

LICENSE TO HACK

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Legal hackathons are exploding in popularity. “Hacking” is a term often associated with illegal behavior, but a hackathon is something different. At a hackathon, lawyers, technologists, data scientists, public interest organizations, law students, and just about anyone who is interested converge in a friendly, time-pressured competition aimed at solving some defined problem. For more than a decade, different industries have looked to hackathons as a source of new ideas. Today, the legal industry uses hackathons to spark creation of innovative tools to chip away at the access to justice crisis and improve the delivery of legal services.

But often lost in the excitement is a key piece to hackathon success: treatment of the intellectual property. For example, who owns the copyright in software created at a hackathon? What about a new business method? What about the rights to trademark a new design? Most hackathons have some form of a participant agreement, but many outright ignore the “who owns it” question or fail to address it in a purposeful manner. This is a problem in need of a solution—or at least some concrete guidance.

This Article explores intellectual property rights in the context of legal hackathons. How intellectual property is approached at the start can impact the success (or not) of creations at the end. Taking rights away from participants risks alienating them and interfering with the collaborative and fun spirit most hackathons embody. Yet giving participants all the marbles may not be preferable either, especially if it disincentivizes organizers to support future development and help a tool survive beyond the hackathon doors. In circumstances where one size doesn’t fit all, this Article discusses pros and cons of varying approaches to intellectual property in hackathon participant agreements. Embodying the hackathon resolve to create something tangible and useful for others, the Article connects readers to an online repository of sample agreements as well as a participant agreement template.

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INTRODUCTION

“[M]any [hands] make light [work].”

—Old English Proverb, 1562¹

At the playground, in the classroom, or around the boardroom, collaboration breeds success. The often insulated, stoic legal profession isn’t exactly revered for its group dynamics, but the “legal tech” era has embraced a new form of teamwork: hackathons. Hackathons are full of potential for innovative legal tools—and full of potential for disputes about who owns them. This Article is the first to tackle this subject.

For starters, what is a hackathon? If your first impression of the word “hacker” likens to a surreptitious data thief, that’s not in itself wrong but narrow and outdated.² Today, hacker culture is a simple and positive thing: skilled individuals working together, usually with technology and in a time-pressured setting, to solve problems. Put another way: groups of creators embracing the notion of “civic technology”³—not “mischief makers.”⁴

¹ JOHN HEYWOOD, THE PROVERBS AND EPIGRAMS OF JOHN HEYWOOD (A.D. 1562) 54 (Burt Franklin ed., 1967) (1562).

² See Valentin Pivovarov, *How Legal Hackers Are Changing the Legal Industry*, FORBES (Nov. 7, 2018, 11:53 AM), <https://www.forbes.com/sites/valentinpivovarov/2018/11/07/legalhackers/#162a657e5d82> (exploring the origins of hacking and its evolution).

³ Luis Ferré-Sadurní, *Bad Landlord? These Coders Are Here to Help*, N.Y. TIMES (Dec. 4, 2018), <https://www.nytimes.com/2018/12/04/nyregion/nyc-landlord-database-who-owns-what.html>.

⁴ Pivovarov, *supra* note 2.

Hackathons and similar events such as design challenges are all the buzz. The question is not what companies host hackathons, but what companies don't? For example, the idea behind popular modern services such as on-demand ride sharing at Lyft⁵ and the online dating app Tinder⁶ are reported to have been borne out of hackathons. There is good reason for the excitement. These competitions spark ideas, foster creation of new products, and inspire innovation. It is no surprise that lawyers are paying attention, and the contagious energy behind hackathons is being unleashed to tackle a monumental hurdle: the access to justice crisis.⁷ Access to justice and the need to reflect on how legal services are (or, perhaps more accurately, aren't) being provided to those with the most need is not just a "legal" topic. It's a topic that, thankfully, now enjoys increasing attention among lawyers, judges, sociologists, government leaders, students, businesses, engineers, criminologists, and just about anyone interested in helping improve the rule of law.⁸ Find a compelling issue, set some ground rules, invite some lawyers, technologists, and anyone else looking for a challenge and free food, and work under time pressure to create something magical. Sounds simple, right?

Wrong. Hackathons often lead to the creation of intellectual property, and the "who owns it?" questions can get murky, if tackled at all. The intellectual property rights at play in legal hackathons centered on improving access to justice are often an afterthought or just plain ignored. But how a hackathon organizer addresses intellectual property in the context of the purpose of the event affects its success, if by success we mean moving past the hype to creation of a useful new tool or solution or strategy. On one hand, if rights are too restrictive, participants may be alienated and disincentivized. Yet on the flip side, if rights are too generous in the participant's favor, organizers and sponsors have little skin in the game to help move ideas outside the hackathon gates to where they might actually be able to do some good.

This Article analyzes treatment of intellectual property rights in the context of legal hackathons. It underscores the importance of direct, purposeful provisions, both to educate participants and clarify expectations. Further, it outlines the pros and cons for different approaches to intellectual property in a hackathon participant agreement. And, while no one size will

⁵ Michal Lev-Ram, *How Lyft Could Defeat Uber*, FORTUNE (July 19, 2017, 3:48 PM), <http://fortune.com/2017/07/19/uber-vs-lyft-race>.

⁶ Jordan Crook, *Burned*, TECHCRUNCH (July 9, 2014), <https://techcrunch.com/2014/07/09/whitney-wolfe-vs-tinder> (noting that the first prototype of Tinder was built over the course of a hackathon and derived from an early app created by Hatch Labs).

⁷ See *infra* Part II.

⁸ See *generally infra* Part II (describing the intersection of access to justice and legal services).

fit all legal hackathon events, for each approach the Article provides participant agreement language, both within this text and by way of sample, publicly-available agreements. Those agreements are available as a shared online resource moving forward at: <https://suffolklitlab.org/research/hackhelp>.

This Article targets two audiences. The first is individuals and organizations interested in legal innovation and technology who find themselves (or are likely to find themselves) in the “hackathon hosting” space but perhaps don’t know much or anything at all about intellectual property. The second is readers who aren’t as well-versed in legal innovation or access to justice work but are interested in the application of substantive contract principles for intellectual property protection in this new context. As such, the discussion toes the line between a full exploration of certain background points and a quick overview of likely familiar concepts for each of those two audience groups—and, hopefully, everyone in between.

Part I offers an overview of the so-called legal tech era, the movement that sets the stage for hackathons to breed. Part II discusses the access to justice crisis as fuel flaming much of the “legal hackathon” fire. Part III describes what hackathons are, and how entities from corporations to the military to the United States government to public service organizations have used them in the hope of spurring creativity and creation. It provides examples of legal hackathons in different contexts, including public interest access to justice initiatives. Part IV informs potential areas of intellectual property dispute, recognizing the growing trend of broad non-disclosure employment agreements and employer claims to intellectual property, and then describing hypothetical hackathon scenarios in the realms of patent, copyright, and trademark law. The Article then offers in Part V a discussion of varying avenues for how to approach intellectual property rights in a hackathon participant agreement, with sample language for each. In doing so, it aims for a delicate balance between two ends: (1) avoiding the potential chilling effect of harsh contractual legalese; but also (2) heeding off future conflict that could stymie promising hackathon creations.

A final preliminary: The contribution of this Article lies in being the first to examine intellectual property rights at the intersection of these two hot-button concepts (hackathons and access to justice), and first to offer guidance on how to approach intellectual property in this setting. By no means is the Article the first to address legal technology. And of course, the access to justice crisis is examined with vigor almost every day, as well it should.⁹ It is a narrow lane on which this Article embarks to shine a light on

⁹ See, e.g., Kathleen Elliott Vinson & Samantha A. Moppett, *Digital Pro Bono: Leveraging Technology to Provide Access to Justice*, 92 ST. JOHN’S L. REV. 551 (2018) (discussing ways to leverage technology to increase access to basic legal services for low-income Americans); LEGAL

the need to address intellectual property rights in this context with purpose, and to provide concrete support for hackathon organizers to do so. This practical path will give more hackathon creations a fighting chance to thrive and make meaningful improvements to access to justice (and more free pizza, too).

I

THE LEGAL TECH ERA

The phrase “legal technology” is everywhere. The idea is that companies and individuals and public interest organizations (lawyers and non-lawyers) are building and using technology services, software, platforms, and applications to solve problems and address inefficiencies related to delivery of legal services.¹⁰ It is much more than the familiar headline-grabbing “drumbeat of anxiety”¹¹ about robots taking lawyers’ jobs.

Glance at any legal magazine, journal, conference agenda, or blog and pick amongst the jargon: Blockchain. Artificial Intelligence. Big Data. Cloud Computing. Legal Operations. Design Thinking. Smart Contracts. Expert Systems. Chatbots. Automation. Machine Learning. Document Assembly. E-Discovery. Data Analytics. Although a full exploration of the history and scope of legal tech is beyond the scope of this Article, some scratching of the surface is helpful to appreciate the current industry environment in which hackathons thrive.

To say the legal industry is in major transition is neither hype nor hyperbole. It’s fact. For decades, technology has helped lawyers—think word processing, fax machines (remember those?!), e-mail, video conferencing, and electronic legal research. Now, technology is no longer just helping—it’s doing. Some say disrupting or revolutionizing.¹² The

SERVS. CORP., *THE JUSTICE GAP: MEASURING THE UNMET CIVIL LEGAL NEEDS OF LOW-INCOME AMERICANS* 30 (2017), <http://www.lsc.gov/sites/default/files/images/TheJusticeGapFullReport.pdf> (discussing low-income Americans’ inadequate access to legal services).

¹⁰ See Mark Fenwick et al., *Legal Education in the Blockchain Revolution*, 20 VAND. J. ENT. & TECH. L. 351, 356–59 (2017) (categorizing various types of legal technology); Tom Wilson, *Legal Tech – Mapping Disruption*, MEDIUM (July 12, 2016), <https://medium.com/@taw/legal-tech-mapping-disruption-3e6685fc4a5c> (describing the legal technology ecosystem and listing many of the firms involved).

¹¹ See Tom Martin, *How Using Bots in Your Law Practice Can Let You Be More Human and Help Grow Your Business*, LAWDROID (May 15, 2018), <https://lawdroid.com/how-using-bots-in-your-law-practice-can-let-you-be-more-human-and-help-grow-your-business> (critiquing common narratives surrounding legal technology).

¹² See, e.g., Fenwick et al., *supra* note 10, at 357–58 (claiming that legal technology is “disrupting the existing parameters for the practice of law”); Daniel Martin Katz, *The MIT School of Law? A Perspective on Legal Education in the 21st Century*, 2014 U. ILL. L. REV. 1431, 1434 (2014) (“[L]aw’s information revolution is very much underway.” (emphasis omitted)); Ronald W.

theory is this: By automating and using technology to perform less complicated tasks (the low-hanging fruit, some may say), lawyers focus on nuanced “higher level” lawyering and individual client attention. The theory takes shape in many forms, and in both the private and public sectors. Straightforward services, like divorce representation, for which law firms charge thousands, are now commoditized by companies such as LegalZoom,¹³ Avvo,¹⁴ and DirectLaw¹⁵ and offered to consumers for a fraction of the cost. Powerful document review systems review millions of pages with far greater accuracy and in a fraction of the time compared to the worn-out first-year associate at midnight billing a client \$325 per hour. Robust data analytics report the patterns and motion-granting propensities of a federal judge in seconds, taking the place of hours of tedious research.¹⁶ Simple parking ticket appeals can be handled by a chatbot instead of a lawyer ticking off tenths of a billable hour.¹⁷ And, pro se individuals can make court appearances and filings from automated court kiosks or use an online chat for questions to the clerk’s office.¹⁸ In fact, several examples reveal that automated systems and other “lawyer-lite” service innovations can offer just as good results.¹⁹

Why the transition? Many endeavor to answer.²⁰ Technology is a piece

Staudt et al., *Access to Justice and Technology Clinics: A 4% Solution*, 88 CHI.-KENT L. REV. 695, 700–02 (2013) (describing “significant changes in the practice of law, demanding that lawyers master new competencies and develop new models for delivering legal services”).

¹³ *Divorce*, LEGALZOOM, <https://divorce.legalzoom.com> (last visited Mar. 27, 2019).

¹⁴ AVVO, <https://www.avvo.com> (last visited Mar. 27, 2019).

¹⁵ *Divorce: What You Need to Know*, DIRECTLAW.US, <https://www.directlaw.us/uncategorized/free-ebook-getting-divorce> (last visited Mar. 27, 2019).

¹⁶ See LEX MACHINA, <https://lexmachina.com> (last visited Mar. 27, 2019) (offering insights about judging patterns “culled from millions of pages of litigation information”).

¹⁷ *Appeal a Parking Ticket*, DONOTPAY, <https://www.donotpay.com/parking> (last visited Apr. 13, 2019) (offering automated parking ticket appeals throughout the United States and United Kingdom).

¹⁸ Stephanie Francis Ward, *Kyle Rimel: Using Technology to Bring Court Services to Remote Areas*, A.B.A. J. (Sept. 16, 2015, 8:02 AM), http://www.abajournal.com/legalrebels/article/kyle_rimel_profile.

¹⁹ See Jeanne Cham, *Celebrating the “Null” Finding: Evidence-Based Strategies for Improving Access to Legal Services*, 122 YALE L.J. 2206, 2222 (2013) (describing studies that “undercut the civil *Gideon* premise that attorneys are essential to good outcomes”).

²⁰ See, e.g., Katz, *supra* note 12, at 1434 n.14 (citing general counsels’ desire to reduce costs and the rise of legal startups); Staudt et al., *supra* note 12, at 727 (citing clients’ desire for new, innovative practices); *Conference Report: ABA National Conference on Professional Responsibility*, [2017] Laws. Man. on Prof. Conduct (ABA/BNA) 1, 2 (June 14, 2017), https://www.americanbar.org/content/dam/aba/administrative/professional_responsibility/2017lawyers_manual_cprconference_report.authcheckdam.pdf (citing the increased influence of chief financial officers in trying to cut legal costs); Barton E. Centauro, *A Changing Legal Market and the Delivery of Legal Services*, 33 Laws. Man. on Prof. Conduct (ABA/BNA) 255 (May 3, 2017), https://www.peabodyarnold.com/wp-content/uploads/2017/08/Centauro_A-Changing-Legal-Market-and-the-Delivery-of-Legal-Services.nrl_pdf (citing increased market pressure for convenient, low-cost legal services).

of a more nuanced puzzle: a player among a host of forces, the combination of which has sparked what many deem a legal “revolution.”²¹ Of course, technology as a catalyst for change is not unique to law—just ask your physician the next time he or she turns to a computer to provide treatment options based on an algorithm using data from millions of patients, or talk to your ride-share driver about it the next time he or she arrives seconds after your mobile request. The legal system is changing not because of lawyers, but despite them, because of economic and market changes, client demands, business growth, and technology. Similar to its cousin in crime, FinTech,²² legal tech is growing in a garden of other powerful seeds: effects of the 2008 market collapse, client demands and firm interest in greater productivity,²³ new competition,²⁴ pressure for alternative fee arrangements,²⁵ etc. Just one exemplary statistic reflects the pressure on corporations and firms to expedite and innovate: In 2016, in-house lawyers reportedly moved \$4 billion in legal spending from outside counsel in-house.²⁶ The legal tech era did not arrive “overnight”²⁷ but has indeed arrived, impacting the legal

²¹ See Miriam Rozen, *GE Inks Legal Outsourcing Deal with UnitedLex, Eying Big Savings*, AM. LAW. (Mar. 22, 2018, 9:00 AM), <https://www.law.com/americanlawyer/2018/03/22/ge-inks-legal-outsourcing-deal-with-unitedlex-eying-big-savings> (describing a legal outsourcing deal by General Electric as a product of the potential legal “[r]evolution”); Jae Um, *Stop the Blame Game: Legal Innovation Is an Extreme Sport*, LEGAL EVOLUTION (May 28, 2018), <https://www.legalevolution.org/2018/05/legal-innovation-is-an-extreme-sport-51> (“Legal Innovation stands at a critical juncture.”).

²² See Bernard Marr, *The Complete Beginner’s Guide to FinTech Everyone Can Understand*, FORBES (Feb. 10, 2017, 12:29 AM), <https://www.forbes.com/sites/bernardmarr/2017/02/10/a-complete-beginners-guide-to-fintech-in-2017> (giving an overview of financial technology and innovations therein).

²³ *Greater Productivity Main Driver for Legal AI Adoption: Survey*, ARTIFICIAL LAW. (May 15, 2018), <https://www.artificiallawyer.com/2018/05/15/greater-productivity-main-driver-for-legal-ai-adoption-survey> (“The biggest driver for the use of AI and automation [in legal services] is to increase productive capacity . . .”).

²⁴ See Mark A. Cohen, *Milbank and Weil Make Headlines; UnitedLex, Dentons, and Deloitte Make Waves*, LAW.COM (June 13, 2018, 9:05 AM), <https://www.law.com/2018/06/13/milbank-and-weil-make-headlines-unitedlex-dentons-and-deloitte-make-waves> (“[T]he Big Four—and other non-traditional law firm providers—will be well-positioned for market dominance.”).

²⁵ Helen Gunnarsson, *Billable Hour ‘Makes No Sense’ in an AI World*, BLOOMBERG L. (June 11, 2018), <https://biglawbusiness.com/billable-hour-makes-no-sense-in-an-ai-world/> (“AI will result in dramatic changes in law firms’ hiring and billing . . .”). Indeed, at least one major law firm now recognizes “innovation” as worthy of the ever-famous “billable-hour” productivity measure. *Reed Smith Rolls Out ‘Innovation Hours’ Towards Billable Targets*, ARTIFICIAL LAW. (May 15, 2018), <https://www.artificiallawyer.com/2018/05/15/reed-smith-rolls-out-innovation-hours-towards-billable-targets> (describing the firm’s system in which up to fifty innovation hours may be counted towards a lawyer’s billable-hour targets).

²⁶ See Ed Walters, *Amazon LLP*, MEDIUM (Apr. 23, 2018), <https://medium.com/@ejwalters/amazon-llp-1b721ed4baad>.

²⁷ See Mark A. Cohen, *Legal Change: Why Drip, Not Disruption?*, FORBES (Apr. 26, 2018, 6:35 AM), <https://www.forbes.com/sites/markcohen1/2018/04/26/legal-change-why-drip-not-disruption/#72c33491fbf3> (“[O]verheated claims [of legal disruption] grab eyeballs and lure people to conferences, but those in the trenches—legal providers and buyers—know that the legal industry

industry, the legal profession, and legal education. Part I's overview concludes with a compressed summary of each facet in turn.

A. *Legal Industry*

Legal tech has sparked a new industry with new products, players, and competition.²⁸ Databases like the one at the Stanford CodeX Center for Legal Informatics²⁹ track the thousands of entrepreneurs building legal tech products. Another database counts 1868 legal tech startups in existence.³⁰ The number of legal tech companies purporting to develop tools based on artificial intelligence reportedly increased sixty-five percent in just one year.³¹ From contract analysis³² to electronic discovery³³ to data analytics³⁴

is changing incrementally because the tight weave of its mosaic and culture cannot be easily reconfigured or quickly replaced.”).

²⁸ See, e.g., Joshua Kubicki, *6 Reasons the Legal Industry Is Ripe for Startup Invasion*, TECH.CO (Mar. 25, 2013, 5:47 PM), <https://tech.co/legal-industry-startup-invasion-2013-03> (“[T]he legal industry [is] ripe for disruption and innovation.”); Cari Sommer, *How Entrepreneurship Is Reshaping the Legal Industry*, FORBES (July 24, 2013, 11:46 AM), <https://www.forbes.com/sites/carissommer/2013/07/24/how-entrepreneurship-is-reshaping-the-legal-industry/#1d1c29492efe> (“[T]his is an exciting moment for legal innovators.”); *Legal AI Companies Increase by 65% in One Year – LawGeex Report*, ARTIFICIAL LAW. (May 14, 2018), <https://www.artificiallawyer.com/2018/05/14/legal-ai-companies-increase-by-65-in-one-year-lawgeex-report/> (“Funding for disrupting the legal profession continues to flourish in 2018.”); LAWGEEEX, *THE IN-HOUSE COUNSEL’S LEGAL TECH 2018 BUYER’S GUIDE* (2018), <https://taskforces.osbar.org/files/2018/05/LawGeex-The-In-House-Counsels-LegalTech-Buyers-Guide-2018-Edition.pdf> (“The legal technology space has exploded, bringing unprecedented disruption to the \$600 billion global legal services market. Each month dozens of companies burst onto the scene promising to transform daily legal tasks, and the pace of transformation is only accelerating.”).

²⁹ SLS CODEX TECHINDEX, <https://techindex.law.stanford.edu> (last visited Mar. 28, 2019) (inviting the user to “[e]xplore a curated list of 1142 companies changing the way legal is done”).

³⁰ Tyler Roberts, *Another Law School Joins the Legal Innovation Movement with New Lab*, NAT’L JURIST (May 1, 2018, 4:39 PM), <http://www.nationaljurist.com/national-jurist-magazine/another-law-school-joins-legal-innovation-movement-new-lab> (noting legal tech startups on AngelList).

³¹ *Legal AI Companies Increase by 65% in One Year – LawGeex Report*, *supra* note 28 (noting the “explosion of well-funded legal technology startups alongside established players seizing new opportunities in the \$700 billion legal market”); see also Julie Sobowale, *How Artificial Intelligence Is Transforming the Legal Profession*, A.B.A. J. (Apr. 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession (discussing a number of advances in legal technology).

³² See KIRA, <https://www.kirasystems.com> (last visited Mar. 28, 2019) (“Kira is a powerful machine learning software that identifies, extracts, and analyzes text in your contracts and other documents.”).

³³ See EXTERRO, <https://www.exterro.com> (last visited Mar. 28, 2019) (offering e-discovery services “[f]rom preservation to production”).

³⁴ See LEX MACHINA, *supra* note 16 (listing data analytics offerings for law firms and companies).

to process management³⁵ to document automation³⁶ to legal research³⁷ to a twenty-four-hour legal texting service for a flat rate of twenty dollars aiming to be the “Uber of Legal Help,”³⁸ the list of new products and services is long and getting longer. Big Four accounting firms now loom as potential players seeking to enter the legal services market³⁹ and, to boot, venture capital financial support for legal tech players shows no sign of slowing down.⁴⁰

B. *Legal Profession*

Legal tech has started to change what it means to be a lawyer. How can that be? Aren’t “Luddite” lawyers technophobes?⁴¹ Not necessarily, or perhaps not for long. In incremental fashion, law firms, legal departments, and legal services organizations are starting to look different, sound different, and operate in a different way. By way of one illustration, firms are exploring a new model, aligning traditional legal representation with a legal process outsourcing company to reduce spending and improve technologies.⁴² Positions such as Chief Innovation Officer and Legal

³⁵ See *LAWYAW*, <http://www.lawyaw.com> (last visited Mar. 28, 2019) (offering to “[c]ut your legal document assembly time in half by auto-filling court forms”).

³⁶ See *LegalMation*, IBM, <https://www.ibm.com/case-studies/legalmation> (last visited June 1, 2019) (promising to “automate routine litigation tasks”).

³⁷ See *CASETEXT*, <https://casetext.com> (last visited Mar. 28, 2019) (offering “[e]asy to use legal research”); see also *US Law Firms Line Up for AI-Driven Legal Research*, *ARTIFICIAL LAW* (May 16, 2018), <https://www.artificiallawyer.com/2018/05/16/us-law-firms-line-up-for-ai-driven-legal-research> (listing law firms now using and technology firms now offering automated-research tools).

³⁸ Robert Ambrogi, *Launching Soon: ‘Text a Lawyer’ Aims to Be the Uber of Legal Help*, *LAWSITES* (June 20, 2018), <https://www.lawsitesblog.com/2018/06/launching-soon-text-lawyer-aims-uber-legal-help.html>; see also *TEXT A LAWYER*, <http://www.textalawyerinc.com> (last visited Mar. 28, 2019) (offering to connect clients with lawyers through a phone app).

³⁹ See *Deloitte Gets Seal of Approval to Compete Directly with Law Firms*, *GLOBAL LEGAL POST* (June 25, 2018), <http://www.globallegalpost.com/big-stories/deloitte-gets-seal-of-approval-to-compete-directly-with-law-firms-94407114> (noting that all four major accounting firms now have an approved legal arm in the UK).

⁴⁰ See Robert Ambrogi, *\$200M in Two Months Says Investors No Longer Snubbing Legal Tech*, *ABOVE THE LAW* (July 2, 2018, 5:14 PM), <https://abovethelaw.com/2018/07/200m-in-two-months-says-investors-no-longer-snubbing-legal-tech> (citing nearly \$200 million invested into legal technology over a two-month period).

⁴¹ See, e.g., John Alber, *Luddites or Empaths*, *PEER TO PEER*, Fall 2017, at 56 (disputing the basis for the reputation lawyers have acquired as technophobes); Mark A. Cohen, *Lawyers and Technology: Frenemies or Collaborators?*, *FORBES* (Jan. 15, 2018), <https://www.forbes.com/sites/markcohen/2018/01/15/lawyers-and-technology-frenemies-or-collaborators/> (“Lawyer qualms about technology reflect the industry’s ongoing transition from a lawyer-centric, labor-intensive guild to an interdisciplinary, tech and process-enabled competitive marketplace.”).

⁴² See, e.g., Robert Ambrogi, *New Law Firm/LPO Partnership Aims to Cut Corporate Legal Spend by Half*, *ABOVE THE LAW* (Apr. 30, 2018, 1:03 PM), <https://abovethelaw.com/2018/04/new-law-firm-lpo-partnership-aims-to-cut-corporate-legal-spend-by-half> (describing a partnership between ElevateNext and Elevate).

Operations Manager now explore strategies often built around legal tech.⁴³ Indeed, one large firm has even launched a summer associate program with a legal tech focus.⁴⁴ Moreover, a lawyer's ethical obligations in any law practice must include some awareness of technology, because in 2012 the American Bar Association amended the ABA Model Rules of Professional Conduct to add a Duty of Technology Competence as a comment to the general Duty of Competence.⁴⁵ Although what this means in practice remains unclear,⁴⁶ over thirty states have adopted the change verbatim or with slight variation.⁴⁷ What's more, Florida and North Carolina now require mandatory tech-related continuing legal education (CLE) credits,⁴⁸ and other states are likely to follow suit. While lawyers need not all become data scientists (although some will!),⁴⁹ sticking one's head in the sand humming the "I don't

⁴³ See, e.g., *Updated: Dentons Names John Fernandez as First Global Chief Innovation Officer*, LEGAL IT INSIDER (Dec. 13, 2017), <https://www.legaltechnology.com/latest-news/dentons-names-john-fernandez-as-first-global-chief-innovation-officer> (stating that Dentons' first Chief Innovation Officer, John Fernandez, will be responsible for driving innovation and overseeing technology projects and investments); *State Street*, COMPARABLY, <https://www.comparably.com/companies/state-street/christina-jackson> (last visited Apr. 12, 2019) (listing Christina Jackson as Legal Operations Manager, Vice President at State Street); see also *About Quinten Steenhuis*, QUINTEN STEENHUIS, <https://www.nonprofittechy.com/about> (last visited Mar. 29, 2019) (describing Quinten Steenhuis as a Senior Housing Attorney, Systems Administrator, and Developer at Greater Boston Legal Services).

⁴⁴ Dan Packel, *Reed Smith Launches Tech Program for Select Summer Associates*, AM. LAW. (Apr. 19, 2018, 7:00 AM), <https://www.law.com/americanlawyer/2018/04/19/reed-smith-launches-tech-program-for-select-summer-associates> (describing the Legal Technology Summer Associate Program).

⁴⁵ MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2016) (requiring a competent lawyer to keep "abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology"); see also Katy (Yin Yee) Ho, *Defining the Contours of an Ethical Duty of Technological Competence*, 30 GEO. J. LEGAL ETHICS 853, 863–66 (2017) (discussing the Comment and state bars' reactions).

⁴⁶ Jamie J. Baker, *Beyond the Information Age: The Duty of Technology Competence in the Algorithmic Society*, 69 S.C. L. REV. 557, 560 (2018) (describing the amended language as "amorphous").

⁴⁷ See, e.g., VT. RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (2018) (adopting the ABA Model Rules' comment on technology verbatim); Baker, *supra* note 46, at 561–64 (discussing various states' approaches to incorporating the Comment into their rules); Randy L. Dwyer, *Litigation, Technology & Ethics: Teaching Old Dogs New Tricks or Legal Luddites Are No Longer Welcome in Utah*, 28 UTAH B.J. 12, 13 (2015) (discussing Utah's rule, which is now identical to the ABA Model Rule); Robert Ambrogi, *Make That 30 States, as Another Adopts Ethical Duty of Technology Competence*, LAWSITES (Mar. 14, 2018), <https://www.lawsitesblog.com/2018/03/make-30-states-another-adopts-ethical-duty-technology-competence.html>.

⁴⁸ Tera Brostoff, *Florida Is First State to Require Technology CLEs*, BLOOMBERG L. (Oct. 6, 2016), <https://biglawbusiness.com/florida-is-first-state-to-require-technology-cles> (discussing Florida's CLE requirement that lawyers complete three hours in an approved technology program); Robert Ambrogi, *North Carolina Becomes Second State to Mandate Technology Training for Lawyers*, LAWSITES (Dec. 5, 2018), <https://www.lawsitesblog.com/2018/12/north-carolina-becomes-second-state-mandate-technology-training-lawyers.html> (noting that North Carolina lawyers now must complete one hour of CLE devoted to technology training).

⁴⁹ See Terry Carter, *David Colarusso: The Data Scientist at Law*, A.B.A. J. (Sept. 15, 2016,

do technology” refrain is now unacceptable.

The legal tech era has ushered in new professional organizations, committees, conferences, and bar initiatives. At the national level, the ABA has several initiatives related to legal innovation and technology. In 2016, it launched the ABA Center for Innovation⁵⁰ in response to a recommendation by the Commission on the Future of Legal Services,⁵¹ and it sponsors an annual ABA TECHSHOW to recognize how “[t]echnology is becoming fully integrated in the practice of law.”⁵² The ABA president has been quoted as warning that the legal profession may be left behind if it does not innovate.⁵³ And it seems like a conference or event surrounding legal tech pops up on the calendar at least monthly—if not weekly.⁵⁴

C. Legal Education

Given the change to the legal industry and profession, one would expect legal education to follow suit. It has. Slowly. Law schools such as Berkeley,⁵⁵

8:30 AM), http://www.abajournal.com/legalrebels/article/david_colarusso_profile (detailing the story of David Colarusso, who is both a lawyer and a data scientist).

⁵⁰ ABA Center for Innovation, A.B.A., https://www.americanbar.org/groups/centers_commissions/center-for-innovation (last visited Mar. 29, 2019) (stating that the Center “believe[s] the intersection of law and technology affords the profession a tremendous opportunity to reshape both the delivery of, and access to, legal services for the 21st century”).

⁵¹ ABA COMM’N ON THE FUTURE OF LEGAL SERVICES, REPORT ON THE FUTURE OF LEGAL SERVICES IN THE UNITED STATES 48 (Aug. 2016), https://www.americanbar.org/content/dam/aba/images/abanews/2016FLSReport_FNL_WEB.pdf (recommending, among other things, that the ABA “establish a Center for Innovation”).

⁵² TECHSHOW 2019, <http://www.techshow.com> (last visited Mar. 29, 2019).

⁵³ Mark Michels, *ABA President Challenges Legal Technologists: ‘Be Bold, Be Adventurous, Be Courageous.’* LEGALTECH NEWS (Apr. 12, 2018, 8:00 AM), <https://www.law.com/legaltechnews/2018/04/12/aba-president-challenges-legal-technologists-be-bold-be-adventurous-be-courageous> (noting that during a speech, ABA’s President, Hilarie Bass, was “concerned that the legal profession may be left behind if it does not innovate”).

⁵⁴ See, e.g., *Beyond Our Borders: A Global Legal Innovation Summit*, NW. U. PRITZKER SCH. L., <http://www.law.northwestern.edu/research-faculty/conferences/legal-innovation> (last visited Mar. 30, 2019) (describing a summit of leaders in global legal industry to discuss technological innovation); SUMMIT ON L. & INNOVATION, VAND. L. SCH., <https://www.solivanderbilt.org> (last visited Mar. 30, 2019) (announcing a law and innovation summit at Vanderbilt Law School).

⁵⁵ See *J.D. Law & Technology Certificate*, U.C. BERKELEY SCH. L., <https://www.law.berkeley.edu/research/bclt/students/law-technology-certificate-program/j-d-law-technology-certificate> (last visited June 1, 2019) (listing courses necessary for a specialized law and technology certificate program).

Cardozo,⁵⁶ Duke,⁵⁷ Penn,⁵⁸ Suffolk,⁵⁹ Northwestern,⁶⁰ Vermont,⁶¹ and Vanderbilt⁶² offer specialized education programs or courses in, for example, Blockchain Applications, Coding for Lawyers, Digital Drafting, Law Firm Management, and Lawyering in an Age of Smart Machines. Innovative law labs modeled after clinical education at a handful of schools teach tomorrow's lawyers to develop, implement, and assess uses for technology in varied legal settings.⁶³ And the intersection of law and technology is the subject of countless academic conferences, Twitter conversations, blogs, and newsletters.⁶⁴

⁵⁶ See *The Blockchain Project*, BENJAMIN N. CARDOZO SCH. L., <https://cardozo.yu.edu/programs-centers/blockchain-project> (last visited Mar. 30, 2019) (describing a program focused on blockchain technology's impact on law and society).

⁵⁷ See *Duke Center on Law & Tech*, DUKE L., <https://law.duke.edu/dclt> (last visited Mar. 30, 2019) (describing a law and technology center and related courses).

⁵⁸ See *Center for Technology, Innovation and Competition (CTIC)*, U. PA. L. SCH., <https://www.law.upenn.edu/institutes/ctic> (last visited Mar. 30, 2019) (describing a research center focused on law and technology).

⁵⁹ See *Institute on Legal Innovation & Technology*, SUFFOLK U., <https://sites.suffolk.edu/legaltech> (last visited July 16, 2019) (describing an institute focused on educating students about legal technology).

⁶⁰ See *Technology, Innovation, and Entrepreneurship*, NW. U. PRITZKER SCH. L., <http://www.law.northwestern.edu/academics/curricular-offerings/concentrations/technology/index.html> (last visited Mar. 30, 2019) (listing courses for the Legal Practice Technology Track of the Technology, Innovation, and Entrepreneurship concentration).

⁶¹ See *Technology & Legal Innovation Specialization*, VT. L. SCH., <https://www.vermontlaw.edu/academics/specializations/technology-legal-innovation> (last visited Mar. 30, 2019) (describing a specialization available to students focused on legal technology and innovation).

⁶² See *Program on Law & Innovation*, VAND. L. SCH., <https://law.vanderbilt.edu/academics/academic-programs/law-and-innovation> (last visited Mar. 30, 2019) (describing the curriculum and activities of a legal innovation program at Vanderbilt).

⁶³ See, e.g., @LawXLab, TWITTER, <https://twitter.com/lawxlab> (last visited Mar. 30, 2019) (showing the Twitter feed of a legal technology lab at Brigham Young University); ACCESS TO JUST. LAB, <https://a2jlab.org> (last visited Mar. 30, 2019) (describing a legal technology lab at Harvard Law School); *About — The Law Lab*, LAW LAB, <https://www.thelawlab.com/about> (last visited Mar. 30, 2019) (describing a legal technology lab at Illinois Tech - Chicago-Kent College of Law); LEGAL DESIGN LAB, www.legaltechdesign.com (last visited Mar. 30, 2019) (describing a legal technology lab at Stanford Law School); NULAWLAB, www.nulawlab.org (last visited Mar. 30, 2019) (describing a legal technology lab at Northeastern School of Law). There is even an Innovation Index for law schools to keep track of the most forward-thinking programs. See *Law School Innovation Index*, LEGAL SERVS. INNOVATION INDEX, <https://www.legaltechinnovation.com/law-school-index> (last visited Mar. 30, 2019). One Canadian law school even requires all students complete a mandatory "coding boot-camp." Rasha Rehman, *Ryerson's Upcoming Law School: Coding Boot-Camps and Law Entrepreneurship*, RYERSONIAN (Jan. 22, 2018, 3:18 PM), <http://ryersonian.ca/ryersons-upcoming-law-school-coding-boot-camps-and-law-entrepreneurship>.

⁶⁴ See, e.g., CALICON18, <http://2018.calicon.org> (last visited Mar. 30, 2019) (describing a law and technology conference); *Clinnovation: Where Legal Innovation Meets Clinical Pedagogy*, SUFFOLK U. L. SCH., <https://suffolklitlab.org/clinnovation> (last visited Mar. 30, 2019) (same); ILTACON, <https://www.iltacon.org/home?ssopc=1> (last visited Mar. 30, 2019) (same); Gabe

Finally, at the risk of oversimplification, an introduction to legal tech is incomplete without mention of the pitfalls. Much of the skepticism and distrust about whether and how technology is or will change law practice is well-founded, and there is no shortage of tension triggers.⁶⁵ Some worry reliance on machine learning systems will create a new race to the top system, where justice turns on “who has the biggest computer with the best algorithm.”⁶⁶ Others criticize “tech for tech’s sake”; that is, lawyers drawn to flashy tech tools without first identifying a problem to solve or improvement to be made or a sustainable benefit of the technology.⁶⁷ Additional thorns arise in the regulatory and anti-competition context, such as state bar association actions against companies such as LegalZoom and Rocket Lawyer for unauthorized practice of law.⁶⁸

All told, if the “exclusionary” and “insular” old era of lawyering isn’t over yet, it’s about to be.⁶⁹ The legal tech landscape is ripe with opportunity for entrepreneurship and innovation, if individuals are incentivized and motivated to contribute. As detailed in this Article, hackathons are one example of how collaboration and creativity can spark real change, including

Teninbaum, *Lawtomatic Newsletter, Issue #81*, LAWOMATIC NEWSLETTER (Mar. 27, 2019), <https://tinyletter.com/gteninbaum/letters/lawtomatic-newsletter-issue-81> (describing a law and technology newsletter).

⁶⁵ See *Law’s Odd Couple: Will New Law Hires Transform Traditional Law Firms?*, LEGAL MOSAIC (Jan. 31, 2019), <https://www.legalmosaic.com/laws-odd-couple-will-new-law-hires-transform-traditional-law-firms> (“Legal buyers, under pressure to ‘do more with less,’ are demanding that practice be leveraged, streamlined, and supported by methods, operations, data, and standards, common to business. Most law firms have lagged in this transformation and have continued to focus on practice to the exclusion of enhanced delivery capability.”).

⁶⁶ Noam Cohen, *There’s No App for Justice*, NEW REPUBLIC (Apr. 25, 2018), <https://newrepublic.com/article/147795/theres-no-app-justice-silicon-valley-startups>; see also Itai Gurari, *Leveling the Litigation Playing Field*, JUDICATA (May 1, 2018), <https://blog.judicata.com/leveling-the-litigation-playing-field-75577d5dc75a> (noting fear that algorithms can bring bias).

⁶⁷ See Mark A. Cohen, *Legal Transformation Requires More Than Tech*, FORBES (Mar. 19, 2018, 7:22 AM), <https://www.forbes.com/sites/markcohen1/2018/03/19/legal-transformation-requires-more-than-tech/#2326ce8a10da> (“Technology is a means—not an end—to improving access to and performance of legal delivery.”).

⁶⁸ See Robert Ambrogi, *Latest Legal Victory Has LegalZoom Poised for Growth*, A.B.A. J. (Aug. 2014), www.abajournal.com/magazine/article/latest_legal_victory_has_legalzoom_poised_for_growth (discussing state bar association actions against LegalZoom); see also Jason Tashea, *Rash of UPL Lawsuits Filed by LegalForce Show Its Failure to Compete, Defendants Say*, A.B.A. J. (Jan. 9, 2018, 8:30 AM), http://www.abajournal.com/news/article/rash_of_upl_lawsuitsFiled_by_legalforce_show_failure_to_compete_defendant (describing unauthorized practice lawsuits against non-traditional intellectual property service providers now competing with traditional lawyers).

⁶⁹ Mark A. Cohen, *The Golden Age of the Legal Entrepreneur*, FORBES (June 1, 2018, 5:57 AM), <https://www.forbes.com/sites/markcohen1/2018/06/01/the-golden-age-of-the-legal-entrepreneur-why-now-and-why-it-matters/#3b15d04d7803> (“Lawyers have failed to satisfy law’s wicked challenges. The smart money is betting that entrepreneurs will.”).

for improvements to access to legal services.

II

LEGAL TECH MEETS ACCESS TO JUSTICE

“There is . . . nothing like necessity to spur innovation.”

—Daniel Martin Katz, 2014⁷⁰

A second aspect of the climate cultivating legal hackathons is the access to justice crisis. The topic is so monumental it earned its own acronym: A2J. Much has been studied about the concept of access to justice, and deservedly so. It is not the primary focus of this Article, and Part II offers a high-level overview.

Access to justice is the notion that as a basic principle of the rule of law, all people (not just those with financial means) should have equal opportunity to exercise legal rights.⁷¹ It is a global issue, an American issue, a state issue, and a local community issue. The “crisis” arises when this basic principle is not reality—when people are, for example, unable to access legal services, unable to have their voices heard, unable to obtain services, or unable to hold others accountable for wrongdoing. These struggles can have far-reaching personal impact, whether financial (e.g., can’t collect public welfare), social (e.g., forced to relocate because of an unresolved legal problem), or physical (e.g., experience stress or anxiety because of legal problems).⁷²

And what a crisis it is. 86% of civil legal problems reported by low-income individuals in one year from 2016-2017 in the United States received inadequate or no legal help.⁷³ One global study reporting on general rule of law including affordability of justice in 113 countries ranked the United States 19th, with an even worse rank of 26th for civil justice.⁷⁴ By way of just one example in one jurisdiction, New York state courts in 2013 had 2.3 million unrepresented individuals appear.⁷⁵ More specifically and not at all

⁷⁰ Katz, *supra* note 12, at 1471.

⁷¹ See *Access to Justice*, UNITED NATIONS & THE RULE OF LAW, <https://www.un.org/ruleoflaw/thematic-areas/access-to-justice-and-rule-of-law-institutions/access-to-justice> (last visited Mar. 30, 2019).

⁷² See WORLD JUSTICE PROJECT, GLOBAL INSIGHTS ON ACCESS TO JUSTICE (2018), https://worldjusticeproject.org/sites/default/files/documents/WJP_Access-Justice_April_2018_Online.pdf (discussing the legal problems of over 46,000 people across forty-five countries and their financial, social, and physical impacts).

⁷³ LEGAL SERVS. CORP., *supra* note 9, at 6.

⁷⁴ WORLD JUSTICE PROJECT, WORLD JUSTICE PROJECT RULE OF LAW INDEX 2017–2018, at 7, 42 (2018), https://worldjusticeproject.org/sites/default/files/documents/WJP-ROLI-2018-June-Online-Edition_0.pdf (last visited Mar. 30, 2019).

⁷⁵ James J. Sandman, *Rethinking Access to Justice*, LEGAL SERVS. CORP. (June 20, 2014), <http://www.lsc.gov/rethinking-access-justice-james-j-sandman-hawaii-access-justice-conference>.

unusual, 98% of tenants in eviction cases had no lawyer;⁷⁶ 90% of landlords, however, did.⁷⁷ In 2009, there were more than ten times as many private lawyers servicing people above the poverty threshold as there were legal aid attorneys aiding the millions below.⁷⁸ According to one study, nearly half of state judicial websites have no information in languages other than English.⁷⁹ And as detailed in a 2014 report, Massachusetts civil legal aid programs turned away 64% of eligible cases, not to mention those individuals who did not even reach the “turn-away” stage because they gave up or didn’t realize their problem was actually solvable.⁸⁰

From all these troubling statistics, and the many more like them, it follows that the “‘justice gap’ – the difference between the civil legal needs of low-income Americans and the resources available to meet those needs – has stretched into a gulf.”⁸¹ What’s worse, recent changes in federal government administration have prompted concern about funding for major access to justice initiatives and publicly funded organizations such as the Legal Services Corporation.⁸²

So, what’s next? With increasing fervor and frankly a lot of hope, technology is being eyed as a key partner in the quest for improvements to access to justice. The ways in which technology aids fall into two very broad buckets. First, from the client point of view, tools and forms and systems can make the experience of obtaining a lawyer or legal advice (or not needing a lawyer at all) more user-friendly, interactive, simplified, translatable, and accessible (e.g., mobile).⁸³ Second, from the lawyer perspective, if new

⁷⁶ *Id.*

⁷⁷ Victoria Bekiempis, *Housing: The Other Civil Rights Movement*, NEWSWEEK (Dec. 11, 2014), <http://www.newsweek.com/should-there-be-free-lawyers-housing-court-289660> (noting also that one-third of people in New York City shelters entered following an eviction).

⁷⁸ LEGAL SERVS. CORP., DOCUMENTING THE JUSTICE GAP IN AMERICA 6–7 (2009), <https://www.americanbar.org/content/dam/aba/migrated/marketresearch/PublicDocuments/JusticeGaInAmerica2009.authcheckdam.pdf>.

⁷⁹ Carrie Johnson, *Rights Advocates See ‘Access to Justice’ Gap in U.S.*, NPR (Mar. 10, 2014, 12:05 AM), <https://www.npr.org/sections/thetwo-way/2014/03/10/288225649/rights-advocates-see-access-to-justice-gap-in-u-s>.

⁸⁰ BOS. BAR ASS’N, INVESTING IN JUSTICE: A ROADMAP TO COST-EFFECTIVE FUNDING OF CIVIL LEGAL AID IN MASSACHUSETTS 1 & n.1 (2014), <http://www.bostonbar.org/docs/default-document-library/statewide-task-force-to-expand-civil-legal-aid-in-ma---investing-in-justice.pdf>.

⁸¹ LEGAL SERVS. CORP., *supra* note 9, at 9.

⁸² *See, e.g.*, Katie Benner, *Justice Dept. Office to Make Legal Aid More Accessible Is Quietly Closed*, N.Y. TIMES (Feb. 1, 2018), <https://www.nytimes.com/2018/02/01/us/politics/office-of-access-to-justice-department-closed.html> (reporting on the effective closure of a Department of Justice office that, under the previous administration, focused on access to justice pursuits); Lee Rawles, *Proposed ‘18 Budget Would Cut LSC by 24%, Increase Funds for Law Enforcement and Immigration Court*, A.B.A. J. (June 30, 2017, 2:49 PM), http://www.abajournal.com/news/article/proposed_budget_would_increase_funds_for_law_enforcement_and_immigration_bu (discussing a proposed twenty-four percent cut to LSC funding under proposed federal budget).

⁸³ The examples here are endless, which is a great thing. *See, e.g.*, James E. Cabral & Thomas

software, tools, and platforms make providing legal advice less expensive, less time-consuming, and more efficient, then legal aid organizations and other providers can, in theory, represent more clients at a lower rate.⁸⁴ One well-known example fitting in both buckets is A2J Author, a cloud-based software tool that provides a template whereby information from guided interviews gets input into a simple document or form for a pro se litigant to, for instance, help the client modify child support payments.⁸⁵ It's no surprise that the topic of access to justice and legal technology recently held center stage as the theme of the 2018 American Association of Law Schools (AALS) conference,⁸⁶ and that the ABA partnered with the Legal Services Corporation to launch the Legal Tech for a Change program, pairing tech companies with legal aid organizations in search of new tools.⁸⁷ A leading United States charity, the Pew Charitable Trusts, also recently announced its entry into the "A2JTech" sector and plans to support development of tools such as online dispute resolution.⁸⁸

Legal education is starting to pull its weight, too. The list of A2J tools and improvements developed at law schools across the country is long—and terrific.⁸⁹ Law students have created smartphone apps and other automated

M. Clarke, *Access to Justice Integration with Emerging Court Technologies*, 26 HARV. J.L. & TECH. 278, 292 (2012) (discussing expansion of e-filing systems that make things easier for litigants); Brad Blickstein, *Three Startups Are Using AI in Law for Noble Purposes*, LEGALTECH NEWS (Feb. 12, 2018, 10:00 AM), <https://www.law.com/legaltechnews/sites/legaltechnews/2018/02/12/three-startups-are-using-ai-in-law-for-noble-purposes> (describing Road to Status, an online platform helping individuals file immigration applications); Matthew Burnett & Tom Walker, *How Small Data Can Improve Access to Justice for the Poor*, OPEN SOC'Y FOUNDS. (May 2, 2018), <https://www.opensocietyfoundations.org/voices/how-small-data-can-improve-access-justice-poor> (providing examples such as replacing manual processes with an automated case management system); JUSTFIX.NYC, <https://www.justfix.nyc> (last visited Mar. 30, 2019) (providing electronic services for tenants).

⁸⁴ See John Mayer, *The Race to the Bottom and How It Might Help Access to Justice*, CALI SPOTLIGHT (Apr. 20, 2018), <https://spotlight.classcaster.net/2018/04/20/the-race-to-the-bottom-and-how-it-might-help-access-to-justice> (noting that automating legal matters "could either make law practice more efficient or it could result in smaller, chunkier work for lawyers doing unbundled, limited license work").

⁸⁵ See A2J AUTHOR, <https://www.a2jauthor.org> (last visited Mar. 30, 2019).

⁸⁶ See, e.g., David Horrigan, *For Law Schools and the AALS, Technology and Access to Justice Become Priorities*, LEGALTECH NEWS (Jan. 8, 2018, 2:38 PM), <https://www.law.com/legaltechnews/sites/legaltechnews/2018/01/08/for-law-schools-and-the-aals-technology-and-access-to-justice-become-priorities>.

⁸⁷ See *LegalTech for a Change*, LEGAL SERVS. CORP. & A.B.A. CTR. FOR INNOVATION, <http://legaltechforachange.org> (last visited Mar. 30, 2019).

⁸⁸ *Major US Charity, Pew, Enters A2J Tech Field with 'No Lawyer Needed' Apps*, ARTIFICIAL LAW. (Nov. 12, 2018), <https://www.artificiallawyer.com/2018/11/12/major-us-charity-pew-enters-a2j-tech-field-with-no-lawyer-needed-apps>.

⁸⁹ See generally Miguel Willis, *8 Law Schools on Cutting Edge of Tech + Innovation*, INNOVATIVE L. STUDENT (Apr. 28, 2016), <https://www.innovativelawstudent.com/2016/04/7-law-schools-cutting-edge-tech-innovation> (listing law schools that have created legal technology

tools in the areas of immigration,⁹⁰ debt collection,⁹¹ and juvenile community services,⁹² to name a few.

As dizzying as the range of potential applications of tech to A2J is, a “curious paradox”⁹³ remains: There are more technologies and tech-savvy thinkers than ever before, yet the gap doesn’t show significant signs of shrinking. As one leader in the field visualized⁹⁴:

FIGURE 1: THE ACCESS TO JUSTICE GAP



Indeed, the need to incentivize development of useful and sustainable tools directed at improvements to access to justice is as dire as it’s ever

curricula and programs).

⁹⁰ See, e.g., Angela Morris, *Students Conceptualize Legal Aid Apps in New Law School Class*, TEX. LAW. (Jan. 30, 2018, 5:11 PM), <https://www.law.com/texaslawyer/sites/texaslawyer/2018/01/30/students-conceptualize-legal-aid-apps-in-new-law-school-class> (discussing students who created an app for an immigrants’ rights coalition).

⁹¹ See, e.g., *BYU Law Develops Free Online Tool to Address Debt Collection*, BYU L., <https://law.byu.edu/news/byu-law-develops-free-online-tool-to-address-debt-collection> (last visited Apr. 18, 2019) (discussing a free online tool to address debt collection).

⁹² See, e.g., LEGAL INNOVATION & TECH. LAB, <https://suffolktilab.org/portfolio> (last visited Mar. 30, 2019) (discussing an online tool to help juveniles find community programs).

⁹³ Kristen Sunday, *The Face of Legal Technology in 2018*, MEDIUM (May 22, 2018), <https://medium.com/@kristensunday/the-face-of-legal-technology-in-2018-213e9479e0b2>; see also *id.* (“Even with the advent of law school innovation programs, hackathons, fellowships, and legaltech incubators to help nourish tech-savvy legal thinkers, we’re still struggling to see companies emerge that are both solving ATJ issues and surviving as self-sustaining, long-term solutions.”).

⁹⁴ *Access to Justice Innovations*, OPEN L. LAB, <http://www.openlawlab.com/project-topics/access-to-justice-innovations> (last visited Mar. 30, 2019); see also Staudt et al., *supra* note 12, at 727 (“While legal costs are being wrung out of the high priced legal market and many young attorneys struggle to find legal work, we live in an age when access to affordable legal services is still impossible for many Americans.”).

been—when lawyers in this context are stretched thin but legal innovators not so much. Hackathon events can play a key part in this effort.

III

WHAT IS A HACKATHON?

As previewed in the Introduction, the word “hack” can be a good thing. Really. For many, “hack” does not evoke a positive feeling: Thieves hack into a home alarm system, cybercriminals hack a computer to steal data, and arborists hack off overgrown tree limbs. Part III describes in greater detail what hackathons are, how they are used (and by whom), the common problems with and concerns about them, and finally how they dovetail with the legal tech/A2J landscape.

A. *Hackathons Generally*

Facebook.⁹⁵ Uber.⁹⁶ Microsoft.⁹⁷ Massachusetts Institute of Technology.⁹⁸ Google.⁹⁹ United States Department of Energy.¹⁰⁰ The United

⁹⁵ See Josh Constine, *Inside Facebook’s Anti-Sex Trafficking Hackathon*, TECHCRUNCH (May 24, 2018), <https://techcrunch.com/2018/05/24/facebook-child-safety> (quoting Facebook’s Vice President of Product Management as saying “[h]ackathons are a great way to bring people together to actually bootstrap . . . ideas” for prototypes designed to fight child sex trafficking).

⁹⁶ See *id.* (noting that a team from Uber participated in Facebook’s annual anti-sex trafficking hackathon).

⁹⁷ See Toyinaminia Norwood, *One Week of #MicrosoftLife*, MICROSOFT (July 21, 2017), <https://news.microsoft.com/life/one-week-microsoftlife> (describing Microsoft’s “largest private hacking event on the planet” with 16,000 employees from 74 countries creating more than 3800 projects over several days).

⁹⁸ See MIT \$100K, <http://www.mit100k.org> (last visited Mar. 30, 2019) (describing a tech competition hosted by MIT); see also MAKE THE BREAST PUMP NOT SUCK, <https://www.makethebreastpumpnotsuck.com> (last visited Mar. 30, 2019) (describing a hackathon to improve breastfeeding).

⁹⁹ See *Mobile Tech Global Hackathon*, HACKATHON.COM, <https://www.hackathon.com/event/mobile-tech-global-hackathon-35924312586> (last visited Mar. 30, 2019) (describing a hackathon involving Google); see also GOOGLE LUNAR XPRIZE, <https://lunar.xprize.org> (last visited Mar. 30, 2019) (noting that the XPRIZE was created “[t]o spur affordable access to the moon and give space entrepreneurs a legitimate platform to develop long-term business models around lunar transportation and to inspire the next generation of scientists, engineers, space explorers and adventurers to enter the STEM fields”).

¹⁰⁰ See *National Clean Energy Business Plan Competition*, ENERGY.GOV, <https://www.energy.gov/science-innovation/innovation/commercialization/national-clean-energy-business-plan-competition> (last visited Mar. 30, 2019) (describing a competition to create clean energy businesses).

Nations.¹⁰¹ Yahoo.¹⁰² Harvard Business School.¹⁰³ Netflix.¹⁰⁴ National Basketball Association.¹⁰⁵ Coca-Cola.¹⁰⁶ The ABA.¹⁰⁷ From breast pumps to movie recommendations to spacecraft to railroads¹⁰⁸ to prevention of child sex trafficking to Facebook’s “like” feature,¹⁰⁹ very different organizations—schools, corporations, government entities—turn to less traditional methods to spark creativity and develop solutions and the next winning idea.

Hackathons are not one-size-fits-all. One working definition is: “short-duration, high-intensity think-tank sessions, aimed at solving problems or generating ideas.”¹¹⁰ Similar events go by different names: For example, Design Challenge, Hack Day, Hackfest, Codefest, Makeathon, Meetup, Startup Weekend, Innovation Competition, or even the mini version #flashhack, but this Article will use the general “hackathon” term to include all. The word is a combination of “hack” (i.e., exploratory programming) and

¹⁰¹ See *‘Decoding’ the Sustainable Development Goals: UNDP China and iamtheCODE to Launch Hackathon in Beijing*, UNITED NATIONS DEV. PROGRAMME (July 11, 2017), <http://www.cn.undp.org/content/china/en/home/presscenter/articles/2017/07/11/-decoding-the-sustainable-development-goals-undp-china-and-iamthecode-to-launch-hackathon-in-beijing-.html> (describing a hackathon created partly by the United Nations).

¹⁰² See Richi Jennings, *Yahoo! Hack! Day! Results! (And Bad Album Art)*, COMPUTERWORLD (Oct. 2, 2006, 7:57 AM), <https://www.computerworld.com/article/2483125/yahoo--hack--day--results--and-bad-album-art-.html> (describing a twenty-four-hour hackathon hosted by Yahoo!).

¹⁰³ See Press Release, Office of the Mayor, City of Chicago, The City of Chicago and Dwyane Wade Host Pitch Black Winner’s Luncheon (Aug. 4, 2017), https://www.chicago.gov/content/dam/city/depts/mayor/Press%20Room/Press%20Releases/2017/August/080417_PitchBlack.pdf (discussing the winners of a hackathon held at Harvard Business School).

¹⁰⁴ See *The Netflix Prize Rules*, NETFLIXPRIZE.COM, <https://www.netflixprize.com/rules.html> (last visited Mar. 30, 2019) (explaining the rules to a Netflix competition to create a better movie recommendation system).

¹⁰⁵ See *NBA Hackathon*, NBA, <https://hackathon.nba.com/#home-overview> (last visited Mar. 30, 2019) (describing a hackathon to build tools to help the NBA).

¹⁰⁶ See *Help Coca-Cola Figure Out What’s in Its Coolers*, DEVPOST, <https://coolerhack.devpost.com> (last visited Mar. 30, 2019) (describing a competition to help Coca-Cola keep coolers stocked).

¹⁰⁷ See Riley Combelic, *Suffolk Hosts “Hackcess to Justice” Legal Hackathon*, U. DENV. (Sept. 24, 2014), <https://iaals.du.edu/blog/suffolk-hosts-hackcess-justice-legal-hackathon> (discussing a hackathon hosted by Suffolk Law to improve access to justice).

¹⁰⁸ See *HackTrain 3.0 – Hacking the Rail Industry Once Again!*, SMARTTRAIL WORLD (Nov. 8, 2016), <https://www.smartrailworld.com/it-and-wifi/hackathonn-3.0> (discussing a hackathon aboard a moving train).

¹⁰⁹ See Matt Weinberger, *‘There Are Only Two Rules’ — Facebook Explains How ‘Hackathons,’ One of Its Oldest Traditions, Is Also One of Its Most Important*, BUS. INSIDER (June 11, 2017, 10:00 AM), <https://www.businessinsider.com/facebook-hackathons-2017-6> (noting history of over fifty hackathons at Facebook).

¹¹⁰ David Wilson, *One Simple Hack to Make Your Hackathon a Greater Success*, NORTON ROSE FULBRIGHT: BRAND PROTECTION BLOG (July 14, 2016), <https://www.thebrandprotectionblog.com/one-simple-hack-to-make-your-hackathon-a-greater-success>; see also *Hackathon*, WIKIPEDIA, <https://en.wikipedia.org/wiki/Hackathon> (last visited Apr. 14, 2019).

“marathon” (i.e., distance).¹¹¹ To be sure, there is nothing revolutionary about the theory that competition spurs creation, or that whirlwind pressure might help us “think outside the box.” Why else would the British government offer a prize for the first accurate measurement of longitude in 1714, and why else would Napoleon offer a prize of 12,000 francs to prompt development of a new food preservation canning process?¹¹² By the mid-to-late 2000s, hackathons grew in popularity and even yielded some major results such as the group messaging service GroupMe, which originated from a TechCrunch Disrupt hackathon in New York in 2010 and was acquired by Skype the following year for around \$80 million.¹¹³ Today, companies can even hire an outside coding competition service such as AngelHack to organize a hackathon.¹¹⁴

Hackathons share characteristics, although they have vast differences in size, scope, public or private nature, participation, funding, and purpose. Most have some specific goal or focus or problem to be solved, often but not always centered upon development of new computer software. There is usually a defined timeframe, whether a few hours or a few days, and in most instances hackathon events are promoted as fun and casual (think free food and swag) team-based environments culminating in some demonstration or presentation to judges to select the winner(s), whatever the prize (if any) might be. Hackathons are collaborative, where individuals with diverse motivations and varying levels and areas of expertise can approach a task from multiple angles, thereby—the organizers hope—arriving at a novel solution or unconventional approach.¹¹⁵ Participants may enjoy valuable networking opportunities and career exposure, especially if they qualify as finalists or winners. In all, these events are regarded as “quick, relatively inexpensive ways to encourage collaboration, produce new ideas, and generate publicity.”¹¹⁶

On the flip side, hackathons take plenty of criticism. The predominant quibble is that while they “create a great atmosphere of excitement . . . few projects are sustainable in the end.”¹¹⁷ In other words, a hackathon might

¹¹¹ *Hackathon*, *supra* note 110.

¹¹² See Alan MacCormack et al., *Spurring Innovation Through Competitions*, MITSLOAN MGMT. REV. (Sept. 17, 2013), <https://sloanreview.mit.edu/article/spurring-innovation-through-competitions>.

¹¹³ Spencer E. Ante, *Skype to Acquire Start-Up GroupMe*, WALL ST. J. (Aug. 22, 2011), <https://www.wsj.com/articles/SB10001424053111903327904576522964260277734>.

¹¹⁴ ANGELHACK, <https://angelhack.com> (last visited Apr. 15, 2019).

¹¹⁵ See MacCormack, *supra* note 112 (“[I]nnovation competitions represent a high-leverage tool that taps into powerful motivations to draw out disproportionate efforts from a wide variety of participants.”).

¹¹⁶ Anjali Sastry & Kara Penn, *Why Hackathons Are Bad for Innovation*, FAST COMPANY (Dec. 1, 2015), <https://www.fastcompany.com/3054023/why-hackathons-are-bad-for-innovation>.

¹¹⁷ Christian Kreutz, *Hackathons and the Challenge of Intellectual Property Rights*, WE

make a great “first stage for idea generation,”¹¹⁸ but there is often a lack of sustainability when the initial dust settles. What’s more, a time-pressured atmosphere—the hallmark of hackathons—is the very thing that can make an event rushed, incomplete, and without full context. Critics point out that hackathons often rest upon watered-down versions of real problems, and thus so-called solutions lack context and “are neither feasible nor inventive.”¹¹⁹

B. Legal Hackathons and Access to Justice

“We can end the two tiered justice system by using technology to bridge the gap. Our choice is to Surrender or Code.”

—Tubman Project¹²⁰

Legal hackathons have exploded in popularity.¹²¹ Within the broader legal tech and A2J backdrop described earlier, an emerging “homebrew computer club” culture has ripened to use this model to spark innovation in the legal industry.¹²² A legal hackathon is “an event where technologists and lawyers may gather together to come up with legal solutions to a legal problem.”¹²³ The legal hackathon trend varies in context as much as the corporate settings described above, from small law school events to social meet ups to global networks with thousands of hackers.¹²⁴ In 2012, a group

THINQ (Aug. 26, 2014), <https://www.wethinq.com/en/blog/2014/08/26/hackathons-challenge-intellectual-property-rights.html>.

¹¹⁸ *Id.*

¹¹⁹ Sastry & Penn, *supra* note 116 (“[O]pen-ended, flash-in-the-pan exploration only helps in the ideation phase.”).

¹²⁰ TUBMAN PROJECT, <http://tubmanproject.com> (last visited July 18, 2018).

¹²¹ See Daniel Martin Katz, *The #LegalHack Movement -or- the HomeBrew Computer Club of the Legal Industry*, COMPUTATIONAL LEGAL STUD. (Nov. 1, 2013), <https://computationallegalstudies.com/2013/11/01/the-legalhack-movement-or-the-homebrew-computing-club-of-the-legal-industry> (“The rise of the legal hack movement is among the most interesting developments in our industry . . .”).

¹²² Katz, *supra* note 12, at 1470 n.160; see also Ioana Good et al., *Hacking the Future of the Legal Industry Through Innovative Ideas*, LEGAL INTELLIGENCER (July 19, 2018, 1:50 PM), <https://www.law.com/thelegalintelligencer/2018/07/19/hacking-the-future-of-the-legal-industry-through-innovative-ideas> (“Hackathons are not a new concept, yet we are now seeing them gain traction in the legal industry . . .”).

¹²³ This simple definition comes from speaker Athena Fan, a former fellow at the American Bar Association Center for Innovation. See Suffolk LIT Lab, *Adapting Design Thinking in a Legal Hackathon*, YOUTUBE (Apr. 17, 2018), https://www.youtube.com/watch?time_continue=60&v=yFXeM3Yp-Ak.

¹²⁴ See, e.g., Legal Cheek Reporter, *Wavelength Law Wins Online Court Hackathon*, LEGAL CHEEK (July 3, 2017, 3:11 PM), <https://www.legalcheek.com/2017/07/wavelength-law-wins-online-court-hackathon> (law school); Brett Milano, *Blue Sky Thinking and Beyond at Harvard Law Hackathons*, HARV. L. TODAY (May 2, 2018), <https://today.law.harvard.edu/blue-sky-thinking-beyond-harvard-law-hackathons> (law school); SOC. JUST. HACKATHON, <http://socialjusticehackathon.com> (last visited Feb. 26, 2018) (law school event open to wider technology community); 2016 Women in Law Hackathon, DIVERSITY LAB,

of law students in New York City started a “Legal Hackers” group to bring together lawyers and technologists to explore new solutions to legal problems; the group now has over 100 chapters on six continents such as the Moscow Legal Hackers and Legal Hackers Colombia.¹²⁵ One of hundreds of examples of hackathons sparking innovation around the globe is the Eastern Europe 2017 LegalTech Hackathon, where an online dispute resolution platform called Pinky Solution was created and later awarded “best legal innovation of the year.”¹²⁶

Examples of legal hackathons abound; this chart highlights several recent ones with their accompanying emerging tools or solutions:

TABLE 1. RECENT LEGAL HACKATHONS

Hackathon	Location and Timing	Emerging Tools or Solutions
Global Legal Hackathon ¹²⁷	Spring 2018, International locations	Decoding Law to help users navigate statutory language; RightsNow App, a voice-activated legal information tool
Access to Justice Innotech Law Hackathon (with Microsoft) ¹²⁸	April 2018, Hong Kong	Pro se document assembler and scheduling platform
Legal Aid Hackathon ¹²⁹	May 2018, varying locations	Program eligibility chatbot for youths aging out of foster care
Music City Legal Hackathon ¹³⁰	April 2018, Nashville, Tenn.	Online power of attorney form for immigrant parents
Legal Justice Hackathon, ¹³¹ Tech for	November 2016, varying locations	ProTechMe chatbot to collect information to auto-create a protective

www.diversitylab.com/hackathons (last visited June 1, 2019) (global law firms).

¹²⁵ See, e.g., *Global Chapters*, LEGAL HACKERS, <https://legalhackers.org/people> (last visited June 7, 2018).

¹²⁶ Pivovarov, *supra* note 2.

¹²⁷ See David Lat, *Congratulations to the Winners of the Global Legal Hackathon!*, ABOVE THE LAW (Apr. 27, 2018, 5:46 PM), <https://abovethelaw.com/legal-innovation-center/2018/04/27/congratulations-to-the-winners-of-the-global-legal-hackathon>.

¹²⁸ Sebastian Ko, *Access to Justice Hackathon: Lessons in Promoting Legal Innovation*, ASIAN LEGAL BUS. (May 7, 2018), <http://www.legalbusinessonline.com/news/access-justice-hackathon-lessons-promoting-legal-innovation/75747>.

¹²⁹ See *Chatbot for Youth Aging Out of Foster Care*, LEGAL AID HACKATHON, <https://www.legalaidhackathon.org/blog/chatbot-for-youth-aging-out-of-foster-care> (last visited Apr. 8, 2019) (discussing the chatbot design from the May 2018 hackathon).

¹³⁰ MUSIC CITY LEGAL HACKERS, <http://www.mclegalhackers.org> (last visited Sept. 3, 2018) (advertising the March 2018 hackathon); see also *For Tennessee Immigrant Parents*, IMMIGRANT POA, <http://immigrantpoa.org> (last visited Oct. 23, 2018) (continuing project that originated at the hackathon).

¹³¹ *Legal Justice Hackathon*, TECH FOR JUST., <https://www.techforjustice.org/legal-justice->

Justice		order
ABA Journal Hackcess to Justice ¹³²	August 2014, Boston, Mass.	PaperHealth app to aid individual organization of health care proxies and living wills

Paired with the excitement surrounding legal hackathons is the same “lack of sustainability” concern noted earlier: “The problem for many hackathons with an access to justice flavour is that they marshal great commitment and idealism but the restrictions under which they are necessarily run mean that little of the work, even of the winners, is taken forward.”¹³³

IV

LIKELY AREAS OF INTELLECTUAL PROPERTY DISPUTE

Hackathons are a hotbed for sticky intellectual property disputes. The goal is to create. Who owns the creation? Organizers may favor fun over formality. Participants are drawn to excitement and competition, not boilerplate rules. Former or current employers of individual participants may have behind-the-scenes broad claims to intellectual property someone develops at a hackathon. A desire for public, free-flowing ideas and innovation can trump individual interest in exclusive rights that are the hallmark of intellectual property. As appealing as it is to have strangers work together to spark creativity, they may lack experience to consider what happens to an invention or idea when the playful dust settles.

This Part approaches from two angles: “Incoming IP” and “Outgoing IP.” First, I discuss what I term “incoming” intellectual property issues: the thorny question of whether a participant might have previously granted another entity (often a former or even current employer) rights in his or her creation long before a hackathon event even starts.¹³⁴

hackathon (last visited Sept. 3, 2018); *Tech for Justice/ProTechMe*, GITHUB, <https://github.com/TechForJustice/protechme> (last visited Apr. 8, 2019).

¹³² See Victor Li, ‘Hackcess to Justice’ Winners Look to Increase the Reach of Their Apps, A.B.A. J. (Aug. 25, 2014, 1:30 PM), http://www.abajournal.com/news/article/hackathon_winners_look_to_increase_the_reach_of_their_apps.

¹³³ ROGER SMITH, LEGAL EDUC. FOUND., ANNUAL REPORT ON DEVELOPMENTS 2017–18: DIGITAL DELIVERY OF LEGAL SERVICES TO PEOPLE ON LOW INCOMES 4 (2018), <http://www.thelegaleducationfoundation.org/wp-content/uploads/2018/06/Digital-Technology-Spring-2018.pdf>.

¹³⁴ There are too many unique scenarios for a one-size-fits-all discussion on this angle; for example, remedies against a hackathon participant who knowingly or willfully uses someone else’s intellectual property rights, or sticky situations in university settings with respect to, for instance, claims against students or faculty or other works-made-for-hire in a corporate context. See, e.g., Jacob H. Rooksby, *A Fresh Look at Copyright on Campus*, 81 MO. L. REV. 769, 771 (2016); G. Kenneth Smith, *Faculty and Graduate Student Generated Inventions: Is University Ownership a Legal Certainty?*, 1 VA. J.L. & TECH. 4 (1997).

Second, even if no pre-event ownership clouds are brought to the table from a prior or current employment agreement covering the hacker, there are “outgoing” intellectual property issues: the muddy new scenarios involving creation arising *out* of hackathon participation. Not every reader has baseline knowledge about substantive IP law; yet, a treatise-like recap of fundamentals would go too far astray. Thus, to set the stage for Part IV’s analysis of approaches to treatment of intellectual property, Part III concludes with a condensed introduction and hypothetical hackathon scenario as to each of the three main categories of intellectual property: patent, copyright, and trademark.

A. “Incoming” (Pre-Event Grants of) IP

Meet Jim, an engineer by trade who manages a gemstone and mineral identification company focused on developing blockchain technology to help track precious stones.¹³⁵ Jim’s wife works at a legal aid clinic, and so one weekend Jim participates in a legal hackathon the clinic sponsors focused on new approaches to helping low-income tenants. At the hackathon, Jim works with a local law student to develop a decentralized blockchain platform with rental property listings and self-executing contracts. When he mentions the event back at work at the gemstone company on Monday morning, his boss says, “Jim, are you crazy?! You know we own all your blockchain ideas! Go read your employment contract and keep that smart blockchain brain where it belongs!”

For some, the notion that property could be owned before it is even created is hard to swallow. But it’s true. At an increasing pace and with increasing breadth, many companies now include in standard employment contracts: (a) far-reaching non-compete agreements (NCAs); (b) expansive non-disclosure agreements (NDAs), purportedly to prevent an employee from sharing confidential business information or trade secrets;¹³⁶ and (c) intellectual property assignment language, which can and often is crafted to grab ownership of current and future inventions, even long after an employee leaves.¹³⁷ Some report as much as one-third of the United States workforce

¹³⁵ This hypothetical is fiction, but the idea behind it was sparked in part from reading about this real company. See *First Blockchain for Coloured Gemstones*, GÜBELIN: NEWS (Jan. 9, 2018), <https://www.gubelingemlab.com/en/provenanceproof/blockchain>.

¹³⁶ Orly Lobel, *Filing for a Patent Versus Keeping Your Invention a Trade Secret*, HARV. BUS. REV. (Nov. 21, 2013), <https://hbr.org/2013/11/filing-for-a-patent-versus-keeping-your-invention-a-trade-secret> (“[T]rade secrets are viewed as the stepchild of intellectual property . . .”).

¹³⁷ See ORLY LOBEL, TALENT WANTS TO BE FREE: WHY WE SHOULD LEARN TO LOVE LEAKS, RAIDS, AND FREE RIDING 33 (2013); see also ORLY LOBEL, YOU DON’T OWN ME: HOW MATTEL V. MGA ENTERTAINMENT EXPOSED BARBIE’S DARK SIDE 154 (2018) [hereinafter LOBEL, YOU DON’T OWN ME] (“These days, however, contracts have kicked through traditional copyright assumptions and expanded the reach of corporate ownership.”).

is bound by an NDA, with many “largely uninformed” about how broad their employer’s reach extends, and what protections are available against it.¹³⁸ And the common perception that these type of restrictions are reserved for high-profile management and executives is a misconception. Janitors, factory welders, bakers, doctors, artists, basketball players, yoga instructors, and just about anyone working anywhere may be subject to restrictions.¹³⁹

What is more, the contours of what property is captured by broad employee assignment clauses are, at best, unclear. For example, the question of what is truly “secret” in a protected “trade secret” is being stretched to the limit. Employers may claim “general know-how” of a current or former employee but, as one author reported a judge to have asked, “Is an engineer supposed to get a frontal lobotomy before they go on to the next job?”¹⁴⁰ Google reportedly requires employees to sign an assignment agreement that defines inventions to include “designs, developments, ideas, concepts, techniques, devices, discoveries, formulae, processes, improvements, writings, records, original works of authorship, trademarks, trade secrets, all related know-how, and any other intellectual property, whether or not patentable or registrable under patent, copyright, or similar laws.”¹⁴¹ Put another way, if an employee of Google dreams up a neat idea or novel approach in his or her sleep while on vacation months after leaving the company, should that intellectual property still belong to Google?

The bottom line is that there has always been the potential for employers to claim rights to intellectual property of current or former employees for something an employee creates outside of the usual bounds of the traditional employment setting. It’s just that the current trend reveals employers’ reach getting longer and, depending on the contractual language, perhaps with a stronger legal basis against an individual employee-hacker who seeks to direct his or her talents to other, less traditional endeavors.

Back to hackathon Jim. Had our hypothetical host clinic included a clear provision in a participant agreement at the outset of the event such as this one, at the very least it would have raised a yellow caution flag for Jim:

¹³⁸ Orly Lobel, *NDAs Are Out of Control. Here’s What Needs to Change*, HARV. BUS. REV. (Jan. 30, 2018), <https://hbr.org/2018/01/ndas-are-out-of-control-heres-what-needs-to-change>.

¹³⁹ See LOBEL, YOU DON’T OWN ME, *supra* note 137, at 155; see also Matt O’Brien, *Even Janitors Have Noncompetes Now. Nobody Is Safe*, WASH. POST (Oct. 18, 2018), https://www.washingtonpost.com/business/2018/10/18/even-janitors-have-noncompetes-now-nobody-is-safe/?noredirect=on&utm_term=.93b709579c76.

¹⁴⁰ Lobel, *supra* note 138 (quoting Judge William Alsup during the Waymo-Uber litigation).

¹⁴¹ LOBEL, YOU DON’T OWN ME, *supra* note 137, at 184 (quoting Google Inc., At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement, California version (effective date Mar. 2014) (on file with Orly Lobel)).

Participant represents and warrants that, to the best of his or her knowledge, any work product is Participant's own original work, was not developed in any form prior to the event, and is not within the intellectual property rights of any third party, including any former or current employers. If you are unsure, you should consult any former or current employment agreement to which you are a party. Under no circumstances will [Hackathon Organizer] be liable to you or any third party for any damages, direct or otherwise, arising out of use of this hackathon work product.

Language like this does not eliminate all risk of IP ownership clouds coming into a hackathon event. After all, excited participants may be apt to ignore it altogether. On the other hand, it serves two important purposes: First, it can be a small but powerful step in flagging the issue and, one would hope, prompting resolution by hackers who may be unsure whether their brilliant ideas are really “theirs” to give away. Second, it gives some protection for the hackathon organizer by exempting it from liability should a former or current employer be less than pleased that its hacker employee is sharing intellectual property without permission.

B. “Outgoing” (Post-Event Issues with) IP

This Section answers two questions: (1) what are the basic contours of each of the three major categories of intellectual property protection (patent, copyright, trademark); and (2) how might conflicts in those spaces arise out of a hackathon? After each topic summary, an italicized hackathon hypothetical follows to put the intellectual property concepts into practical context.

*I. Patent*¹⁴²

By federal statutory law, patents protect new, unobvious, and useful inventions.¹⁴³ Upon public application with a detailed description of the process or product, the United States Patent and Trademark Office (PTO) determines whether the invention meets the core aspects of patentability:

¹⁴² A notable side note: There has been an almost 500% increase globally in the past five years for “legal technology patents.” *Legal Technology Patent Filings Up 484 Percent*, THOMSON REUTERS (Aug. 21, 2017), <https://blogs.thomsonreuters.com/answeron/legal-technology-patent-filings-up-484-percent>.

¹⁴³ 35 U.S.C. § 101 (2012). See generally 1 DONALD S. CHISUM, CHISUM ON PATENTS: A TREATISE ON THE LAW OF PATENTABILITY, VALIDITY AND INFRINGEMENT § 1.01 (2019).

novelty,¹⁴⁴ utility,¹⁴⁵ and nonobviousness,¹⁴⁶ among others. Once obtained, a patent confers the right to exclude others from making, using, or selling the claimed invention for a term of twenty years from the application date, or less depending on the type of patent issued.¹⁴⁷ Section 101 patent protection is broad but does not include laws of nature, natural phenomena, and abstract ideas or principles.¹⁴⁸

Mack & Doane LLP, a small law firm, organized an All-4-Justice Hackathon centered on improving delivery of legal services to the community's growing Spanish-speaking population. Strapped for resources, the firm partnered to host the event with NowLaw, a new legal tech company looking for publicity opportunities. Helenice, a recent high school graduate planning to major in Engineering in college, was bored and interested in social justice, so she participated. Frustrated by a parking ticket experience at the local courthouse, Helenice worked around the clock for 24 hours to design a "Translation Pen"—a small machine that could be available at the clerk's office and in the courtroom for visual language translation onto a small screen on the side of the device, thus allowing non-English speaking patrons to be able to read legal documents. Helenice won first prize and a \$500 award, although lawyers and paralegals from the two sponsor organizations talked with her about the project and provided feedback. She continued development of the model after the event and has been approached by several parties interested in licensing the technology for use with different languages. Mack & Doane and NowLaw caught wind of the interest and want to be involved in royalty negotiations.

Who owns the patent?

2. Copyright

Copyright protection covers original works of authorship when they are fixed in a tangible form or medium of expression.¹⁴⁹ This includes, for example, literary works, pictures, graphics, musical songs, and art. Copyright may be claimed only in the expression of a work of authorship, not in merely an idea.¹⁵⁰ In most cases, copyright protection lasts for a term

¹⁴⁴ 35 U.S.C. § 102.

¹⁴⁵ *Id.* § 101.

¹⁴⁶ *Id.* § 103.

¹⁴⁷ *Id.* § 154(a)(1).

¹⁴⁸ See 1 CHISUM, *supra* note 143, § 1.01.

¹⁴⁹ 17 U.S.C. § 102(a) (2012). See generally 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT §§ 2.01–2.03 (Matthew Bender ed., rev. ed. 2018) (detailing the legal tests for determining originality, tangible or intangible expression, and authorship).

¹⁵⁰ See, e.g., 1 NIMMER & NIMMER, *supra* note 149, § 2.03(D)(1).

of the life of the author plus seventy years.¹⁵¹ During that time, the owner has the exclusive right to use the work, distribute it or make copies, and display or circulate the work in public.¹⁵²

Wilson is a self-described gamer and “recreational” coder who loves to create computer software in different settings. A friend invited him to attend a weekend “Code 4 Us” hackathon organized by TechStep, a legal tech company focused on application of blockchain technology in the legal profession. Wilson paired up with another participant (a local law student) and wrote code for a smart contract child support payment system whereby users would be able to have payments made, modified, and cancelled automatically instead of through inconvenient and expensive continued court filings and appearances. TechStep had considered pairing with a local family law clinic and was excited to pursue development of the idea after its CEO watched Wilson’s presentation, especially because TechStep’s resources were thin and it did not have the bandwidth to create its own version from scratch. But Wilson was finished with his weekend of free pizza and refused to discuss expanding the project or sharing any of the code.

Who is the owner of the copyright?

3. Trademark

Defined by statute but developed through common law, a trademark is a designation used “to identify and distinguish” the source of goods and services of a person or company.¹⁵³ The policy behind trademark protection is twofold in that it aims to protect consumers from deception while also protecting the trademark owner from misappropriation or infringement on the established mark.¹⁵⁴ A trademark usually takes the form of a word, image, shape, color, or some combination thereof that is used by the owner in commerce, and the protection is enjoyed with no time limit apart from abandonment of the mark.¹⁵⁵

Geeky Legal, a collaborative group of lawyers and technologists, teamed up with a local law firm and several legal tech corporations to host a one-day “Hackcess to Court” competition designed to bring attention to deficiencies in antiquated state court systems. Participants were randomly assigned to small groups, and one group developed a mobile

¹⁵¹ 17 U.S.C. § 302(a) (2012).

¹⁵² *Id.* § 106.

¹⁵³ Lanham Act § 45, 15 U.S.C. § 1127 (2012).

¹⁵⁴ 1 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION §§ 2:1–2:2, 17.1 (5th ed. 2017).

¹⁵⁵ *See, e.g., id.* §§ 7:102–7:108 (illustrating different forms of “mark” under trademark law).

“kiosk” platform whereby criminal defendants on probation could virtually check in and communicate with the probation officers and avoid waiting for days in the courthouse. Mobile-Probo, as it was called, wowed the judges with its catchy and colorful logo and won the competition. The group began to enjoy demand from courthouses around the country, but was sued by LawDoc, a legal automation company, for trademark infringement. LawDoc alleged that the Mobile-Probo red and yellow striped logo caused confusion because of similarity to LawDoc’s logo, and argued that it did not want its high-end LawDoc corporate brand to be associated with helping criminal defendants. Geeky Legal wants to pay to fight the lawsuit, but others in the group want to re-design or remove the logo.

Who owns the trademark?

At bottom, hackathon competitions are a perfect storm for intellectual property thunder. Unresolved ownership among participants or between participant and organizer or sponsor (often coupled with potential “incoming” claims by former or current employers) in any of these three categories creates risk for future conflict—conflict that can roadblock the very access to justice initiatives around which so many hackathons are centered. If intellectual property rights aren’t approached with purpose and communicated with emphasis, there is risk that tools borne out of competition may never reach their optimal potential, scale, and sustainability.

And if that’s the case, the real hackathon losers are all of us.

V

TREATMENT OF INTELLECTUAL PROPERTY

What’s a hackathon organizer to do? If only there was a single answer. There are many balls to juggle: attracting attention and publicity, minimizing future conflict, educating participants, and supporting sustainability—all the while maintaining a spirited and enjoyable hackathon experience. This Section describes four approaches to IP rights:

- A. Ignore it.
- B. Participant retains no IP.
- C. Participant retains all IP.
- D. Find a middle ground.

For starters, the only one-size-fits-all idea here is that hackathons should have some form of participant agreement. A contract, for sure, although avoiding formal legalese would be of benefit. Beyond that, intellectual property provisions will—and should—vary greatly based on

variables like the size, scope, and purpose of the event. This Article does not prescribe a “best” approach. The goal is to lay out the considerations involved in different approaches and offer illustrative language that could be a starting line for drafters of hackathon participant agreements in their own unique corporate, academic, non-profit, or professional setting.

In sum, with the following explanations and menu of concrete sample options, intellectual property provisions can be crafted with care, guarding the hackathon spirit while helping products and solutions, especially those geared towards A2J issues, survive past the hackathon door.

A. *Ignore It: Ignorance Is[n't] Bliss*

What better to halt the collaborative and inventive juices flowing at a hackathon than a boilerplate, heavy, legalese-filled participant contract? Ignoring intellectual property may be justified in some situations, but in the usual course it is a risky approach.

Even if simple and short, a participant agreement isn't always feasible or fitting. For example, in 2016 the Diversity Lab organized its first “Women in Law Hackathon,” a large-scale event with lawyers from over fifty law firms working for months to generate ideas aimed at boosting “the retention and advancement of experienced women in law firms.”¹⁵⁶ According to the CEO of Diversity Lab, it was not realistic that fifty different law firms would agree to any one participant agreement and, more important, the spirit of the event was to generate public ideas that could be widely implemented in the legal profession.¹⁵⁷ In fact, the winning idea did take shape nationally: As of August 2018, over forty of the nation's leading law firms achieved certification under the “Mansfield Rule” that measures whether law firms have considered at least thirty percent of women and attorneys of color for leadership roles.¹⁵⁸ In the spirit of this hackathon, the idea that there would ever be an “owner” of the Mansfield Rule just didn't make sense.

Yet in the usual hackathon course, not having a participant agreement with an intellectual property provision is unsound. Ignoring intellectual property outright increases the likelihood of future precarious situations. For starters, as discussed in Part III with hypothetical hacker Jim, forgoing any mention whatsoever misses a simple opportunity to offer an important educational “heads up” to participants. Something as simple as increased

¹⁵⁶ See DIVERSITY LAB, *supra* note 124; WOMEN IN LAW HACKATHON, 2016 WOMEN IN LAW HACKATHON: THE RESULTS REPORT (2016), <https://www.diversitylab.com/wp-content/uploads/2015/08/2016-Women-in-Law-Hackathon-Results-Report-All-Ideas-Winning-Teams-Updated-August-2016.pdf>.

¹⁵⁷ E-mail from Caren Ulrich Stacy, CEO, Diversity Lab, to author (Feb. 1, 2018, 11:08 AM) (on file with author).

¹⁵⁸ See *41 Law Firms Announced as Mansfield Rule Certified*, DIVERSITY LAB (Aug. 20, 2018), <https://www.diversitylab.com/pilot-projects/mansfield-rule-certified-firms-2018>.

awareness might lead to increased communication and head off intellectual property fights before they start. At the very least, a participant agreement with a clear intellectual property provision is a small step in setting expectations and, one would hope, fostering more thoughtful business arrangements down the road.¹⁵⁹

So, if a contract provision for intellectual property has so many rewards, what's the risk? Why don't all hackathon organizers include this? That answer lies in the spirit of what a hackathon is supposed to be: fun, informal, flexible, outside-the-box. Thus, the go-to justification for not having a participant agreement or a specific provision governing intellectual property is its potential cooling effect. Hackathon organizers do not want to alienate participants or have drawn-out, complicated legalese interfere with the inviting and collaborative spirit of these events. This concern is well-founded. Companies have drawn the ire of would-be hackers over far-reaching intellectual property contract language.¹⁶⁰ But if the choice is between confusing or misleading participants by punting on the "who owns it?" question on one hand and using some legalese to protect everyone's interests on the other, the better bet in the long run almost always lies with protection. In truth, as described with the remaining approaches and sample language, confusing legalese isn't a forgone conclusion—there are ways to approach intellectual property rights in a straightforward fashion without smoldering the hacking fun.

B. *Most Restrictive: We Own It All*

As of the date of this event, and in consideration of [Hackathon Organizer] sponsoring this event and facilitating your participation, you grant to us all right, title, and interest in any intellectual property (such as inventions, copyrightable materials, trademarks) that you created, conceived, and/or recorded as part of your Hackathon entry.

Instead of ignoring intellectual property rights, some hackathon

¹⁵⁹ See 1 TIMOTHY MURRAY, CORBIN ON CONTRACTS: FORMATION OF CONTRACTS § 1.1 (Matthew Bender ed., rev. ed. 2018) (describing the realization of reasonable expectations as a fundamental principle of contract law).

¹⁶⁰ See, e.g., Naomi Eide, *Hackathon Raises Hackles over Botched Intellectual Property Clause*, WASH. BUS. J. (Aug. 13, 2015, 11:00 AM), <https://www.bizjournals.com/washington/blog/techflash/2015/08/hackathon-raises-hackles-over-botched-intellectual.html> (describing the outcry after a hackathon's participation agreement appeared to grant all intellectual property rights of any resulting applications to the sponsor company).

organizers want it all. Many organize hackathons with selfish motives, and why not? They are organizing, advertising, funding, and hosting the event. It's no wonder they might want something in return: the rights to whatever sparks of genius they hope will fly. This is not per se a bad thing, and not always that self-serving in the long run. Below are three reasons why.

First, ownership of hackathon IP in favor of the organizer (for example, a corporation, non-profit, or professional organization) may up the likelihood that an idea or product sees the light of day outside the hackathon context. Often, an entity has more resources than any one individual creator, financial or otherwise. This is not always so, of course, and one can image a legal aid clinic or small start-up company intrigued at the idea of hosting a hackathon, but nonetheless strapped for cash and without the bandwidth to support future development of an idea or prototype. But in more cases than not, an entity with the resources to host a hackathon in the first place brings a more robust network, institutional drive, industry connections, and financial means to help an early hackathon seed grow.

Second, an organizer often brings more expertise about intellectual property. For example, perhaps it has hosted hackathons before and brought products to market. Or it has supported development of inventions by individual employees. Or maybe it has access to prompt legal advice; for example, consideration of whether to file an immediate patent application for a product developed at a hackathon. Maybe it has familiarity with a range of different licenses, or experience navigating wrinkles unique to particular contexts such as computer software. The point is that not all individual hackers are experienced and savvy when it comes to protecting their intellectual property, and in many contexts a product may enjoy more protection in the long run with institutional ownership and oversight from the get-go.

Third, put simply, the “we own it all” approach could result in better creations. This seems counterintuitive: Wouldn't hackers work harder if they knew that the end product was theirs? Not necessarily. For starters, if an organization is going to “take” all the intellectual property created at a hackathon, it most likely (though not always) will have a more substantial prize offering. Not all hackers are created equal, and those participating for the love of the competition and reputational benefit and Twitter bragging rights may just care more about prize money and publicity than keeping the rights to whatever they come up with. In a similar vein, participants could be energized at the idea of someone else owning their creation—that the end product could actually “go somewhere” or “be something” with more resources behind it than any one hacker could offer.

The primary risk of this one-sided approach is that an organizer grabbing all the marbles may make participants feel taken advantage of. This

may not be the case at internal hackathons—those limited to employees within one entity. In that setting, most would consider a hackathon as an extension of usual work hours and any applicable intellectual property assignments to which an employee is already subject. But at external hackathons, those open to individuals outside of a particular company or organization, participants may not want to lend their creative genius if, at the end of the day, they are forced to give it away and have no skin in the game. Indeed, one hacker’s Twitter reaction to the attempted far reach of a company at its hackathon in the United Kingdom sums up the sentiment: “I was gonna do @Telstra’s IoT challenge until I read the terms. They want FROF [Right of First Refusal] for ANY IP you develop 18 months after, which is bull****.”¹⁶¹

Whether the motive is to make a profit or improve access to justice or some combination of the two, setting a clear expectation that ownership of intellectual property will lie with a hackathon organizer is by no means bad. But it should be done in delicate fashion, with full recognition of the risk of hackers’ negative perceptions.

C. *Least Restrictive: You Own It All*

Participation in this hackathon does not require transfer of ownership of anything you create. All intellectual property rights in each hackathon entry will remain the sole property of the participant(s) who created it.

The opposite of “we own it all” is, of course, “you do.” This approach makes no attempt to own intellectual property created at a hackathon, and all rights remain with the individual participant(s). The upsides and downsides are outlined below.

First, the optimistic upside: self-interest. It’s no surprise many of us will work harder if we stand to benefit. The idea here is the same as the way you might approach yard work at a home where you live as opposed to an apartment you rent to a tenant. At your home, you rake every leaf and trim every grass blade because you’ll get to enjoy the beauty of a manicured lawn. But at the apartment, bare minimum effort is fine—it’s not you who will be around to be bothered by the enormous leaf piles. Likewise, if a hacker is going to get to keep and reap the potential benefits of what she created,

¹⁶¹ See Richard Chirgwin, *Telstra Claims Ideas Created in Hackathon as Its Own for 18 Months*, REGISTER (Oct. 28, 2015, 12:42 AM), https://www.theregister.co.uk/2015/10/28/telstra_iot_challenge_p0wns_whatever_you_think_for_18_months (noting that Telstra may have just failed to precisely define “New IP” in the agreement).

monetary or otherwise, it follows that perhaps she'll put in that extra effort. This is the flip side, of course, to the idea mentioned earlier that some hackers might be more motivated by prize and reputation than individual interest in their actual creation. An attempt at generalization would be foolish, but as one hackathon organizer presumed in the context of a global competition for innovation, "All teams own their IP coming out of it, *so* the solutions that are going to be coming out of this . . . are going to be absolutely profound."¹⁶²

Next, the pessimistic downside: too much self-interest. A hacker focused on her own use of a product or simply developing something for the fun of it with no interest whatsoever in bringing it to market or using it as a tool to, for example, aid with access to justice initiatives could mean that a terrific invention never sees the light of day. That might be okay for some, but, in the context of so much frustration about why more legal tech tools aren't being actualized to create meaningful, large-scale improvements, it's unnerving to many. Without the living power and resources mentioned above to build out, develop, update, market, scale, assess, and sustain a hackathon creation, great ideas can be left homeless and help no one.

Not all individual hackathon creations are left out to dry when ownership remains in the hacker. For example, in the context of that Global Legal Hackathon in 2018, one of the organizers recognized that "teams sometimes fizzle out" but that the organization was "trying to provide resources to take their solutions to the next level."¹⁶³ Other hackathon organizers may allow participants to retain all rights but grant a license solely for promotional or marketing purposes.¹⁶⁴ Thus, while keeping all rights in the hackers may attract a large number of participants, organizers should consider whether doing so is at the expense of having the "hacked" tool reach its full potential.

A final wrinkle in this "you own it" approach is the question of who is the "you"? What if hackers work in pairs? What if one individual imagines the first seed of an idea, but a team of participants develops the actual computer code, for example, throughout the day? What if one hacker is in the United States, but she works online with a team in London? The parameters of co-ownership of all forms of intellectual property vary and are

¹⁶² *Introducing the World's Largest Legal Hackathon*, LEGAL TALK NETWORK (Jan. 24, 2018), <https://legaltalknetwork.com/podcasts/special-reports/2018/01/introducing-the-worlds-largest-legal-hackathon> (emphasis added).

¹⁶³ Stephen Rynkiewicz, *Upcoming Global Legal Hackathon Aims to Expand Tech Services' Worldview*, A.B.A. J. (Feb. 13, 2018, 2:45 PM), http://www.abajournal.com/news/article/global_legal_hackathon_tech_worldview.

¹⁶⁴ See *Global Legal Hackathon Competition Official Rules*, LEGAL INNOVATION & TECH. LAB 4, <https://suffolklitlab.org/research/hackhelp/participants/Global-Legal-Hackathon-2018-Rules-20180222.pdf> (last visited July 5, 2019) (specifying that participants grant the competition sponsor rights over their competition entries "in order to evaluate, score, advertise and promote such Entries in connection with the Competition").

beyond the scope of this Article, but suffice it to say in this setting organizers should encourage clear recordkeeping for hackathon entries; for example, forms with listed team members' names. Even if ownership will remain with participants, hackathon organizers can still help avoid future complication by teeing up potential co-ownership issues with limiting language such as:

[Hackathon organizer] accepts no responsibility for resolving intellectual property disputes among participants in this hackathon.

Or, even better, point participants to publicly available sources of co-creator "startup" intellectual property agreements for use once the honeymoon hackathon period ends:

Terrific ideas and tools may be created at this hackathon. Without providing legal advice, [Hackathon organizer] encourages participants to work together after completion of this event to further develop any concept or technology created here, and to address relevant intellectual property issues through use of a collaboration agreement such as Seedhack's Collaboration Founders Agreement available at: seedcamp.com/seedhack-founders-collaboration-agreement-version-2-0.

D. Middle Ground: Let's Share or Agree to Work It Out Later

A quick recap: No ownership interest for an individual creator might result in little incentive to push for something great, but outright ownership might result in little means by which property can be developed or scaled to be of real value to others. Within that conundrum lies hope of a middle ground, described here in two possible forms: (1) Permissive License; and (2) Option or Right of First Refusal.

1. Permissive License

A license is a method for sharing intellectual property. In other words, the creator still owns the hackathon creation but, depending on the language in the license, grants immediate permission for others to do something with it, too.

Legal hackathons involving creation of computer code are prime candidates for a simple permissive licensing arrangement. This stems in part

from a generational shift originating in the early years of hacker culture,¹⁶⁵ away from heavy terms of governance and in favor of open source sharing and the modern notion of “free revealing” whereby “user-innovators . . . voluntarily publicly reveal what they have developed for all to examine, imitate, or modify.”¹⁶⁶

A permissive license can be short and straightforward in a time-crunched hackathon setting or registration process. It also need not be novel or unique. Numerous public licenses that a participant agreement can link to exist for this precise type of use. In fact, some are grounded in the origins of that hacker culture from decades ago, when the notion of open source sharing of software for all to benefit gained traction among a community of early collaborators.¹⁶⁷ One example is the so-called “MIT License”¹⁶⁸ that still enjoys immense popularity today and a reputation as simple and minimal in traditional hacker circles.¹⁶⁹ In the context of software created at a hackathon, for example, it would grant an organizer unrestricted and royalty-free (at no cost) permission to:

*“[D]eal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software”*¹⁷⁰

The MIT License includes a blank entry for copyright year and holder, and, although it does not include the actual word “patent” (the original

¹⁶⁵ See STEVEN LEVY, HACKERS: HEROES OF THE COMPUTER REVOLUTION 28–29 (2010) (“A free exchange of information, particularly when the information was in the form of a computer program, allowed for greater creativity.”).

¹⁶⁶ ERIC VON HIPPEL, DEMOCRATIZING INNOVATION 77, 99 (2005) (“Open source software has emerged as a major cultural and economic phenomenon.”).

¹⁶⁷ See, e.g., E. GABRIELLA COLEMAN, CODING FREEDOM: THE ETHICS AND AESTHETICS OF HACKING 69–70 (2013) (describing hackers’ “clever” way to hack the law by creating licenses that reverse traditional copyright principles and grant users the right to copy and share).

¹⁶⁸ See *The MIT License*, OPEN SOURCE INITIATIVE, <https://opensource.org/licenses/MIT> (last visited Apr. 8, 2019).

¹⁶⁹ See *Choose an Open Source License*, CHOOSE A LICENSE, <https://choosealicense.com> (last visited Dec. 1, 2018) (allowing clients to choose among various open source licenses); *Participating in Hackathons*, GOOGLE OPEN SOURCE, <https://opensource.google.com/docs/hackathons> (last visited Apr. 7, 2019) (displaying Google’s open source documentation of guidelines for participating in hackathons); *The 2-Clause BSD License*, OPEN SOURCE INITIATIVE, <https://opensource.org/licenses/BSD-2-Clause> (last visited Dec. 1, 2018) (showing another example of an open source license); Gordon Haff, *The Mysterious History of the MIT License*, OPENSOURCE.COM (Apr. 26, 2019), <https://opensource.com/article/19/4/history-mit-license> (“[T]he MIT license is one of the most popular licenses used by open source software.”).

¹⁷⁰ *The MIT License*, *supra* note 168.

license form predates most law on software patents), the expansive “without restriction” language has been regarded by some as an implied patent license, though the issue has to my knowledge never been litigated.¹⁷¹ Especially when paired with a shared online repository for code such as GitHub, which has exploded in popularity,¹⁷² this type of non-exclusive licensing provision would enable continued communal development of an idea after the formal hackathon ending point.

Moreover, though silly to some, a simple permissive license helps people feel good. That matters here. Individual innovative hackers get to contribute their design or code or drawings or plans to the world and are less put off by a perception of an organizer or sponsor “taking” their intellectual property. Indeed, granting a permissive license could be the most practical path for an individual hacker, given the real-world transaction costs and often unlikely ability to reap any real profit from traditional intellectual property protection.¹⁷³ As important, hackers remain free to develop the idea or tool themselves, test the market, or frankly do whatever they want with it. What’s more, those once-perceived greedy organizers shelling out time and effort and prize money to host a legal hackathon now feel as though they might be able to *do* something with hackathon creations, especially those with real bandwidth to help improve access to justice on a scale much wider than one particular organization, court system, city, or state.

All told, a royalty-free, non-exclusive, permissive license can be a terrific option in many hackathon environments. It tees up the concept of intellectual property for participants, sets expectations, facilitates continued collaboration and improvement to foster (one hopes) better and more useful tools for delivery of legal services, and can be simple enough not to steamroll hackers’ innovative spirit and motivation to contribute.

2. *Option or Right of First Refusal*

An Option and Right of First Refusal are often regarded as one in the same, but they are not—although the distinction is slight. Both could be quite “hacker friendly” and may be an attractive way to pause the hectic and

¹⁷¹ See Scott K. Peterson, *Why So Little Love for the Patent Grant in the MIT License?*, OPENSOURCE.COM (Mar. 23, 2018), <https://opensource.com/article/18/3/patent-grant-mit-license> (disagreeing with the common argument that the MIT License contains an implied, not express, patent license).

¹⁷² Richard Fontana, *Post Open Source Software, Licensing and GitHub*, OPENSOURCE.COM (Aug. 13, 2013), <https://opensource.com/law/13/8/github-poss-licensing> (noting the popularity and success of GitHub service); see also *Docracy Document Bundle: Hackathon*, DOCRACY, <https://www.docracy.com/bundle/hackathon-bundle> (last visited Dec. 1, 2018) (popular open source website for sharing of legal documents).

¹⁷³ See VON HIPPEL, *supra* note 166, at 81 (noting that benefits from free revealing may often exceed “practically obtainable” benefits from holding an innovation secret).

fragmented hackathon scene (different locations, different registration times, and so forth) to allow for a more nuanced, future discussion of the “who owns it” question as between an individual creator of property and the hackathon organizer.

An Option is a provision in a contract that gives one party to the agreement the right to acquire a particular right within some set time in the future, if it so desires.¹⁷⁴ Consider this hypothetical: Legal Research startup company AccesIt hosts a hackathon to develop an app to generate correctly formatted court motions and appellate briefs. It is interested in potentially scaling and profiting from any such tool in different jurisdictions, and so it does not want to simply call it a day at the conclusion of the hackathon. Thus, in its participant agreement, it inserts an Option clause:

We'd love for you to retain ownership over what you build or create here at the AccesIt Hackathon. But we might like to review your work and work on it too, someday. By signing this Agreement, you grant us an Option to negotiate a license by the end of our Review Period, which is [2 months post-hackathon]. By that date, if we elect to exercise this Option, you'll receive written notification and you agree to negotiate in good faith the terms of a new licensing or agreement at that time.

Under the same umbrella as an Option and often accompanying it is the narrower sibling of a Right of First Refusal. In contrast to an Option that gives an actual contractual right to elect to license intellectual property at a later date, a Right of First Refusal would give a hackathon organizer only the conditional right to “preempt” in the future another party seeking to license the property.¹⁷⁵ In other words, if a hacker receives an offer from a different entity, she is contractually obligated to bring those terms to the hackathon organizer for it to then decide whether to create a license agreement with the hacker on those exact same terms as were offered by the third party.¹⁷⁶ If a hacker never receives any such third-party offer, the hackathon organizer does nothing and gets nothing (absent any fresh, mutual negotiation).

This approach was used in a hackathon involving something to which almost everyone can relate: soda. Coca-Cola organized a “CoolerHack” in 2016 to solve the problem of “stock-outs” when a cooler runs out of the particular soft drink the consumer wants, but was never automatically re-

¹⁷⁴ See 3 ERIC MILLS HOLMES, CORBIN ON CONTRACTS § 11.1 (Joseph M. Perillo ed., Matthew Bender rev. ed. 2018).

¹⁷⁵ See *id.* § 11.3.

¹⁷⁶ See *id.*

filled, thus creating a missed sale for the company.¹⁷⁷ Its rules stated:

*You keep any and all intellectual property you bring or build for this challenge, but you agree to give Coca-Cola the right of first refusal to enter into a contract with you to continue building the solution and/or run a test pilot.*¹⁷⁸

Options and Rights of First Refusal offer advantages. In particular, a much-needed pause. The hackathon environment is dynamic and flexible, and it's anyone's guess at the outset what of value, if anything, will be created. Of course, hackathon organizers don't have a crystal ball, and building in this type of provision gives the institutional entity after-the-fact time to consider what was created, examine it, research its value or novelty, decide whether to fund further development, or create test projects. It also balances the individual spirit of hackathon participants by offering some assurance that they still own their intellectual property and will have a chance to negotiate a royalty or other terms as they deem fair at the specified future date.

Still, there are drawbacks. Most relevant here is that these clauses carry their fair share of detail and have the potential to weigh down a participant agreement with boilerplate-sounding legalese. The sample language in the previous shaded textboxes aims to simplify and make the legal agreement more "hacker friendly" so as to not scare individual participants off or dampen the otherwise light spirit of the event, as discussed in Section III.B as important considerations. But to be ironclad, Options and Rights of First Refusal should include some greater detail about, for example, how the condition gets triggered or the timeline and precise method of notice should the hackathon organizer seek to exercise rights.¹⁷⁹ Use of vague remarks such as "we'll keep the option to work with you in the future" might keep things concise and be easy on hackers' excited eyes, but may not be enforceable.¹⁸⁰

As between a Permissive License or an Option/Right of First Refusal, the latter is a bit more "participant friendly" compared to the automatic, full, and open royalty-free license of the former. Put another way, if a Permissive License approach cuts down the middle, Options/Rights of First Refusal lean back in favor of the individual creator, who retains her intellectual property

¹⁷⁷ See *Help Coca-Cola Figure Out What's in Its Coolers*, *supra* note 106.

¹⁷⁸ *CoolerHack 2016: Rules*, DEVPOST, <https://coolerhack.devpost.com/rules> (last visited Apr. 8, 2019).

¹⁷⁹ See 3 HOLMES, *supra* note 174, § 11.3.

¹⁸⁰ See *id.* § 11.3 nn.21–22 (summarizing case law involving attempted option terms deemed too indefinite such as "first choice" and "renewable at the option of").

but obligates herself to some extent of future sharing.

Among all the options—ignore, take it all, take none, or try to share and pause—which approach to intellectual property is best? That’s the wrong question. The right question is: Has the hackathon organizer made an informed, purposeful decision about which approach to take considering the goals and context of the event, and has it communicated that approach to hackers in a straightforward manner? I hope this Article makes it more likely than not that the answer to that question for future legal hackathons will always be a resounding yes. To that end, readers may find useful a public repository¹⁸¹ available at <https://suffolklitlab.org/research/hackhelp> created as part of this Article, hosting the publicly-available hackathon agreements I reviewed as part of my research. I intend to update it with new material and encourage readers to do so as well, not as formal legal advice but (true to the hacker spirit) as helpful collaborative materials for organizers to review in context some of the different approaches introduced above.

CONCLUSION

Hackathons are a key chapter in today’s “legal technology aids access to justice” storyline. They are happening almost everywhere, but can more be done to address concerns that their creations aren’t as sustainable as one would hope? Creativity and collaboration combined with the legal tech revolution can fuel development of great products, but the “who owns it” question must be tackled with deliberate care to balance the interests of eager and talented individuals with institutional sponsors and organizers. In truth, of course, treating intellectual property rights at hackathons in a purposeful way is by no means the end-all solution to the problem of how to make legal services more accessible to more people. That problem is far too immense for any one solution. But if this Article contributes to even just one hackathon creation moving from prototype to a widespread tool that helps those most in need of affordable legal services, then I’ve met my goal.

¹⁸¹ Again, thanks to Gabe Teninbaum, director of Suffolk Law’s Institute on Legal Innovation & Technology, who offered this suggestion as part of his goal for Suffolk Law to make and share useful tools—not just talk about them.