



# THE YEAR IN LAW & TECHNOLOGY 2017

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This article was scheduled to appear in the 2018 *Green Bag Almanac & Reader*. That did not work out, but it would be a great shame for our readers to lose out on all the thought-provoking and entertaining information in the article, so here it is.

— The Editors

## JANUARY

**O**PENING OUR REVIEW of the past year, *In Re: Horizon Healthcare Services Inc. Data Breach Litigation*, decided in the Third Circuit this month, held that the risk of future harm could be sufficient to establish standing in a data breach suit involving two laptops stolen from health insurer Horizon.

The power of social media to summon lawyers to a pro bono cause was demonstrated when hundreds of lawyers flocked to the nation's airports to

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assist refugees and immigrants affected by the immigration executive order. Hundreds of photos and videos of lawyers setting up workspaces in airport cafes, hallways, and baggage claim areas flooded the news and social media.

*UC Davis Law Review* held a symposium on “Future-Proofing Law: From rDNA to Robots,” where they examined the impact of new technology such as augmented reality and synthetic biology with panels on “Tangible Questions about Virtual and Augmented Reality,” “The Real Law of Virtual Reality,” “Regulating for the Future,” and other topics at the intersection of law and innovation.

Will lawyers be replaced by computers? Machine learning contract analysis was one of the themes of legal innovation in 2017, and the startup Juro, which helps lawyers analyze contracts, received further funding this month. Juro assists in contract review by flagging unusual provisions, such as an indemnity clause that does not appear in other non-disclosure agreements (NDAs) reviewed by the software.

## FEBRUARY

If you watched *Law & Order* reruns every night, could your TV begin to serve you ads for CLEs in your state? The FTC and the New Jersey Attorney General settled with TV manufacturer Vizio on claims that it had failed to obtain adequate consent from consumers before tracking and analyzing shows that consumers watched. Vizio captured and analyzed video images displayed on the screen to determine which cable TV shows, DVD movies, or streaming media viewers were watching.

The Third Circuit *Horizon* case notwithstanding, the Fourth Circuit found that allegations of potential future harms were insufficient to establish standing in *Beck v. McDonald*.

On February 7, as the “travel ban” immigration executive order was argued in the Ninth Circuit, more than 135,000 viewers logged on to watched a livestream of the oral arguments. While some courts, including the U.S. Court of Appeals for the D.C. Circuit, have banned all electronic devices in their courtrooms, the Ninth Circuit has begun to regularly stream cases deemed to be of interest to the public, prompting the public to ask “Can I haz more courtroom video plz?”

Legal tech innovation hasn't always been about AI and chatbots. On Twitter, Mark Sherman (@shermancourt) shared a letter from Justice Kennedy to Justices White and Scalia, inviting them to come view his new fax machine, which worked 24 hours a day to send and receive "any time you like."

Meanwhile, contemporary lawyers spend 90% of their day in Outlook and Word, according to Evolve Law tweeting about Microsoft research presented at Legal Week 2017. Their comment: "Really? Still?!?! 📠" No word on how much of their day was spent using fax machines.

When the ABA's Law Practice Division Future Initiatives group gathered in Miami for a Midyear Meeting, the scheduled program was set aside in favor of an all-hands-on-deck technology project. The group spent its day instead creating <http://ImmigrationJustice.us> for the American Immigration Lawyers Association ("AILA") to use in pairing pro bono lawyers with clients in need of legal advice. The entire project team, consisting only of lawyers, built and launched a "minimally viable product" to get the AILA quickly matching lawyers and clients. The Future Initiatives group also created a guide to quick-deploy websites to help other teams in the future, hosted on <http://abacenterforinnovation.org>.

In *Robots in American Law*, Ryan Calo analyzed how current caselaw might apply to robots. Is a walking robot an animate object for the purposes of assessing customs? Can a robot possess a shipwreck under salvage law? As robots become more common in our society, are they property or do they have a legal personhood?

The Legal CIO show was held in Midtown Manhattan and featured panel discussions on a variety of legal tech issues, including one on *Enhancing End-User Experience and Combatting Technology Misuse*. Panelists considered the problems of "Shadow IT" (where end users set up their own technical solutions such as using Dropbox for their work documents without informing their company IT departments) and how to increase security through usability updates.

The case of *Harleysville Insurance Company v. Holding Funeral Home, Inc.*, showed the risks of attorneys using online document sharing platforms without fully understanding how to configure them. Attorneys for the insurance company uploaded their discovery response to document sharing website Box.com, but did not restrict permissions to the files, leaving the

documents readable by anyone online. The judge found that Harleysville Insurance Company had waived privilege, deciding to use the case to encourage attorneys to familiarize themselves with the technology they use, writing, “The technology involved in information sharing is rapidly evolving. Whether a company chooses to use a new technology is a decision within that company’s control. If it chooses to use a new technology, however, it should be responsible for ensuring that its employees and agents understand how the technology works, and, more importantly, whether the technology allows unwanted access by others to its confidential information.”

## MARCH

Your diligent authors have a special place in their hearts for Judge William Alsup, based in no small part on his quips and curiosity. In the early stages of *Waymo, LLC v. Uber Technologies, Inc.*, Judge Alsup asked for assistance in understanding the technology at hand. Julia Carrie Wong wittily summarized his request for literature on the use of LiDAR as “do not patronize judge alsup about the non-linear nature of focal points as a function of distance of an object from the lens” (@juliacarriew, March 24, 2017).

An island retreat of engineering students and budding technology lawyers just off Manhattan? Cornell Law joined the new Cornell Engineering School on Roosevelt Island for a semester long “Program in Information and Technology Law” where law students will study emerging legal topics like cybersecurity and privacy technology.

Blockchain fever has finally hit lawyers. With the public Bitcoin madness and the SEC already taking note on the regulatory front, Mark Fenwick, Wulf A. Kaal, and Erik P.M. Vermeulen also caught the blockchain fever and wrote *Legal Education in the Blockchain Revolution*, which analyzes how blockchain technology challenges “many of the traditional assumptions, doctrines, and concepts of law and governance.”

Are law firms slow to innovate? *Forbes* asked why “[l]aw’s Uber moment has yet to occur” and observed that firms seemed to have avoided “aggressive steps to innovate and protect market share.” Among reasons cited for the perceived lack of a sea change were “law firm senior partners lack the financial incentive to invest in the firm’s future because their ‘equity’ is not residual,” and “firms lack the investment capital to make long-term invest-

ments in innovation and there is a generational/economic divide between older and younger partners.” Will firms shift as more embrace software tools to assist in their practice, or will technological adoption largely be driven by other sectors of the legal industry?

As veterans of various law reviews, this twitter throwdown made us laugh. We applaud the legal innovator who brought small caps to the generally footnote-less Twitter:



## APRIL

The Association of Corporate Counsel released a set of model “Information Protection and Security Controls for Outside Counsel Processing Company Confidential Information” ([www.acc.com/advocacy/upload/Model-Information-Protection-and-Security-Controls-for-Outside-Counsel-Jan2017.pdf](http://www.acc.com/advocacy/upload/Model-Information-Protection-and-Security-Controls-for-Outside-Counsel-Jan2017.pdf)). Among the clauses are definitions of confidential information, requirements that firms have incident response procedures, and use of encryption for data at transit (i.e., while being emailed or uploaded or downloaded to a cloud server) and data at rest (i.e., while being stored on a laptop, desktop, file server, or cloud server). There are also

stringent password strength clauses and requirements to patch software vulnerabilities “in a timely manner.”

CuroLegal, noticing a wide gulf between legal tech companies aimed at for-profit attorneys and those focused on legal aid, launched a new Slack (a popular private chat software that can be accessed through the web or desktop and mobile applications) to bring these two worlds together where they can discuss and collaborate.

ROSS AI, whose “hiring” at BakerHostetler we featured last year, teamed up with Lawyers Trust Fund of Illinois to offer legal research support to Illinois Legal Aid lawyers. The ABA has noted that Illinois has 4 million residents at or below the poverty line, but only about 400 legal aid attorneys.

In a *New York Times* article, *Meet the People Who Train the Robots (to Do Their Own Jobs)*, Dan Rubins, creator of AI software Legal Robot, explained that he sought out SEC filings to train his legalese-to-English language translation software because the contracts in such filings were “a cesspool of legal language.” Like many of the other contract analysis assistants that cropped up in 2017, Legal Robot’s automated analysis currently relies on the highly structured style of most contracts, but hopes to grow into a larger assistive role for lawyers.

Defendant United Collection Bureau, Inc., was ordered to write a short software program to collect Electronically Stored Information (“ESI”) in a discovery dispute in *Meredith v. United Collection Bureau, Inc.* Defendant’s counsel had protested that information about voicemails left by the debt collector would be too burdensome to produce. However, the Defendant’s CTO had stated during a deposition that a script could be written to query United Collection Bureau’s databases and gather the information requested. The judge granted the plaintiff’s motion to compel to obtain the call information to determine potential class members, and ordered United Collection Bureau to either produce the raw databases for the plaintiff’s expert to query, or to write and execute software themselves to generate the list of phone numbers.

When Waymo filed a transcript of their deposition of Uber engineer Anthony Levandowski, the project names of various Uber technology projects were redacted in the body of the transcript. The index, however, had no redactions, allowing journalist Kate Conger to match the index with the redactions on the pages and discover the redacted names.

## MAY

Cornell's Legal Information Institute, which hosts freely accessible copies of the US Code, the Code of Federal Regulations, and numerous other legal resources, turned 25 years old in May. The LII launched in 1992 when the Internet was still in its infancy and was the first legal site on the Internet.



In its Formal Opinion 99-413, the ABA released new guidance on online attorney communications, finding that most of these client representation communications did not violate the Model Rules of Professional Conduct. Some communications, however, rose to greater sensitivity and required "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."

In *Whelan v. Michaels Stores, Inc.*, the Second Circuit rejected the claimant's argument that the threat of future harm was sufficient to establish standing. The court found, in a non-precedential ruling stemming from the payment card systems breach suffered by Michaels stores in January 2014, no "particularized and concrete injury suffered from the attempted fraudulent purposes."

Washington State became the latest state to pass a Biometric Privacy Law. Unlike versions passed by other states, Washington's law did not cover photos. However, it did regulate the commercial use of biometric identifiers, which are defined as "data generated by automatic measurements of an individual's biological characteristics, such as a fingerprint, voiceprint, eye retinas, irises, or other unique biological patterns or characteristics that is used to identify a specific individual."

May 25, 2017 marked the one-year date before the European Union's General Data Protection Regulation ("GDPR") was set to take effect. The GDPR includes requirements that companies in possession of data from people in the EU take reasonable security precautions with the data and provide ways for users to request deletion of their data. It also includes strict timelines for breach notification and heavy fines for violations.

Eric Goldman published *Surveying the Law of Emojis*, analyzing many of the issues of interpretation, problems with searching, and IP protections that are affected by emoji. Goldman reported that up to 92% of Internet users utilize emoji in their communications, but many legal tools are not

yet adapted to display them, leading to potential for confusion and mis-interpretation.  

## JUNE

An unintended consequence of wider access to legal filings online was the identification of informants in criminal cases by jailed defendants, who used PACER to unmask informants. The *Wall Street Journal's* Jacob Gershman wrote in *Why Life for 'Snitches' Has Never Been More Dangerous* that federal inmates have asked contacts outside of prison to search PACER for information about cooperating witnesses.

About 3,600 DLA Piper lawyers globally (and all of their legal matters) were put on digital lockdown last summer when the firm was hit by Petya ransomware. Given a short break from billing hours, employees were warned to *not turn on their computers*.

With more voice activated toys and the development of facial recognition technology, the FTC updated their guidance on complying with the Children's Online Privacy Protection Act ("COPPA"). The new compliance plan includes new products covered by COPPA and new ways to obtain parental consent.

Anthem Inc. settled class action claims stemming from a February 2015 data breach affecting the personal information of more than 78 million people. The settlement included payments of \$115 million and a requirement that Anthem guarantee funding to improve the security of its internal computer systems.

June is "clear off the docket" month for the Supreme Court before it heads to summer recess. Two of its more significant acts were its denial of cert in *Lenz v. Universal* (aka the "dancing baby case") and its decision in *Packingham v. North Carolina*. Denial of cert in *Lenz* let stand a Ninth Circuit decision making it difficult to sue for damages under the DMCA for a wrongful takedown notice. In *Packingham*, the Supreme Court found it unconstitutional for a court to ban someone from the Internet.



## JULY

We bid farewell to the *Wall Street Journal Law Blog*. During its 11 years (January 2006-July 2017) online, the blog published more than 20,000 posts on breaking legal news and trends.

Luminance, a due diligence Legal AI technology, signed up Cravath Swaine & Moore as a client. The contract analysis platform uses pattern recognition, statistical analysis, and Bayesian estimation to identify clauses in contracts uploaded into their dataset.

LexPredict open sourced their contract analysis tool ContraxSuite, based on Natural Language Processing (often known as “NLP,” it is a method of helping computers interpret text by analyzing language in sentences or paragraphs). The software source code was posted on Github (at <https://github.com/LexPredict/lexpredict-contraxsuite>) under an open-source license that allowed users to implement their own versions and add-ons.

Another pro bono legal chatbot launched this month, as Veterans Legal Checkup, available at [veteranslegalcheckup.com](http://veteranslegalcheckup.com), began helping veterans identify potential legal issues and guiding them through actions to remedy matters. The tool, built by Curo Legal, aims to help address access-to-justice issues in the veteran population.

Improper or [REDACTED] missing redactions [REDACTED] in discovery material were a [REDACTED] consistent theme in 2017. This month, a law firm hired by Wells Fargo produced several spreadsheets with unredacted personal information of Wells Fargo clients, including social security numbers, to opposing counsel. In an article on the inadvertent disclosure, the *New York Times* noted that “careful reviews to exclude or redact personally identifiable information, encryption and other safeguards as data is transferred” are needed in e-discovery practice to avoid turning over sensitive, privileged, or otherwise confidential information.

In the Northern District of California case of *In re: Facebook Internet Tracking Litigation*, a judge found no reasonable expectation of privacy or actual economic loss by plaintiffs for Facebook’s tracking their activities when not logged into the Facebook website. The users did not block their browsers from sending their Facebook cookies to Facebook’s web servers when they visited other websites that used Facebook “Like” buttons. (Web browsers are architected to send all cookies from a domain to that domain every time content is requested from it, regardless of whether the main

page is being loaded from that domain or not, unless ad blockers are used to alter the default behavior.)

The Cybersecurity Unit in the Department of Justice Criminal Division released a Vulnerability Disclosure Program Framework intended to help public and private organizations set up vulnerability disclosure (“bug bounty”) programs. The Framework encouraged organizations to begin by determining the scope of their program and deciding on allowable methods and techniques for bug hunters, and also included advice on administering the program and drafting a vulnerability disclosure policy that clearly defined limitations without “vague jargon or ambiguous technical language.”

## AUGUST

The D.C. Circuit reversed the district court in *Attias v. CareFirst, Inc.* and found that plaintiffs, customers of health insurer CareFirst, had Article III standing based on risk of future harm due to theft of their personal information. CareFirst’s computer systems were breached in June 2014, but the intrusion was not noticed until April 2015. In May 2015, customers were notified that their information had been stolen from the breached database. The circuit court found that the plaintiffs had standing to sue CareFirst based on their heightened risk of future identity theft.

Rxnda.com launched, offering a self-service way to generate standardized NDAs. While we applaud the easy-to-use site and the spirit of legal innovation, we also appreciate the Terms of Service for the site, which contain clear instructions for the end user, “For the love of God, engage an attorney and ask them whether using rxnda.com is right for you or your business . . . .”

The nearly universal practice of web scraping was brought front and center through a lawsuit by hiQ Labs, Inc. against LinkedIn Corp. The Northern District of California judge issued a preliminary injunction stopping LinkedIn from blocking hiQ from scraping public data. The court found that the application of the Computer Fraud and Abuse Act’s provisions and restrictions on scraping did not apply to hiQ’s actions.

The FTC settled allegations of deceptive privacy and data security practices with Uber. Uber had been charged with failing to appropriately monitor access to or use of the personal information of both drivers and customers, such as with Uber’s “God View” display widely reported in the

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news in 2014. A database of US driver's license information and other personal information was also potentially improperly accessed by a third party in 2014.

The case of *In re SuperValu, Inc. Customer Data Security Breach Litigation* further deepened the existing circuit split over what constitutes valid standing for data breach class actions. The Eighth Circuit held that the plaintiffs had not alleged they suffered harm (identity theft or fraudulent charges), and therefore did not have standing to pursue claims on the basis of alleged risk of future harm.

CourtListener achieved a new milestone in opening up access to case law. Working with the U.S. Department of Labor and Georgia State University, Court Listener pulled every free court opinion and order from PACER (that's 3.4 million orders and opinions from about 1.5 million federal court cases) and hosted them in the free RECAP archive.

### SEPTEMBER

Suffolk Law School offered a "Coding the Law" computer programming class, aiming to give law students a "high-level familiarity with the realm of the possible in legal tech, including a general understanding of data science and machine learning/narrow AI." The students' final projects, available at [http://www.codingthelaw.org/Fall\\_2017/work](http://www.codingthelaw.org/Fall_2017/work), ranged from intake data analysis tools, to a U.S. Air Force Medical Discharge Assistant, to a Legal Entity Determiner designed to assist new businesses. As nerds, we're delighted to welcome a new round of technology-savvy soon-to-be lawyers to the field!

The FTC settled charges that Lenovo had compromised users' privacy and security when the company (beginning in August 2014) shipped laptops to consumers pre-installed with VisualDiscovery software, which broke the web security in users' browsers to sniff their Internet traffic for monetization. The settlement required Lenovo to obtain affirmative consent from consumers before pre-installing similar software and prohibited the company from making misrepresentations about the pre-shipment software installed on laptops. Commissioner Terrell McSweeney described the software as, "leaving [consumer's laptops] vulnerable both to attack from cyber-criminals and to transmitting personal information across the web to Superfish, Inc. servers."

When did you realize you no longer had any control of your most sensitive data? Equifax announced that unauthorized access occurred from mid-May through July 2017, exposing 143 million Americans' data.

The FTC settled the first Privacy Shield Enforcement action after charging three companies with misleading statements alleging that they participated in the EU-US Privacy Shield framework.

Gattaca-style fingerprint clock in? I'll have a burger and a side of facial scan? Speedway and Lettuce Entertain You were hit by Illinois Biometric Information Privacy Act ("BIPA") claims. BIPA requires consent, notice, and disclosure procedures before collecting or using biometric information. Speedway allegedly collected employee fingerprints and then used them for employee timekeeping in violation of the statute. Lettuce Entertain You allegedly violated the statute when it took facial scans of customers who used their self-order kiosks to order food.

## OCTOBER

Doug Hebenthal, who worked at Microsoft for two decades on Xbox and other projects, and then at Amazon, joined Axiom as CTO. He forecasted "a real analog to digital conversion" in the legal services industry.

"We're trying to make public law more public and useful – to move from a world in which law is scarce to one in which law is abundant" said Ed Walters of Fastcase, which launched Cloud Linking, a new citation tool for lawyers. Cloud Linking generates links to publicly available versions of cases for all the citations in a document.

Elizabeth Joh captured life as a law professor in 2017, tweeting: "2017: the year that every law school casebook author starts quoting tweets: Me: Assigns pages tweet 1 - tweet 22."

Was GDPR a goldmine for online legal solutions? It seemed so. Law firms have released numerous online and tech tools, such as self-assessment gap analysis questionnaires to prep companies for the 2018 GDPR enforcement date.

Case Crunch challenged 100 lawyers to compete against their software in predicting the outcomes of some financial disputes before the Financial Ombudsman Service in the UK. The software edged out the lawyers with an 86.6% accuracy rate vs. the human attorney's rate of 62.3%. Case

Crunch said, “These results do not mean that machines are generally better at predicting outcomes than human lawyers. These results show that if the question is defined precisely, machines are able to compete with and sometimes outperform human lawyers.” (Whew!)

## NOVEMBER

The UK Information Commissioner’s Office announced the first grant recipients in their program to fund privacy tools and research. The grants supported research into children’s privacy, medical data sharing and consent, and tools to pseudonymise data and protect people’s financial information.

American Airlines and United Airlines faced class action lawsuits under Illinois’s biometric law, BIPA. The lawsuits against both airlines were filed by employees who alleged that the airlines’ use of fingerprints to operate employee time clocks violated the statute.

The #AppellateTwitter hashtag was busy, with attorneys using it to share jokes, network, and seek out information. We hope that Peter J. Tomasek (@peterjtomasek) was successful in crowdsourcing his sanctions request on November 29: “I’m trying to find the FRCP providing for sanctions against opposing counsel when he/she files a brief that’s too long, even when printed double-sided, to be stapled with an ordinary stapler. Any suggestions #AppellateTwitter?”

Speaking of #AppellateTwitter, Michelle Olsen (@AppellateDaily) noticed that on Tuesday, November 28, four of the five attorneys arguing before the Supreme Court that day were on Twitter (@KannonShanmugam, @DanGeyser, @Neal\_Katyal, and @TomGoldsteinSB). Has there been a day of arguments with a higher percentage of oral advocates with active Twitter accounts?

If a platform is subpoenaed for the identity of one of its users, can it try to quash the subpoena by asserting the user’s rights to anonymous speech? By November it had become clear that the answer under California state law (where quite a few Internet platforms are headquartered) was yes, according to a decision connected to the *Montagna v. Nunis* case involving Yelp and another California court of appeals decision earlier in the year involving Glassdoor.

Section 230 does a lot of heavy lifting to protect Internet speech. In 2017, a federal district court found it also prevented the enforcement of a worldwide injunction issued by a foreign jurisdiction (in this case, a decision by the Canadian Supreme Court requiring Google to delist certain search results in a case brought by Equustek).

## DECEMBER

**W**as it a legitimate bug bounty payment or a data breach? Reuters broke the story about Uber's \$100,000 bug bounty payment to a Florida security researcher, which some believed was a cover-up payment to hide a reportable data breach.

Open source data protection impact assessment ("DPIA") software was released to help data controllers perform DPIAs as part of their GDPR compliance programs. The software, available at <https://www.cnil.fr/en/home> in both English and French, takes users step by step through doing a Privacy Impact Assessment of the information they control.

Clio asked several legal tech experts to look ahead at exciting trends for 2018. The list: big data, security, consolidation, invention, APIs, and text messaging. Among the biggest opportunities: using technology such as client portals or blogging to connect with clients, increasing work in cybersecurity, scaling effectively, and use of chatbots by small law firms to assist in areas like client intake.

LegalZoom faced a complaint in the Northern District of California alleging unauthorized practice of law. LegalZoom's non-lawyer "trademark document specialists" are alleged to have "provided legal advice to the plaintiffs by selecting classification and modifying the goods and services description from the template, thereby applying specific law to facts."

Help Self Legal (another online platform in the access-to-justice area) launched with a focus on assisting low- and moderate-income individuals who are seeking domestic violence legal help. The online platform assists users in filing DV restraining orders.

Finally, a look back at social media and blogging use by attorneys. An article in the ABA's *TechReport 2017* reported that out of attorneys who maintained a legal blog, 76% blogged for client development, while 47% blogged because they enjoyed the writing. Forty-three percent of the blog-

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gers reported that a client had retained their services at least in part due to their blogging. At the time of the report, 26% of law firms had blogs, compared with 15% of solo practitioners. One hundred percent of the authors for this article do it because they enjoy the writing.

