June 13, 2018. Members who become champions after June 13 will be recognized in next year’s September/October issue of AALL Spectrum.

Statement of Ownership and Management

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FAVORITE APPS

4 CLICKS

They help us easily schedule meetings, cite material and manage references, build our professional network, and manage our personal and professional calendars. What apps are essential to your workday?

DOODLE

“As the chair of several committees for both the American Association of Law Libraries and my local chapter, I am tasked with conducting committee meetings by phone. Scheduling an agreeable date/time for a conference call can be challenging, considering time zones and members’ busy schedules. However, Doodle, a scheduling app and website, makes it easy to find an agreeable time for committee members to meet. An individual URL is created for a poll, so it can easily be sent out via email. Doodle operates like a poll, i.e., everyone votes for the times they are available and the most popular time usually wins. The app can also be linked to your personal calendar so it can alert you to any potential conflicts. You can add a proposed agenda and participants’ voting choices can be kept confidential. You can also add a proposed agenda and participants’ voting choices can be kept confidential.”

Errol Adams; Electronic Services/Reference Librarian; Pace University; New York, NY
doodle.com (iOS and Android; free)

OUTLOOK CALENDAR

“There are many calendaring apps available. I transitioned to Outlook Calendar from Google Calendar when it was adopted by my university. My Outlook Calendar app has become an essential workplace tool because I am typically on-the-go and have learned to leverage some handy features. I can manage both my professional and my personal calendars through the same app by bringing up both calendars at once. Colleagues can be located by viewing their calendars. Similarly, you can check a room’s availability and book a room when sending a meeting invite. The task list feature is very helpful, too. It has the capability of texting or emailing a task to a colleague, as well as adding a task to a colleague, as well as adding a task to a colleague, as well as adding a task to a colleague, as well as adding a task to a colleague, as well as adding a task to a colleague. Doodle drafts at once. Colleagues can bring up both calendars by using the same app.”

Beth Adelman; Director of the Law Library; University at Buffalo; Buffalo, NY

PAPERPILE

“Paperpile is a reference manager for Google products. As a diehard Google Docs user, it has been instrumental in maintaining my sanity. There are 8,000-plus citation styles to choose from, including The Bluebook. Users can also craft their own style formats. I use Google Chrome and Google Docs for most of my writing. The Chrome plug-in allows users to quickly save online references, with the online interface allowing for manual additions of offline references. Users can also annotate and upload PDFs to any reference and organize content with tags and folders. Paperpile drafts a citation for each reference added, which can be further refined, and it provides a seamless process for inserting and using Paperpile citations and bibliographies in Google Docs, even if references are later updated. Overall, Paperpile is easy to use and syncs across all devices.”

Charlie Amiot; 2018 MLIS Law Librarianship Candidate; University of Washington; Seattle, WA
https://paperpile.com/ (iPhone, iPad, Android, Desktop; free 30-day trial; must have Google sign-in; subscription $2.99/month and $9.99/month for businesses)

LINKEDIN

“The LinkedIn app provides a way to monitor the library and information services community, it enables me to follow thought leaders, and it’s free. In addition to seeing where people are going professionally, LinkedIn provides insights on what peers are promoting in terms of innovations, technologies, or services to see whether anything is potentially applicable to my work. There is no need to explain the free site, but there are fewer ads on the mobile site. Using the app also allows me to forgo using business cards while attending conferences. As I wrote in an article in the January/February 2018 issue of AALL Spectrum, for job seekers and those looking to recruit new employees, the app is another useful tool in the job search process.”

Kathleen Agno; Knowledge and Research Intelligence Director; Greenberg Traurig, LLP; Florham Park, NJ
Linkedin.com (iPhone, iPad; Android, desktop; free)

TELL AALL SPECTRUM

What apps are essential to your workday? Email hhaemker@aall.org and your answer may be featured here.
MEMBER PROFILE
VANTAGE POINT

COURTNEY SELBY
 Assoc. Dean for Information Services
 Director of the Law Library
 Prof. of Law
 Maurice A. Deane School of Law at Hofstra University Law Library
 Hempstead, NY

Advice to Your 20-Year-Old Self?
You will have more fun if you’re well rested. Take more naps!

Favorite Thing About Your Job?
I love learning new things, and the positions I currently hold provide me with an opportunity to learn something new almost every day.

What Inspires You Most?
I’m most inspired by young people who question and strive to eradicate injustice and inequality.

Favorite Travel Destination?
The North Coast of Scotland is hands-down the most beautiful, relaxing, and restorative place in the world for me. Just Google for photos of the area and you will understand why.

If You Wrote an Autobiography, What Would the Title Be and Why?
Bacon, Beer, and Other Keys to Happiness. Anyone who has met me will find this one self-explanatory. Anyone who hasn’t should join me for bacon and beer!
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learn tips & takeaways from the 2017 AALL Management Institute at bit.ly/ND17-mi
PUTTING ARTIFICIAL INTELLIGENCE TO WORK IN LAW FIRMS

BY ED WALTERS & MORGAN WRIGHT

How librarians are using AI to increase efficiency and productivity.
Artificial Intelligence (AI) has captivated legal thinkers in recent years, as law firms, law schools, and in-house counsel have all dived into the well of possible applications. Law librarians are already starting to use AI tools to create practical solutions to intractable problems in knowledge management and business intelligence. What does legal AI actually look like as it is used today, and how are information professionals taking advantage of what AI has to offer?

We often think of AI as powering third-party, end-to-end software, such as that for e-discovery. But increasingly, law libraries are applying AI tools to legal problems and tasks in a pragmatic way. Everything from research to litigation analysis has already been enhanced by AI tools. AI is eliminating some brute-force tasks that people least like to do and, at the same time, making it much easier to do many routine tasks, such as find patterns, extract metadata, or support important decisions with empirical data.

Knowledge Management
It’s now harder than ever to maintain order in knowledge management (KM) systems, especially when there are so many law firm mergers and acquisitions. Even highly organized firms inherit systems that are messy or structured differently. Many firms have untagged legacy data as well, making curation and management practically impossible.

Tagging or structuring this data would be expensive and laborious—requiring large investments of human capital and time. However, law firms are starting to use supervised learning to extract information such as the author of a document, its date, the client, or the court in which the parties appeared.

In addition, IBM Watson has developed machine learning and deep learning tools that allow users to create their own models for comparative analysis and custom visualization. Similarly, Watson’s Natural Language Understanding module can unearth trends in both structured and unstructured data, such as relations between entities.

Firms are also using rule-based AI systems such as Neota Logic to capture knowledge held by lawyers in the firm, creating expert decision trees as guides for later efforts by the firm and driving efficiency for clients.
Billing and Analytics
Firms that collect clean data are able to take full advantage of that information and leverage it against administrative tasks. Client intake forms, matter management, litigation budgeting, and fee structuring have all been assisted by AI in recent years. An example is Digi
tory Legal, which helps firms develop competitive pricing models, so in-house legal departments stay under budget when hiring outside counsel by tracking trends in past billing data.

Chatbots can also be used to foster a more efficient workflow in the office. Instead of searching through files and folders, employees can use natural language queries to ask a bot to retrieve documents, or bots can work as organization-wide assistants, connecting employees who are working on similar matters in different locations. Katherine Lowry from Baker Hostetler won the 2017 AALL Annual Meeting Innovation Tournament with a chatbot that performed a similar lawyer-facing job.

Tools such as Lex Machina from LexisNexis and Docket Alarm from Fastcase have used artificial intelligence to extract information from dockets, pleadings, motions, and opinions to help users understand parties, lawyers, law firms, and judges. These tools and services have also used big data to help firms and clients price risk and make better strategic decisions in litigation.

Contract Analysis
Drafting contracts is one of the most formulaic tasks lawyers participate in, but version control and consistency can often be a chore. Several tools on the market today remove the most tedious elements of contract drafting.

ContractStandards is a company that helps drafters use machine learning to standardize contract language across documents and manage contract templates. The result is contracts that follow unified rules across teams, making every step of the negotiation process easier. Parties can negotiate terms of deals, rather than argue over the language used to express those terms.

Similarly, ContraxSuite from LexPredict allows users to search through contracts to identify legal trends and group them into different categories based on legal content and metadata. Standard analysis approaches (such as due diligence review) can be applied across document groups.

The technology is promising, so much so that the Harvard Business Review recently published an article titled “How AI is Changing Contracts,” in which doctoral candidate Beverly Rich argued that applying AI, and potentially blockchain, to contract drafting will soon be useful to all law firms, not just those in the BigLaw sector.

Legal Research
AI tools are not only replacing some human review in legal research, they are also creating new types of research tasks. For example, lawyers at Casetext, ROSS Intelligence, and Judicata have created tools that analyze briefs for completeness and accuracy based on the language in the brief, the cases cited, and the context.

Fastcase created the world’s first algorithmic citator, Bad Law Bot, which extracts negative citation history directly from the text of judicial opinions and their citations. Fastcase also uses the information architecture of citations, the map of citations in a list of search results, as well as software that learns from the aggregate search history of the database to rank the most important search results at the top of the list.

Personality Insights
The other major application for AI in the legal space lies in the area of personality insights.

Recently, the Seventh Circuit’s Judge Richard Posner retired amidst claims that his colleagues were unduly biased against pro se litigants. It may soon be possible to accurately predict judicial outcomes and prove such claims of bias by analyzing the “personality” of opinion writers and aggregating their past decisions with AI tools.
Relatedly, AI can already be used to draw simpler conclusions about personalities, such as which expert witness is most aligned with a client’s interests. Expert databases such as Courtroom Insight and JurisPro give users the ability to discover which experts have the most experience in achieving the desired outcome before specific judges. Law firms are also using data from these expert witness databases, in combination with their own firm’s data, to create highly customized understandings of expert witnesses.

**Moving Forward**

Although some worry that artificial intelligence is over-hyped, it is nevertheless true that AI is already here and being used effectively by an increasing number of firms. For years, firms have been subscribing to tools that incorporate AI for tasks such as e-discovery, docket analytics, and contract review. Indeed, use of these types of read-only tools is becoming the new baseline of competence, just as using a citator became a mandatory tool in the 1900s. These read-only AI tools and their use are the new floor.

The ceiling will be defined by read/write tools—which law libraries will build themselves—and how they are used. When law firms harness the vast expertise in their document repositories, billing systems, and human experts, they can create data training sets that are unique. Using AI tools, they can build the next generation of legal services, truly differentiated from the offerings of other firms, and of accounting firms that wish to break into the legal services market but who don’t have the historical legal data on which to build.

Who will be the makers in this new era of read/write artificial intelligence? It would be natural for the law firms’ experts in legal information, law librarians, to have the central role. Law librarians have expertise with enterprise legal data, great access to KM systems and document management systems, and the training in ontologies and legal information. We are right on the cusp of a new age of legal services powered by artificial intelligence, and the time is now for law librarians to learn how to use these new tools.

Who will be the makers in this new era of read/write artificial intelligence? It would be natural for the law firms’ experts in legal information, law librarians, to have the central role.

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Watch the 2018 AALL Annual Meeting program “Powered by AI, Built in the Law Library,” at bit.ly/AM18AI.

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**Ed Walters** is the CEO of Fastcase, an online legal research software company based in Washington, DC. He practiced law at Covington & Burling in Washington, DC, and Brussels. Walters teaches The Law of Robots at Georgetown University Law Center and at Cornell Tech in New York City. He is a graduate of Georgetown University and the University of Chicago Law School, and the editor of *Data-Driven Law* (Taylor & Francis, 2018).

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How using reference statistics can help us better understand our users, staff, and organizations.

BY AMY ATCHISON & JUNE H. LIEBERT

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We both started as research librarians at the University of California Los Angeles Law Library more than 20 years ago. Back then, we tracked reference desk requests each day with tick marks on a sheet of paper. We refer to this now as “data gathering for dummies.” While this simple method recorded the number of requests in a given time period, it provided almost zero value (how often do tick marks ever get aggregated?), and we lost the most useful information, such as the questions and the answers.

Faculty submitted requests almost exclusively via email or phone back then, which is still true today. Our biggest innovation at the time was to print each unassigned faculty request and tape it to an old file cabinet with the idea that a visual of our growing workload would encourage us to take more requests. The unintended effect was group avoidance of the file cabinet and a de facto game of chicken with the faculty requests.

Time passed and things got better. Although we now work at two very different institutions—a law school and a law firm—both of our libraries must run efficiently and cost-effectively while still exceeding our users’ expectations. One way we accomplish this is by tracking research requests in an online system that provides us with the data we need to better understand our users, staff, and organizations.
Data analytics offer benefits for all law libraries by providing both broad and detailed views of operations and areas where productivity has grown or lagged. The challenge is finding a system that tracks work, provides useful measurements for managers, and is easy to use (i.e., a system that does almost everything that we need).

There are many ways to track the number of questions your library receives (including those paper tick marks), but today’s sophisticated online tracking systems provide so much more. The trick to selecting the right system is to first identify your needs and then prioritize them. This determines the data you should collect and will help you select a system that will meet most of those needs.

**What Is a Reference Tracking System?**

Reference tracking systems are usually web-based systems that manage and store research requests in a single location. A requestor simply sends an email to the library request address and the tracking system automatically creates a request ticket (phone calls and in-person requests may be manually added). Depending on the request, one or more researchers can add themselves to the ticket as the assignee(s). The assignee then responds to the request from within the system, including acknowledging the request, asking for more information, or sending the research results to the requestor. Ideally, the system records all interactions related to the ticket, including the requestor’s and assignee’s names, the date of the request, the completion date, and the time worked, and it stores or links to the work product.

These systems also provide preset reports, graphs, and other data visualizations that help with analyzing the data on the back end. Some systems also allow you to create custom reports for more flexibility. However, almost all systems allow you to export the data into other formats for use in spreadsheets and data visualization tools, such as Tableau.

**How Can Reference Data Be Used?**

Reference tracking systems can improve management of workload by producing meaningful data about user needs, which can then be analyzed to identify trends and patterns. They also serve as a repository of easily accessible, completed requests. Here are just a few examples of how we use our reference tracking systems to help with decision-making:

- **To ensure adequate staffing:** At Sidley’s library, we discovered spikes in the number of requests during the last 10 minutes of the workday in each time zone, which explained why we had some difficulty providing adequate staffing in the late afternoons. Based on this data, we created an extra shift to help cover this time period, which has greatly improved our ability to manage our late afternoon work.

- **To better understand how our work has changed:** At Sidley, the number of research requests has steadily risen over the last four years (see Figure 1). We also receive increasingly complicated requests, as indicated by the number of hours spent per request and the type of requests received. This data gave us a much more holistic view of the work we do (especially when compared to a simple count of the number of requests received).

- **To pinpoint inefficiencies:** At the University of California, Irvine (UCI) School of Law Library, we use our tracking system to identify projects we should delegate to lower-cost employees, such as faculty research assistants. For example, we are currently tracking the frequency of and time spent on 50-state survey requests.

- **To identify training opportunities:** The bubble graph image on the following page (Figure 2) displays the requests handled by three different researchers. The color of each bubble represents a different type of request, such as document delivery, case law research, company profiles, securities research, etc. The size of each bubble represents the number of requests taken. Depending on the overall

![FIGURE 1: NUMBER OF RESEARCH REQUESTS (2014-2017).](image-url)
organizational goals, such graphs can help identify where there may be opportunities for further growth.

- **To value the library’s contributions to the organization:** Tracking hours spent on work for specific projects, people, and cases helps put a dollar value on our work and tells us how resources are used. At UCI, we include hours spent on research for new and tenure-track faculty in our annual report to the dean, and in future reports we intend to include data on services provided to law school clinics, pro bono work, and other law school departments.

- **To justify resource requests:** The tracking system enables us to document the number of user requests for a particular resource not currently in our holdings. At Sidley, we tag and note requests for these resources so we can quickly find these tickets when asked to justify subscribing to them (or not).

- **To identify users’ future needs:** An online system can help you quickly spot trends in specific types of requests so you can plan for needed resource shifts. For example, increased requests for statistical research may mean that you use a new job opening to hire someone with more experience in this area. This type of hard evidence can also provide valuable support for additional resource requests.

- **To preserve knowledge and encourage information sharing:** A great tracking system should record all written interactions between the requestor and librarian for each transaction, so it serves as a knowledge-base for your staff (and potentially for your users). This is particularly helpful to new researchers, who can use the system to identify similar requests and learn from what was done by other researchers.

**When Should You Start Collecting Data?**

The best time to start collecting data is right now, because you are losing valuable data every day. A simple way to get started immediately is to use a spreadsheet that all of your researchers can access. Choose a few questions you want to answer and start collecting the data you need to answer them. As long as your data entry is consistent (we highly recommend drop-down codes), you can upload the data once you have selected and set up a full-blown research tracking system.

While implementing a more sophisticated system can seem daunting, we have found it to be well worth the time and effort. A lesson we have learned over the years is that success depends on understanding ourselves, individually and as an organization. We may be at different libraries now, but we still face the same practical challenge of how to use the lessons of prior work to predict future needs and reach our intended goal of exceptional research service. Collecting research data is the place to start.

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**Information Management**

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“renaissance” is often described as a cultural rebirth, a movement ushering in a modern age and leaving behind the old ways of doing things. There is every indication that we are entering a technology-driven renaissance in the legal profession. Artificial intelligence (AI), “big data,” document automation, e-discovery tools, cloud-based case management systems, and communication and collaboration tools are just a few of the ways that technology is transforming the practice of law in the twenty-first century.

Certainly, technology has played a key role in the practice of law for almost 50 years. However, there are several indicators that technology is becoming an increasingly important part of law practice. Thirty-one states now require lawyers to understand the risks and benefits of technology in accordance with Comment 8 of Rule 1.1 of the American Bar Association.
(ABA) Model Rules of Professional Conduct. One state, Florida, has even added a continuing legal education (CLE) requirement for technology, similar to the annual ethics requirement in most states; Pennsylvania and North Carolina are also considering adding the requirement.

In addition, the professional literature is awash with articles about the importance of technology in the practice of law. Noted legal technology expert Jim Calloway summed up this idea in his article “Every Law Firm Is a Technology Business.” He notes that “[a]lmost everything a law firm does involves the retrieval, analysis, processing, manipulating, storing, and dispensing of information.” These are all tasks at which technology excels. He concludes by stating that lawyers can choose to be Flintstones, or they can choose to be Jetsons going forward.

The ABA challenged law schools to focus on teaching technology skills to law students in 2013. The ABA Task Force on the Future of Legal Education, in its final report, stated that “although changes in the delivery of legal services have made competence in the use and management of law-related technology important, only a modest number of law schools currently include developing this competence as part of the curriculum.”

Law schools have responded to this challenge with a wide variety of programs designed to equip students with the technology skills required by modern law firms. Above the Law recently published its “Directory of Law School Innovation Centers” in its Law2020 feature to highlight law schools with innovation-focused missions.

In addition, the media is now recognizing these efforts with various ranking systems and indices. In 2017, preLaw Magazine highlighted the “20 Most Innovative Law Schools” as well as the “Top Schools for Technology and Law,” and Michigan State College of Law introduced its Law School Innovation Index to highlight U.S. law schools that prepare students to deliver legal services in the twenty-first century by providing programs focused on “legal-service delivery innovation and technology.”

Certification and Assessment
As the need for technology skills in law firms grows, and as law schools continue to ramp-up programs designed to teach technology skills to law students, there will be an increasing need for assessment and certification tools. Law schools will want to assess whether students can repeat a technology skill (such as legal document preparation or courtroom presentation), and law firms will want graduates to demonstrate that they possess technology skills.

Assessment and certification of technology skills has been evolving over the past five years. Casey Flaherty was perhaps the first lawyer to call attention to this need with his technology competency audit. He developed this audit as corporate counsel for Kia Motors to test the Microsoft Word, Excel, and Adobe Acrobat skills of the attorneys in the firms Kia planned to hire. Unfortunately, he found that associates required five hours on average to complete tasks that took him thirty minutes. As of today, there is no clearly established industry leader in this area, though there are options available for law schools.

The Legal Technology Core Competencies Certification Coalition (LTC4) is an international organization of law firms, legal departments, and legal nonprofits “that has established legal technology core competencies and certification.”

The Legal Technology Core Competencies Certification Coalition (LTC4) is an international organization of law firms, legal departments, and legal nonprofits “that has established legal technology core competencies and certification that all law firms can use to measure ongoing efficiency improvements.” A few law schools around the world, including the University of Oklahoma College of Law, are using LTC4, along with its vendor partner, Capensys, to certify law students in a variety of technology skills, including legal document preparation, collaboration, security, and presentations.

Flaherty continues to work on solutions in this area. He recently established a company called Procertas to develop a Legal Technology Assessment (LTA) “to assess legal professionals’ proficiency with the basic technology tools of their trade: Word, Excel, and PDF.” Procertas offers a law school edition of their LTA that can be implemented into technology-related courses or made available to an entire law school.

The Impact of Social Media on Twenty-First Century Lawyering
Social media is drastically affecting the practice of law, and attorneys should
anticipate the use of social media by their clients. Further, ABA Model Rule 1.1 and its Comment include the requirement of technological competence for an ethical practice. The ABA Comment notes that this encompasses knowledge and understanding of the associated risks and benefits of certain technologies. The impacts of social media on litigation and infiltrations into our domestic and world markets are undeniable, and areas of technological competence keep expanding to ethical use of technology, e-filing, social media, prominent web presence and virtual lawyering, cloud computing, courtroom technologies, e-discovery, and more. Best practices for lawyering in an era of social media include informing clients about responsible use of social media during representation and developing firm-wide social media policies. Lawyers must grapple with social media use in a variety of contexts, including the courtroom with myriad parties, and they will have to alter their traditional framework of lawyering to include social media from the initial intake of clients to fruition of a case in both civil and criminal case settings.

Attorneys must carefully consider: 1) whether to use social media in their practice of law; 2) creation of a business plan or policy for the ethical use of social media to align with the ABA guidelines; and 3) preserving social media as e-discovery evidence and advice to clients on social media use and preservation during the case’s lifetime. Upon intake of each case, attorneys should conduct careful client counseling about social media in the digital age. This includes recommendations about not posting on social media in the context of the case and pending litigation, the legal implications of social media activity, and the duty to preserve evidence. Recent CLE programs for attorneys and law and technology courses in law schools often include social media tips. The current guidelines and best practices include obtaining social media discovery at an early stage of the case, updating a law firm’s definition of Electronically Stored Information (ESI) to include social media and social media in document preservation letters (to clients and adversaries), and requesting social media content in document requests and third-party subpoenas. According to recent ABA rules and guidance on technological competence, lawyers should: 1) follow employer guidelines on social media; 2) include appropriate disclaimers on social media sites used for their work; 3) stay current with ABA and State ethics opinions; 4) consider court decisions on social media use and social media sites’ “Terms of Service” agreements; 5) be professional while using social media; 6) always exercise client confidentiality; 7) make sure LinkedIn endorsements are appropriate; and 8) use social media as an apt discovery tool while following the appropriate e-discovery norms. The landscape is constantly changing in the field of legal technologies, but social media is here to stay, and attorneys must adhere to the new social media professional requirements for their ethical practice.

Electronic Communications: Balancing Risk and Reward
The wide-scale adoption of email usage in the 1990s eventually found its way to lawyers. This in turn was followed by an explosion of social media usage after the turn of the millennium. Email provides an efficient and relatively low-cost way of communicating with clients, opposing counsel, and anyone else whom a lawyer needs to reach. Social media can be part of a lawyer’s marketing efforts, helping to develop clients and a reputation among lawyers and other professionals. These e-communication platforms introduce substantial risks that were not common with using postal mail and even fax machines. Those of us teaching technology to law students need to familiarize them with the risks attendant to these technologies.

Perhaps the biggest ethical challenge in using e-communications is adhering to the duty to protect the confidentiality of client communications, as mandated by Rule 1.6 of the ABA Model Rules of Professional Conduct. Without going
into technical details, email is subject to interception during its transmission. Additionally, clients who store their email messages on devices accessible to third parties, such as an employer-owned computer or one used by family members, may lose confidentiality when third parties read the messages.

Beginning in 1999, the ABA Standing Committee on Ethics and Professional Responsibility issued three formal ethics opinions on an attorney’s duty when communicating with clients by email. The committee originally stated:

A lawyer may transmit information relating to the representation of a client by unencrypted email sent over the internet without violating the Model Rules of Professional Conduct (1998) because the mode of transmission affords a reasonable expectation of privacy from a technological and legal standpoint. The same privacy accorded U.S. and commercial mail, land-line telephonic transmissions, and facsimiles applies to internet email. A lawyer should consult with the client and follow her instructions, however, as to the mode of transmitting highly sensitive information relating to the client’s representation.

Next, the committee addressed the issue of clients storing their email in potentially unsecure locations. The Committee asserted a duty for attorneys to explicitly advise clients of the risk of placing email messages where other parties could read them: “A lawyer sending or receiving substantive communications with a client via email or other electronic means ordinarily must warn the client about the risk of sending or receiving electronic communications using a computer or other device, or email account, where there is a significant risk that a third party may gain access.” The committee cited examples of employees whose computers and email accounts could be accessed by employers, and, in a domestic relations case, where spouses or other family members shared home computers.

Last year, in Formal Opinion 477R, the committee updated its advice about the risk of email interception: “A lawyer generally may transmit information relating to the representation of a client over the internet without violating the Model Rules of Professional Conduct where the lawyer has undertaken reasonable efforts to prevent inadvertent or unauthorized access. However, a lawyer may be required to take special security precautions to protect against the inadvertent or unauthorized disclosure of client information when required by an agreement with the client or by law, or when the nature of the information requires a higher degree of security.” The opinion includes guidance for attorneys on steps to make those reasonable efforts:

1. Understand the nature of the threat.
2. Understand how client confidential information is transmitted and how it is stored.
3. Understand and use reasonable electronic security measures.
4. Determine how electronic communications about client matters should be protected.

In practice, attorneys have relied on two means of reasonably protecting e-communications—by encrypting email messages and by limiting such communications to a client intranet or portal. Encryption makes messages unintelligible to anyone other than the intended recipient, and a portal may be accessed only by the client if the system credentials are kept private. Portals use TLS (Transport Layer Security), the successor to SSL (Secure Sockets Layer), to protect internet traffic from interception. (URLs that start with “https:” use this protocol.) Until early May 2018, most authorities would have considered either method in compliance with making a reasonable effort. However, at that time, vulnerabilities in the widely used email encryption protocols PGP (Pretty Good Privacy) and S/MIME (Secure/Multipurpose Internet Mail Extensions) were exposed, initially casting some doubt on this method. As of this writing, security experts are debating the impact of the vulnerability. Some recommend using client portals or other encrypted applications.

Law students and attorneys need to be cognizant of what it takes to make a “reasonable effort” to protect client confidentiality when using e-communications.

Electronic Discovery
It has become trite but accurate to say that electronic discovery has replaced paper discovery. Electronically stored information (ESI), already ubiquitous in emails, texts, productivity software, databases, social media, video, phone records, digital photos, and GPS, is growing exponentially with the connection of “everything” to the internet (IoT, or the Internet of Things). As the scope of discoverable ESI expands, the competency bar rises. Lawyers must account for ESI stored in their clients’ personal devices and business systems. Commingled personal and business information complicates a lawyer’s concurrent obligation to produce relevant, responsive information while not disclosing confidential or privileged information.

Recurring discovery mistakes and misconduct can range from simple human or technical error to negligence or intentional spoliation of ESI. Perfection is not the standard. Given the volume of discoverable ESI, some human and technical error will occur. Negligence may warrant monetary sanctions but can often be reduced with education and training. A spoliation finding based on intent to conceal or deprive the opposing party of the use of relevant ESI will result in a harsher sanction, such as striking pleadings, an adverse inference jury instruction, dismissal, or default judgment. Prompt issuance and ongoing monitoring of litigation holds provide baseline protections against client loss or spoliation of ESI.

Lawyers must be technologically competent to handle electronic discovery, but do not have to be technology experts themselves. Knowing when to enlist, and how to communicate effectively with client IT personnel, outside vendors, and forensic experts is key.

Librarians with related experience or acquired knowledge may want to consider teaching an electronic discovery
Lawyers must be technologically competent to handle electronic discovery, but do not have to be technology experts themselves. Knowing when to enlist, and how to communicate effectively with client IT personnel, outside vendors, and forensic experts is key.

course, guest-lecturing on the subject, or developing guides and instructional material.

The Electronic Discovery Reference Model (EDRM) provides a visual representation of the process, starting with information governance (including litigation readiness). Identification, preservation, and collection of ESI follow when a credible threat of litigation triggers the preservation duty. Processing, review, and analysis using an online review platform is next. Catalyst and Relativity are two legal software vendors who provide educational access to their systems. Production of ESI must be in a form specified and agreed to by the parties consistent with the FRCP (Federal Rules of Civil Procedure) and other applicable court rules. Presentation at trial, authentication, and admissibility conclude the EDRM.

E-discovery law essentials include the 2006 and 2015 FRCP amendments and foundational cases such as Zubulake and Qualcomm. Ediscovery Daily Blog is an excellent way to keep current on these issues.

The Sedona Conference principles and commentary are essential best practice sources. Attorney Craig Ball, a technology trailblazer and adjunct professor at the University of Texas, maintains highly useful teaching materials on his website. View the materials at bit.ly/SO18cb.

Artificial Intelligence
Artificial intelligence applications are burgeoning with far-reaching legal, economic, and social implications. As AI offers opportunities for reducing or eliminating routine, time-consuming tasks in electronic discovery, contract review, and other traditional lawyer functions, innovative lawyers adapt to seize new opportunities. Improving prediction of legal outcomes is an example of leveraging AI in the legal profession to better understand data.

Predictive coding uses machine learning (a form of AI) to speed up the identification of relevant documents. Lawyers wanting to use predictive coding instead of or in conjunction with traditional keyword searching must satisfy judges (and opposing counsel) of their competence to oversee the process, including quality control and vendor supervision. A judge may want the attorneys (and their technical experts) to explain enough about “the black box” behind the technology to understand how it works and how reliable it is compared to other search methods, before the court approves its use.

Unanswered legal questions about AI abound in tort, insurance, employment discrimination, and other contexts. In March 2018, MIT Technology Review asked what laws should apply, when, in a hypothetical set in 2023, “self-driving cars are [on] city streets and for the first time, one of them has hit and killed a pedestrian, with huge media coverage” (bit.ly/SO18MIT). This question has arrived five years ahead of time with the recent Uber self-driving car accident. Legal scholarship on the law of AI and robotics is at work on answering some of these questions.

Law librarian scholars are contributing their expertise to further understanding of AI applications in legal research. Professor Susan Nevelow Mart puts legal research “black box” technology to the test by calling for greater vendor transparency in the algorithms and methods used. Mart’s study and Jamie Baker’s AI and technology competency writings are prime material for Advanced Legal Research and Law and Technology courses with AI components.

Big Data and, Yes, Coding
Big Data—what is it and why should law schools care about whether such a thing belongs in the curriculum? The answer is not complicated. According to Google Dictionary, Big Data is “extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions.” But Big Data also entails a series of skill sets surrounding the development and analysis of the data. Viktor Mayer-Schönberger and Kenneth Cukier provide an easy-to-digest yet well-done primer on the subject. (Learn more at bit.ly/SO18bigdata.)

For example, they point out that “[a]t its core, big data is about predictions. Though it is described as part of the branch of computer science called artificial intelligence and more specifically an area called machine learning, this characterization is misleading.
Big data is not about trying to ‘teach’ a computer to ‘think’ like humans. Instead, it’s about applying math to huge quantities of data in order to infer probabilities.”

Ed Walters, among others, has presented on the topic of data as the “new oil,” namely, an economic reality where lots of jobs and lots of opportunities for jobs will be created by the world’s increasing ability to generate more and more data. Data may be a by-product of other information systems and processes, but it is clearly also the foundation for a whole host of new applications.

This shift though, as always, has implications for the law. Not just in how we develop uses for the data but also for how these uses are regulated and monitored. Many dystopian novels and movies seem to begin at the point where humanity has somehow lost its way with the rise of technology because the law didn’t keep up. And while this may be a compelling reason for law schools to enter the Big Data game, it’s not a rationale we’re suggesting.

The reason for why law schools should develop courses around Big Data is not complicated. Put simply, graduating law students who, in addition to having subject-matter expertise, can distinguish correlation from causation and who have some semblance of a data scientist background and skill set, will be extremely employable. Proof here is not hard to find. For example, the chief knowledge officer of a nationwide law firm said he would hire as the chief knowledge officer of a nation-wide law firm said he would hire as many law students with data science skills as we could produce. Even more telling, just look at a couple of weeks’ worth of AALL KnowItALL newsletters that appear in your inbox each day. Recent headlines have included “Big Data Meets the Constitution in New Originalism Project,” “Lex Machina Expands Analytics Insights Into Remedies Grant/Deny Rates and Trends,” “Gavelytics Expands California Judicial Analytics With Rulings Research Capability and Adds Arbitrator Archive,” and so on.

But the last two headlines above about Lex Machina and Gavelytics add fuel to the fire for creating curriculum around Big Data: our vendors are already there. Reed Elsevier, particularly with its acquisition of Ravel, has taken a huge lead in this area. And a word for law librarians—nobody owns this space … yet. We must and should make this part of our DNA.

So how do we get there? In no small part related to this is the question: To Code or Not to Code, should we teach law students how to code? Yes! Coding is a crucial part of the data scientist skill set and will make our law graduates more employable.

Any doubt of this notion can be immediately erased by following the work of David Colarusso, now clinical fellow and director of the Legal Innovation and Technology Lab at Suffolk Law. It isn’t just Colarusso’s work; it’s also the work of Daniel Katz and Michael Bommarito, who taught the programming language R and made their work open source for anyone to use. (Learn more at bit.ly/SO18Katz.)

Law Librarians Leading the Charge

Law librarians have many opportunities to make this a point of conversation in our schools. We can craft these courses and the pedagogy (and throw in the word heuristics to make traditional faculty more or less think it has merit). We have many opportunities in any given year to discuss how this can happen and to move it forward. For example, we have an information hub to collocate all this information at the Legal Technology Laboratory. (Learn more at bit.ly/ SO18legaltechlab.)

While working with legal information is old hat to lawyers, law librarians, and law students, the rapid and broad spread of technology over the past three decades demands our rethinking about how and what we teach law students. The world is on the cusp of profound change, and now is the time to bring law students to the forefront.

### Teaching + Training

#### AALL2go EXTRA

Watch the 2017 AALL Annual Meeting program “Teaching and Implementing Emerging Technologies in Legal Practice” at bit.ly/ AM17legaltech.
2018 began with a whirlwind of development in cannabis laws and the cannabis industry in general, and it shows no signs of slowing down. Cannabis is still prohibited at the federal level under the Controlled Substances Act (CSA), but there is real momentum toward federal decriminalization. Additionally, at the state level, medical marijuana is now legal in 29 states, and adult-use “recreational” marijuana is permitted in nine. The District of Columbia allows for both medical and recreational use, though implementation of the laws is currently stalled. Through all this, lawyers continue to push the boundaries federally, at the state level, and in representing the myriad interests of cannabis entrepreneurs. Herein is a discussion of the current landscape for cannabis law this year, what the future might hold, and a list of helpful resources for keeping up with the moving target of cannabis law, policy, and business.
Federal Law: Then and Now
Despite the tension between the opposing federal and state legal positions on cannabis, the industry has survived and even thrived due to a trio of Department of Justice memoranda and a bill defunding enforcement, which together shield the states somewhat from federal interference. The Ogden Memorandum set forth federal prosecution guidelines for states where medical marijuana was legal.

The first Cole Memorandum clarified the scope of the Ogden Memo, and the second Cole Memorandum (known as the Cole Memo) laid out eight federal enforcement priorities given the widespread and rapid state legalization of cannabis. The Rohrabacher-Farr Amendment (now known as the Rohrabacher-Blumenauer Amendment) prohibited the federal government from spending funds on prosecuting state-compliant medical marijuana patients and providers. (Learn more at bit.ly/14Rohrabacher.)

On January 4, 2018, the positive momentum seemed to abruptly stop, when Attorney General Jeff Sessions immediately rescinded the Cole Memo, unequivocally stating that prior national guidance on marijuana is unnecessary. This sent shockwaves through the industry. Since then, however, numerous developments flying in the face of Sessions’s position seemed to signal renewed forward motion in the federal government’s stance toward legalizing cannabis.

The Rohrabacher-Blumenauer Amendment was renewed through September 2018, and in a press release, U.S. Rep. Dana Rohrabacher (R-CA) announced plans to make the amendment permanent through the Cannabis States’ Rights Act. Senate Majority Leader Mitch McConnell (R-KY) introduced the Hemp Farming Act of 2018, which would legalize hemp and remove it from the CSA’s schedule of controlled substances. The bill is being fast-tracked through the Senate. On April 20 “4/20” (marijuana’s unofficial holiday), Senate Minority Leader Chuck Schumer (D-NY) announced a plan to VICE News for federal legislation that would “decriminalize marijuana from one end of the country to the other.” Senator Cory Gardner (R-CO), who has blocked Justice Department nominees since January 2018 in response to the rescission to the Cole Memo, recently struck a deal with President Trump in which Gardner lifted his Justice Department’s hold in exchange for the president’s promise that he would “support a federalism-based legislative solution to fix this states’ rights issue once and for all.” Moreover, the Food and Drug Administration (FDA) issued a report noting “substantial evidence” of a new drug derived from cannabis designed to treat seizures in children.

Could the end of federal prohibition be in sight? It certainly appears closer than ever.
At this time, more than half the states have legalized medical marijuana, and this number is expected to increase given that several states currently have pending medical marijuana laws, according to Governing.com.

**State Law: Recent Developments**

At this time, more than half the states have legalized medical marijuana, and this number is expected to increase given that several states currently have pending medical marijuana laws, according to Governing.com.

Legalization for recreational use continues as well. On January 1, 2018, California opened its doors for recreational use sales. In Massachusetts, the sale of recreational use cannabis is expected to begin later this year. Vermont was the first state to legalize recreational use through the legislature—not a ballot measure—unlike the other eight states with recreational use cannabis laws in place.

More and more Americans support the legalization of cannabis. According to a January 2018 poll by the Pew Research Center, 60 percent believe cannabis should be legal. This number is nearly twice what the approval rating of cannabis legalization was in 2000 (31 percent). Additionally, cannabis analytics firm New Frontier Data predicts national medical and recreational cannabis sales will hit $11.7 billion this year, increase by 25 percent in 2019, and hit $25 billion in 2025.

With numbers like these, it’s clear the states will continue to develop and allow for robust cannabis laws and economies, whether or not the federal government is on board.

**Laws Impacting Cannabis Lawyering**

Lawyers have played a key role in developing cannabis laws, and they will continue to be needed as additional, and perhaps all, states move toward legalization in some form, and as the federal government continues to shift its position. Even more importantly, lawyers have played a critical role in helping businesses navigate the complex and inconsistent legal landscape surrounding evolving cannabis laws. Given the range of areas in which lawyers advise cannabis clients, including entity formation, regulatory compliance, intellectual property development and enforcement, advertising, mergers and acquisitions, investments, real estate transactions, contract negotiation, and of course, litigation, the need is more urgent than ever for competent, ethical representation of cannabis businesses.

States vary in their rules regarding legal representation of cannabis clients. For example, in California, newly enacted AB 1159 allows for the enforceability of cannabis contracts that comply with state and local laws. Additionally, the new law reinforces the attorney-client privilege between cannabis companies and counsel, so long as clients are advised of potential conflicts with federal law. AB 1159 underscores the importance of the attorney-client privilege (namely, that communications requesting or receiving legal advice are protected from disclosure to third parties), enabling solid and successful attorney-client relationships within the cannabis industry, as the nation enters the age of regulation.

According to the American Bar Association, at the end of 2017, 15 other states had either modified ethics rules or created policy allowing for representation of cannabis industry clients, including Arizona, Colorado, Connecticut, Florida, Hawaii, Illinois, Maryland, Minnesota, Nevada, New York, Ohio, Oregon, Pennsylvania, Vermont, and Washington, as well as the District of Columbia.

**Moving Forward**

While it may not end in 2018, it’s clear federal prohibition can’t last much longer. Further legal development is certainly on the horizon, as well as an increased need for legal representation of cannabis clients poised for growth but facing regulated business concerns, such as employment law issues. With more and more states legalizing cannabis, the reality of a viable cannabis economy is here, and its impact will only continue to grow.
Throughout her career, former AALL President Sarah (Sally) Holterhoff has been an advocate for the federal depository library program, for digital authentication of legal materials, and for access to government information. Now, in her retirement, she has a new cause: building a network of seasoned American Association of Law Libraries (AALL) colleagues and exploring opportunities for them to stay engaged with each other and the Association.

A stroke of luck brought Sally Holterhoff into a career in law librarianship. After receiving her MALS from the University of Wisconsin-Milwaukee, Holterhoff worked in public and school libraries. Then, in 1981, she and her husband moved to Valparaiso, Indiana, with their two small children. “After checking around, I learned that Matt Downs, director of Valparaiso University Law Library, wanted to hire a part-time government documents librarian,” recalls Holterhoff. Though she lacked relevant experience in government information or law, she was hired for the position that began her 35-year career as a law librarian. “That fortunate break turned my career in a new direction, one that was better than I could possibly have imagined. I learned quickly on the job, and through the years my responsibilities changed and expanded,” said Holterhoff.

Her position evolved into government information/reference librarian and associate professor of law librarianship. “When the Valpo law librarians gained faculty
status, I took on teaching responsibilities. I discovered that I really enjoyed teaching legal research and answering tough research questions about government information for faculty.”

Holterhoff spent her entire career at Valpo Law Library, until her retirement in 2016. She is now associate professor emerita of law librarianship at Valparaiso.

Since joining AALL in 1982, Holterhoff has been extremely active within the Association. She served as AALL President from 2006–2007 and was an Executive Board member from 2000–2003 and 2005–2008. She has chaired standing committees (Government Relations Committee, Public Relations Committee, and the Council of Chapter Presidents) as well as numerous special committees, advisory groups, and task forces. She served as chair of the Government Documents Special Interest Section, and has been a longtime member of the Chicago Association of Law Libraries (where she served as president from 1995–1996) and the Ohio Regional Association of Law Libraries. In 2016, she and several other AALL colleagues organized the Encore Caucus. Here, she discusses the benefits of belonging to a professional association, and why it’s important that retired and later-career members stay engaged, not only with the Association, but with the profession as well.

What’s the value of being an AALL member?
First of all, I’m convinced that being actively involved in a professional association can greatly

enrich a person’s career. It’s a way to meet colleagues, find mentors, and build professional and personal friendships. AALL provides members with opportunities to hone their skills by volunteering, to find programming to continue learning in their field, and to network and exchange information and find answers.

What role has AALL played in your career?
Membership in AALL has been especially valuable to me personally. I attended my first AALL Annual Meeting in Detroit in 1982. I was so impressed with the people I met there and what I saw happening, I could hardly wait to get involved. AALL quickly became my professional “home” and has remained so, even now in my retirement.

Although I spent my entire career working in one law library, through AALL I was able to form strong connections with colleagues and mentors around the country and in a variety of library types. My involvement with the Association for all these years has broadened my horizons and has provided me with numerous opportunities to learn about leadership, advocacy, and public speaking. Serving as AALL President was a great honor and certainly a highlight of my career. My colleagues in AALL continue to challenge, advise, and inspire me.

What lessons have you learned from the leadership roles you’ve held in AALL?
Leaders have to be problem solvers, and it can be tempting to make a quick decision to resolve a situation. But before making a major decision, it’s often better to be patient and take a day or night to reflect. That’s not possible in every decision-making situation, but when it is, I’ve found that the result is often better.

Criticism is something leaders must learn to handle. No one enjoys being criticized, but it’s nearly impossible to avoid some negative feedback if you’re doing your job as a leader. You should listen and try to understand the viewpoint of others, but ultimately you have to accept that very often you can’t please everyone. You have to focus on the goals of the organization and proceed, not taking differing opinions personally.

Other AALL leaders can serve as valuable role models. Early in my career, some of the best training for future leadership that I found was as a volunteer at the special interest section or chapter level. There I had the good fortune
QUICK HITS WITH SALLY HOLTERHOFF

**Q&A**

**ebooks or print?**
I’m still very partial to print and usually have several books underway at any given time. I listen to audiobooks while driving.

**Favorite quote?** “Show kindness whenever possible. Show it to the people in front of you, the people coming up behind you, and the people with whom you are running neck and neck. It will vastly improve the quality of your own life, the lives of others, and the state of the world.” This advice is from Ann Patchett, a favorite author of mine.

**Book you’ve enjoyed reading recently?**
Fiction: *Commonwealth* by Ann Patchett.
Nonfiction: *This Chair Rocks: A Manifesto Against Ageism* by Ashton Applewhite. This author believes that society needs to overcome the prejudice of ageism. She makes a case for age being a criterion for diversity, which should be applied in all aspects of life, including the workplace.

**Guilty pleasure?** My fascination with British royalty!

**Favorite travel destination?** Bonita Springs, Florida, where my husband and I have a vacation condo and are now spending several very pleasant months each fall and winter. Recent favorites also include Cape Town, Athens, Prague, and Budapest.

**Favorite TV show to binge-watch?** I enjoy catching up on all the seasons of top drama series of the past: *The Sopranos*, *West Wing*, *Six Feet Under*, *Breaking Bad*, *The Good Wife*, and [most recently] *Mad Men*.

**Horizon:** See the big picture and embrace new ideas and ways of thinking. Take full advantage of your chance to make a difference. Have a vision and be an advocate for something you believe will improve the organization and make a difference beyond your time at its helm. Be invested in your vision and be willing to take some risks to accomplish it.

**You’ve been involved in AALL advocacy for many years. How do you see advocacy skills as related to leadership?**
With members of our profession taking on new roles in their work environments, advocacy skills are increasingly important. It’s essential for all of us to be able to speak and write effectively about important legal information issues. Through advocacy work in the Association, we can gain experience in talking to persons in positions of authority, in explaining both sides of an issue succinctly, and in making the case for a particular action or goal. That skill set is transferable, enabling individuals to take on leadership roles in various workplaces. In law schools, librarians may be supporting the implementation of legal research competency standards. In law firms, they may be making a case for using Lean Six Sigma concepts and strategies for project management. Government librarians may be speaking up on access to justice issues. Across the board, our standing as leaders in the legal information profession is enhanced if we have good advocacy skills.

**What do you see as essential traits for leadership?**
There are different leadership traits and styles that can be appropriate and effective for a given situation or organization. While I’m not an expert on traits of effective leaders, I can offer my personal reflections on leadership, things that have worked for me in the positions I’ve held or that I’ve observed in others. They can be summed up with four words that begin with the letter H:

**History:** Be aware of and consider what has come before in an organization before planning the next steps. Be familiar with the norms of the past. The status quo may be deeply seated. Even if it’s time to change past practices, do that as respectfully as possible.
In 2016, you and several other colleagues organized the AALL Encore Caucus. What was your motivation for founding this new group? What are its goals?

In 2016, as I approached my own retirement, it seemed to me that there must be some additional way for me and others in my situation to continue to be involved and contribute to AALL, beyond the roles we had already played. I wanted to stay connected with colleagues of all ages and career stages, which is something I’ve always enjoyed and found to be valuable.

AALL has a large number of later-career members—seasoned professionals who possess a wealth of experience, tacit knowledge, and perspective. If, as these individuals approach and reach retirement, they drift away from their connection to AALL, that will be quite a loss—both for the Association and for them.

The Encore Caucus is a group of longtime, experienced AALL members. It was formed to bridge the gap between colleagues who are in the last decade or so of their active careers—those who are approaching the finish line—and those who have already transitioned to post-employment life (and want to continue their connections with colleagues in AALL). At this point, ours is one of the largest AALL caucuses, with 130 members, many of whom are still working full time.

For our first two AALL Annual Meetings as a caucus, we have tried to offer some special experiences for our members (while also welcoming guests and future recruits). A feature of our annual business meeting has been a short presentation by a local speaker on a topic of interest to our members. We’ve also offered a social/cultural event or “field trip.”

I think there are some great possibilities ahead in AALL for the Encore Caucus—I’m eager to see what comes next!

For individuals who are approaching or have reached the retirement milestone, what benefit do you see for them in continuing their AALL membership and their involvement in activities with the Association?

For those of us who, throughout our careers, have felt a sense of community within AALL, reaching retirement is no reason/excuse to leave the stage, so to speak. It is in the interest of all for “seasoned” colleagues to continue their AALL involvement—to stay in touch with friends and put to use their experience and tacit knowledge in meaningful ways. It’s a waste of talent to lose that. The Encore Caucus is just one attempt to give longtime AALL members a purpose and a place to stay involved and to continue to make contributions, without detracting in any way from the need for younger colleagues to take the lead in running the organization.

AALL offers opportunities for people of all ages to be engaged, to be part of a social network, and to feel a sense of community. Plus, on a practical level, there are discounted dues and registration rates for retired members!

Also, AALL has taken strong stands on diversity issues and it is important for all of us to be aware that age is one criterion for diversity. It has been pointed out that ageism is the last socially acceptable prejudice and it is found throughout society—in the workplace, in advertising, and yes, even in professional organizations. It’s time to change that, and we hope to encourage AALL to take a stand against ageism. That is less likely to happen if those of us in the “older” category just disappear from the AALL picture by dropping out of the Association.

What is the best career advice you received during your 35 years as a law librarian?

Don’t be afraid to take on a new role or challenge, even if it scares you a little or takes you well out of your comfort zone. Trying the new thing and struggling through some doubt and uncertainty about it can be uncomfortable. But it is almost always worth it in the end and can be a great way to increase your skills. Success at something new helps you grow professionally and reach the next stage of your career.

What advice would you give to a colleague in the earlier stages of his or her career?

■ Be aware that members of the law library and legal information profession form a close-knit group, a network of colleagues and friends with many interconnections. The reputation (good or not-so-good) that you build for yourself will follow you throughout your career, in ways you might not expect.

■ Show respect to and value the perspective of everyone in your work environment, not just the “important people.” You can learn a great deal about how things really work from members of the support staff.

■ Have fun. Be the person who can enjoy the scenery on a detour. Changes, even disappointments, as hard as they seem at the time, may bring you to an unexpected but much better destination than the one you intended to reach.
Question: What role does technology play in the transformation of law?

Technology is transforming the legal profession. Not a day goes by that we don’t read in the legal press about a new artificial intelligence (AI) or data analytics tool entering the legal market. These new technologies hold out the promise of helping lawyers to practice more efficiently, serve their clients more effectively, and promote access to justice more broadly.

While some people fear that these new tools will lead to the mass outsourcing of lawyers or the creation of robot lawyers, I think just the opposite is true. AI-powered tools require smart lawyers to train these new systems, and these systems will alleviate lawyers of the more redundant and repetitive tasks and allow them to focus on more value-added work. Lawyers will still have the same duties, including duties of supervision and independent judgment.
We should not forget that we have been using technology in a number of areas to provide incremental efficiencies in the way lawyers practice over the years. Think of natural language searching for online legal research, the use of predictive coding in e-discovery, the use of legal search engines that work on top of document management systems to facilitate the searchability and repurposing of existing work product, or the use of sophisticated taxonomies to deliver relevant current awareness and competitive intelligence to lawyers.

Technology is also changing the way law firms deliver legal services. Some cutting-edge law firms have developed new ways of delivering legal services through online innovation centers that offer clients direct access to technology and compliance tools. As a result, law firms are beginning to productize legal services that can be consumed by many clients.

In order to help practicing lawyers and the future generation of lawyers prepare to practice in a technology-driven environment, law schools and law firms must continue to change the curricula to offer more technology-related courses, such as the creation of apps, coding, data analytics, and artificial intelligence.

In fact, in many law firms we are already starting to see new information technology specialist roles for lawyers in e-discovery, knowledge management, data analytics, business development, and pricing.

This is great news for our profession as law librarians are taking a leading role in many of the technology initiatives at law firms. Both in law schools and law firms, librarians are educating law school students and lawyers about the new technology tools entering the legal market and teaching how to use them to respond to clients’ increasing demands for efficiency and to lower the cost of legal services. The future is bright for law librarians who possess technology skills and can help translate to the information technology department what tools lawyers need and how to teach lawyers to use these tools in their practice.

Currently, the new standard means proving that we use high-end software and technology for the betterment of our clients. In fact, every RFP (request for proposal) asks the same questions, including: “What cutting-edge or innovative electronic tools does your law firm use to provide services to clients?” Those RFP’s are leading the charge for a technology revolution.

So, does new technology change the face of law or does the face of law change technology? To some extent this is a chicken-and-egg quandary. Our clients come to us seeking more than just an understanding of the law. They want expertise and astute counsel. New technology is vital in meeting these client needs.

Clients have their own homegrown analytics and are trying to leverage information to which we have access. Legal research is changing to meet the client’s financial needs and time constraints. It is no longer acceptable to say we do not know how long it will take a court to rule or how many appeals are being heard and cases upheld or that it will take 40 hours of research to get the answer. Nearly every pay-to-play vendor has developed Artificial Intelligence (AI) and analytical platforms. The daily need for insightful information has pushed this need for AI and analytics to the forefront. To be responsive and provide the services our clients want, we need these tools.

If AI and analytics are the expected resource, what is next? You guessed it, blockchains and cocktails.

Let’s face it; the practice of law is old! Ironically, in a profession steeped in ancient scrolls, opinions, statutes, regulations, and cocktail napkin contracts, lawyers love to think they are leading the technology revolution. The real questions are what is becoming the new standard in the technology revolution and, then, what comes next.
The American Association of Law Libraries Latino Caucus raises funds to help provide pro bono legal assistance to migrant children separated from their parents at the border.

BY CASANDRA LASKOWSKI

I am the daughter and great-granddaughter of Cuban and Italian immigrants, respectively. Having permission to bring only four people to America, my grandmother and grandfather left two of their four sons behind in Cuba. My father, the youngest, was eight when he crossed the sea. I was about that age when my uncles joined us in Miami, each with a family of their own. So the recent stories of migrant families separated at the U.S. border sent out a message—one that I did not support, and that tore at my heart. As the American Association of Law Libraries (AALL) Latino Caucus Chair, I wanted us to find a way to effect change in some small way. Thanks to the amazing people in our community, the result was anything but small.

The Latino Caucus has had a trying year. With colleagues in Puerto Rico and Houston, those tragedies hit close to home. The Caucus was founded to connect Latino librarians, increase their visibility, and provide a forum to discuss issues of importance to the Latino
community. This year it proved to be more of a family. With each harrowing news story, we shared resources and support. We checked on each other and provided encouragement.

Can We Do More?
When article after article flooded every news feed with stories of families torn apart by the Trump Administration’s Zero-Tolerance Policy, I did as we had done before, I shared information in our forum about ways to aid the families. It did not feel like enough. I spent two days wondering how we could do more. I do not remember why my mind drifted to the humorous custom name badge ribbons Dolly Knight had made the year before, but with that memory came the idea for a fundraiser.

I reached out to the Caucus to see if the idea stood a chance or if I was flying a bit too close to the sun. The response was swift and exuberantly supportive, much to my surprise and relief. With only a few weeks until the AALL Annual Meeting in Baltimore, we began planning. We had to decide on an organization to support, phrasing for the ribbons, and determine the scale of the fundraiser.

We chose to support Kids in Need of Defense (KIND), because we wanted to highlight and support an organization doing amazing work that was not already the focus of other high-profile fundraisers. KIND provides pro bono attorneys to unaccompanied minors in immigration proceedings, performs policy education and outreach with policy makers, and works in Central American and Mexico to improve conditions for children. While KIND usually aids unaccompanied minors, they were also working to reunitie families separated at the border. They do all of this to “protect children’s rights and safety before, during, and after migration.”

The Caucus placed the order for 150 ribbons that declared “Families Belong Together” in bold black lettering on a bright chartreuse fabric. Once the ribbons arrived, I snapped a quick photo, took a deep breath, and posted our first notice about the fundraiser. In less than five minutes, I received email after email asking for ribbons and exalting the idea. A few people wanted to help distribute them. Then I got an email from Diana Koppang, the director of research and competitive intelligence at Neal, Gerber & Eisenberg LLP. She was excited, and wanted in. With Diana on the team, the fundraiser’s reach and visibility expanded.

There was less than a week left, so we volleyed emails and calls at light speed. I created a team fundraising page on KIND’s website, and Diana ordered an additional 150 ribbons to sell at the Private Law Librarians & Legal Information Professionals Special Interest Section workshop and meeting. I posted notices about the fundraiser, and she made cards with our fundraising page on them. We planned tactics, recruited some help (a big “Thank you” to Julie Pabarja), and hit the ground running as soon as we made it to Baltimore.

People were excited. They asked about the ribbons at the Marketplace, the Exhibit Hall, after sessions, and in the hallways. Chartreuse ribbons could be seen wherever you went. People pointed proudly at theirs when they saw my sign held high in the air. The fundraiser was an incredible success. We sold every one of the 300 ribbons.

Building a Bridge
As of this article, this fantastic community has given $4,123.91 to KIND; far beyond the $150 the Caucus had hoped to raise. We are overwhelmed with gratitude to each person that supported this campaign. We are thankful for the other caucuses that shared our link, and we are thankful for the people who were unable to attend AALL 2018, but still chose to donate to the cause. Thank you.

After our colleagues at the University of Puerto Rico Law Library presented at the session on surviving disasters, a few attendees expressed their interest in creating a space for sharing ideas or opportunities between those in need and those wanting to help. A similar theme arose when we spoke to Catherine D. Hulme from the Unaccompanied Children Pro Bono Project at our business meeting. There is a desire to help and a need for help. The Latino Caucus wants to be this bridge and encourages others to join our Caucus.

KIND provides pro bono attorneys to unaccompanied minors in immigration proceedings, performs policy education and outreach with policy makers, and works in Central America and Mexico to improve conditions for children.
Your Blueprint for Success

The AALL Body of Knowledge (BoK)—designed to serve as a blueprint for career development—defines the domains, competencies, and skills today’s legal information professionals need for success.

**DOMAINS:**
Core content areas of expertise

**COMPETENCIES:**
Key knowledge areas required for proficiency in each domain

**SKILLS:**
Actions demonstrating the required knowledge and experience to appropriately practice the competency

**SPECIAL INTERESTS, SKILL GAPS?**
To assist members in acquiring the knowledge and expertise set forth in the BoK, all AALL professional development content—including AALL Annual Meeting & Conference programs, publications, webinars, and resources—identifies applicable domains.

**WE’RE YOUR ADVANTAGE**
Legal information professionals look to AALL for tools, timely and relevant resources, and authoritative strategies to help them excel as legal information experts. The BoK assists legal information professionals in identifying strengths and opportunities.
WE STAY AHEAD OF THE GAME
As the profession evolves, so must the BoK. The BoK is future-focused and sets the stage for continued development; regular reviews and updates will maintain the BoK’s relevance as shifts in the profession and industry occur.

WE’RE YOUR SOURCE FOR CAREER PLANNING
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RECOGNITION AS AN AALL CHAMPION
- Your name listed on the AALL website
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- AALL Annual Meeting*
  - Listed in Awards Brochure
  - Listed on signage
  - Slide during Association Luncheon
  - AALL Annual Meeting badge ribbon
  - Listed in AALL Spectrum once a year

ALSO RECEIVE
- Complimentary AALL lapel member pin
- Complimentary ticket to AALL Annual Meeting Association Luncheon [$40 value] at the AALL Annual Meeting

*Members who upgrade after June 13, 2018, will receive 2019 AALL Annual Meeting recognition, a complimentary Association Luncheon ticket, and will be listed in the September/October 2019 issue of AALL Spectrum.

learn more at bit.ly/AALLchampion
Justly’s Plan to Improve Legal Services Pricing

During the four years that Laurent Wiesel worked as a law firm litigation partner, potential clients repeatedly requested he propose budgets and task-based, non-hourly fee arrangements to win their business. Without any available tools—or well-organized firm data at hand—to use to help estimate the time involved in matters, Wiesel found the process involved too much guesswork and was too often unprofitable.

He had noticed, however, that a number of other industries had begun using analytics to inform the way they worked. Convinced big data could be a game changer for the legal sector, Wiesel, who’d by then been a lawyer for 15 years, left his practice behind and launched Justly in 2015.

“I was inspired by the needs of my clients and unmet demands on the practice to jump on this data analytics bandwagon,” Wiesel says. “It seemed to be critical for the future.”

Law firms now use the company’s web-based data analytics platform to track their litigation experience. Justly’s case assessment features let law firms forecast a timeline for new litigation, allowing them to manage client work more effectively and price their services competitively to win business.

We recently spoke with Wiesel, Justly’s founder and CEO, about the company’s value proposition, why gathering information from different courts can be difficult, and the types of analytics use cases the legal industry can expect to see in the future.

What was your initial goal when launching Justly?

The original and enduring mission is to leverage data and externalize legal expertise on our platform, specifically to support pricing and delivery model innovation for all stakeholders in the legal industry.
How did Justly’s Legal Experience product, which debuted in March of this year, come about?

Aggregating and analyzing data that informs legal business operations is central to Justly’s mission. Court records are difficult and expensive to access and analyze, especially in large volumes at the state level. Even when you can actually get the data, you still need experienced lawyers to understand what a case is about and how it contrasts with others. This makes litigation experience very difficult and costly to track. It has entailed getting lawyers to fill in forms and code matters and apply a standard set of tags or classifications. This approach usually does not go well. All law firms struggle to maintain good, clean, actionable data in their systems; historically, data has not been kept well, especially for large firms with a lot of lateral transitions.

Legal Experience leverages Justly’s proprietary taxonomy, which is applied to our comprehensive and continuous litigation data. The product offers a complete and accurate representation of any law firm’s experience. Justly’s broad coverage, combined with analytics run on the data, is ideal for benchmarking and, we believe, essential to standardizing the way legal services are delivered and priced. This public data can be blended with a firm’s billing data or a client’s historical legal spend to get a much deeper understanding of how prior similar matters have been priced.

Who uses your product?

We are focused on delivering value to law firms. Our primary entry points have been knowledge management professionals and the law library; CIOs or data analytics teams in large firms and COO-types, CMOs and pricing directors are also key people for us.

Law firms can retrieve insights by logging into the site and exporting and incorporating data into their existing systems. We make systems and software that firms are currently using more efficient because they’re able to function more effectively with better data.

How do law librarians use the product?

Law librarians have a broad range of stakeholders who need state and federal court data to do their jobs. In Justly’s case, we have information nobody else has. Law librarians who found us early on and supported us have been able to deliver something they weren’t able to before.

Have law librarians helped you develop Legal Experience in any way?

From the very beginning, after we got the database together, the question was what market to target. For a little more than a year, we offered case assessment and matter scoping capabilities, or litigation timeline analytics, to corporate legal departments, the largest consumers of legal services—in particular, legal operations and procurement types.

Big changes started happening in February 2017, when AALL President Greg Lambert, who heads up knowledge management for a preeminent Texas firm, discovered us through a referral. His support and influence over the ensuing months led to a significant pivot from corporate legal departments to law firms last spring.

Justly would not be faring as well today if not for the pivot. It was the right move, made easier by Greg’s encouragement and word of mouth through the law librarian community. Greg and his peers were an initial source of feedback. It’s hard to overstate the influence that knowledge management professionals and law librarians have had on the company. For this reason, we decided to exhibit Justly’s wares in person for the first time at the 2018 AALL Annual Meeting & Conference.
Justly offers information from various types of courts. Does the process of obtaining data from any of the courts differ?

There are almost 2,900 courts in the United States. Much ink has been spilled over frustrations with obtaining state court data in particular, due to the large number of courts and non-standardized data. On the federal side, you have about 190 trial-level courts and a couple dozen other courts, including the circuit courts and Supreme Court. There are some 215 courts on the federal side.

On the state side, about half have unified court systems where you can actually go to a single website and interact with a state’s court in that one space. States without unified systems generally require us to obtain records county by county.

How do firms use the information Justly provides to win business?

We’re a silent partner to law firm business development teams who are responding to client requests for proposals. If you’re a law librarian and the business development team comes to you and says, “We have a huge meeting with Exxon Mobil this week; we’re going to talk to litigators there and we’ll be pitching to join their litigation panel—it could be $5 million of business this week,” you would shrug your shoulders; you don’t know.

We track cases across all courts for law firms; there’s efficiency in that. Law firms no longer need to rely on the workarounds of the past and accept dodgy data in areas that Justly now covers better.

How have you marketed the product to industry members?

At this stage, we’ve found that direct sales to innovative buyers—individuals, often law librarians—is the way to go, rather than spending money on digital marketing campaigns and the like. Where we’ve been succeeding is by selling directly to the most innovative people in the industry, who then become referral sources.

Do other industries use Legal Experience?

We’re very happy to have found the best potential customer segment: law firms appear to need what we offer the most and are willing to pay for it. But we recognize that our current data and other data we are aggregating can support functions across the legal industry and peripheral industries, such as insurance. The court records we aggregate contain not only data about the legal process, but about people and relationships between people and what goes on in a particular county and state. We constantly discover new applications for our data.

Has the landscape for legal analytics specifically changed since Justly’s launch?

Lex Machina is the godfather of legal analytics. Many of the analytics tools in the market when Justly launched in 2015 are off the market today or don’t seem to be taking off. There are some startups that are offering similar insights to Justly’s, but they are limited to a few courts or practice areas. More are coming, definitely, but beyond Lex Machina, which seems to be gaining in prominence, the field is pretty wide open.

What’s next for Justly?

Our Legal Experience product is Justly’s first scaled offering to U.S. law firms. From here, we intend to develop our case assessment and matter scoping tools for pricing and project management, as well as client and competitive insights for marketing and business development.

We consider these additional features—which have been in continuous development and are in use by early adopters on the platform today—to be add-ons that enhance a law firm’s core experience, which is the foundation of client value.

What do you think the future of legal analytics in general will involve?

The future will be Justly! (Wiesel laughs.) We’re aiming to be the future of analytics.

In legal analytics today, including new releases from Lexis and Westlaw, the main application is in traditional legal research, with visual representations of how judges decide cases. That stuff is great; but it’s essentially better research.

We’ve been focused on incorporating legal analysis into the legal business. In the future, we believe the $500-billion-and-growing U.S. legal market will run on data like every other industry. We are trying to build the analytics platform that will support the legal industry of tomorrow.

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**JUSTLY FACTS**

**Year founded:** 2015

**Current number of employees:** 6

**Justly provides data from:**
- All 121 U.S. federal courts
- All 92 U.S. bankruptcy courts
- 2,680 state courts (all state courts, except for those that aren’t online or restrict the newest filings to in-person review)
Our organization is investing heavily in emerging technologies, such as artificial intelligence and knowledge management. While most or all are 100 percent on board with the goals of these initiatives, our library staff is spending an increasing amount of non-billable time, in addition to their “normal” daily responsibilities, working on these projects. How can library managers ensure that the entire staff stays motivated and excited while being asked to do more (sometimes tedious, usually non-billable) work?
Maribel: AALL Spectrum readers are well aware of the changing role of the information professional in the advent of artificial intelligence (AI) and knowledge management. According to Jean O’Grady, AALL Executive Board member and senior director of information research and knowledge services at DLA Piper (US) LLP, “[it is not] realistic for anyone to expect emerging technologies not to impact the way they do their job and deliver superior results. It’s like refusing to use a calculator and insisting on using an old technology such as a slide rule. Why not embrace the power of technology to raise your own game? The bottom line is you’re not providing your organization with the highest level of service if you don’t gain an understanding of emerging technologies.”

Our profession is full of people who are eager to embrace change and seek new challenges. However, any change, especially one that involves intelligence or knowledge management, usually comes with asking staff to do extra work in setting up and becoming an expert in these new systems. Knowing that a big change is coming and that it is important for us to be proactive in reinventing services and defining our roles as information professionals is key for mental preparation. However, as the staff is once again being asked to “do more with less,” it is important to try to get the staff on board and keep them excited about the work that is being done.

To that end, make sure that staff members are able to see the bigger picture and the amazing evolution of the whole legal information industry. Because these initiatives often span several departments within the organization, library staff can often feel disconnected from the initiative. Make sure they truly see how their contribution adds to the final product. Include staff in higher-level discussions and allow for two-way communications about what the end goal of these initiatives looks like. Communicate progress and milestones consistently and clearly. Show a demo, or if you’re building something, show a prototype as soon as possible so that the staff can see what their hard work is going into. Emphasize staff training as a part of the initiative and empower them to become experts in these new technologies.

Dolly: It’s true that the transition can be tedious, as records have to be configured, metadata created, files scanned, and it all seems like a big slog with no end in sight. That’s why setting up teams is so vital to the process of implementation: staff not only have a crew to “share the wealth” with, but also others who can share best practices (and commiserate). As Maribel noted above, bringing together teams that encompass multiple departments allows for collaboration and cooperation. For librarians, it brings us into contact with other groups we may not have a chance to interact with on a daily basis, so it serves an additional purpose of not just embracing new technology, but also bringing us firmly into “the fold” and organization.

In my new role where I provide services for a library that is part of a larger city government, I’ve joined a team working on the implementation of a Digital Asset Management System. This team allows me to interact with people from departments other than my own, leaving us less siloed in the library and more aware of what’s going on in the parks department, risk management, etc. There is additional work from being part of these teams, but they offer a chance to expand my skills, and also allow me to work outside my normal area.

Bonus Q&A
People keep asking me if I think AI is going to put us out of business. What do you tell them? According to Jean O’Grady, “We are not in competition with AI. AI can only replicate tasks that take about 10 seconds of human thought. It is bad at interpreting intangible information about human behavior and human interaction. AI can be used to identify patterns in large masses of data, but it still takes a human intelligence to interpret the meaning of the data.”

EVOLVING TECHNOLOGY RESOURCES

- Lynda.com bit.ly/SO18Lyndatutorials
- “Moving from Content Aggregation to Content Intelligence” Steven A. Lastres, AALL Spectrum [May/June 2018] bit.ly/MJ18content
AALL held its two-day program Competitive Intelligence (CI) Strategies & Analysis May 10-11 in Chicago. Led by Zena Applebaum, director of professional firm customer segments with Thomson Reuters in Canada, the program gave professionals the tools they need to make a stronger strategic impact within their organizations, focusing on data visualization, framing, scenario planning, business acumen, and marketing the CI function. During a follow-up evaluation, participants were asked what practices they planned to adopt; here’s what a few of them had to say:

- Review and revise our dossier template
- Frameworks and early warning systems
- Adopt a mission/value statement
- Planning more internal outreach
- Use PESTLE Analysis (Political, Economic, Social, Technological, Legal, and Environmental)
- Attend practice group meetings and present to stakeholders on CI capabilities
- Investigate and subscribe to the tools mentioned
- Synthesis, analysis, and report writing
- Create a CI vision and strategy and try to streamline my work to match that strategy

This was one of the best professional development courses I’ve attended. I liked how practical the instructor was and how she recognized that change in law firms is hard but achievable.
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