Law 2.0:  
Inelligent Architecture for Transactional Law

Kaleb A. Sieh, Rapporteur**

* The Law 2.0: Intelligent Architecture for Transactional Law event is part of the Silicon Flatirons Roundtable Series on Entrepreneurship, Innovation and Public Policy. Brad Bernthal, Associate Clinical Professor of Law at Colorado Law School, and Jason Mendelson, Managing Director of the Foundry Group, served as lead organizers and co-moderators for the Law 2.0 event. Special thanks to Brad Feld, Managing Director of the Foundry Group, who sponsors the Roundtable Series. Law 2.0 is the ninth installment in the series, following earlier discussions on: (1) Government 3.0; (2) Open Standards, Open Innovation, and the Rollout of IMS; (3) The Social, Ethical, and Legal Implications of Social Networking; (4) The Promise and Limits of Social Entrepreneurship; (5) The Private Equity Boom; (6) The Entrepreneurial University; (7) Rethinking Software Patents; and (8) The Unintended Consequences of Sarbanes-Oxley. The reports from those discussions can be found at http://www.siliconflatirons.org/publications.php?id=report.

** Silicon Flatirons Research Fellow. Special thanks to Dave Heal for editorial and research assistance.
Executive Summary

On Friday, August 13, 2010, the Silicon Flatirons Center convened leaders from the legal, academic, and software-related fields to discuss recent and future developments in transactional law due to changes in technology (the “Roundtable”). The Roundtable analyzed how accelerating adoption of technological “enablers” is qualitatively affecting business models for the provision of transactional legal services. Participants saw some novel business model innovations as “disruptive,” and others as “sustaining,” but in the aggregate the Roundtable participants agreed that the practice of transactional law is undergoing notable, significant and irreversible change.

Participants agreed that the core value of legal services is in the exercise of sound judgment and in the relationship between lawyer and client. No participant felt that the importance of judgment would be diminished by adoption of digital technology. The group observed, however, that technology is altering how legal judgment is acquired and, moreover, is altering relationships between attorneys and clients. Participants expect these changes to accelerate as legal models increasingly leverage technological enablers.

The Roundtable discussion revealed how new practices pose destabilizing challenges for valued elements of transactional lawyering. In particular, participants wondered whether increased automation, geographically distributed nature of work, and fragmentation of legal services would erode the ability to develop the “judgment” which forms the foundation for the attorney’s role as a client’s “trusted business advisor.” Participants expressed particular concern for the development of young attorneys. Namely, as the work done by first-year associates becomes routinized and fewer entry-level positions exist, how will a new attorney develop the pattern recognition and familiarity with granular aspects of documents sufficient to inform good judgment? More broadly, even for more experienced practitioners, as legal work is increasingly compartmentalized and decentralized, these trends present unique challenges for attorneys to gain a “big picture” understanding of a client’s business sufficient to provide advice well tailored to a client’s needs.

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Introduction

The world is swimming in a digital ocean. As humans increasingly operate in digital rather than analog environments, the circumstances under which people perform services and communicate with each other have undergone, and are continuing to undergo, a fundamental reinvention. Some observers have compared the magnitude of the change inherent in the digital “revolution” – at least in its potential effects – to the emergence of the electrical grid or the invention of the printing press.¹

The emergence of new digital technologies and services, when combined with the nearly frictionless transmission platform that is the Internet, has had a profound and rippling effect throughout society and has altered the economic structure of entire industries.² One telling example is the newspaper industry, which is in the midst of a jarring transition to digital. Other information-based industries, including legal services, are seeing similar stresses in their business models associated with the digital transition. For transactional lawyers, a key set of questions begins to emerge: how far into this digital transition has transactional law come, how much farther will it go, and what will it look like on the other side?

 Attempting to answer these questions, on Friday August 13, 2010, the Silicon Flatirons Center hosted a Roundtable titled, Law 2.0: Intelligent Architecture for Transactional Law at Colorado Law School. The Roundtable focused on the implications of the digital transition and how it is changing transactional legal services. Leaders from the legal, academic, and software-related fields came together for a discussion on developments in business practices due to what many refer to as technological “enablers.” Of particular interest to the group were the near-term consequences of these changes for the legal profession, for clients, and for the training – both at the law school level and within the historical apprenticeship at law firms – of transactional attorneys. Jason Mendelson, Managing Director of the venture capital fund the Foundry Group, and Brad Bernthal, Associate Clinical Professor of Law at the University of Colorado Law School, moderated the discussion. A complete list of Roundtable participants is included as Attachment A.

Roundtable participants agreed that the adoption of technological enablers is qualitatively affecting business models for the provision of transactional legal services. In the aggregate, the group felt the practice of transactional law is undergoing significant and irreversible change, with some changes “disruptive” and others “sustaining.” The participants also generally agreed that the fundamental value of legal services

involves “judgment” and “relationships,” and that the importance of these assets would not be diminished in the digital transition. Indeed, widespread deployment of technology may result in greater emphasis in the role of good judgment as this skill may become more difficult for attorneys to acquire in a digital world.

The group observed that technology is altering how legal judgment is acquired and, moreover, is changing relationship dynamics between attorneys and clients. Participants expect these changes to accelerate as law increasingly leverages technological enablers associated with faster processing capabilities, enhanced ability to move information (broadband), and expanded storage capacities. These enablers in turn will facilitate the greater use of legal services that are: (1) automated where possible – *viz.*, transactional legal work which “can be routinized will be routinized”; (2) modular – *viz.*, compartmentalized legal work which permits clients to select different specialists *a la carte* across firms for separate legal needs (for example intellectual property at one firm, regulatory needs at another, and corporate law at still another, etc.); (3) decentralized – *viz.*, legal services provided at a distance where client and attorney are not necessarily nearby; and (4) outsourced – *viz.*, sending lower end and less complicated legal matters to lower cost geographic locations, a distributed approach made easier because of advances in telecommunications and document control technology.

The Roundtable discussion revealed how these trends may result in direct efficiencies, however, they may also destabilize valued elements of transactional lawyering. In particular, participants questioned whether the increased automation, geographically distributed nature of work, and fragmentation of legal services would erode the ability to develop the “judgment” which forms the foundation for the attorney’s role as a client’s “trusted business advisor.” Participants expressed particular concern for the development of young attorneys. The best lawyers and partner-level attorneys, many thought, will likely always have work since the high complexity legal tasks are not easily automated. In sharp contrast, however, participants thought that when the “low-level” work given to first year associates is taken away and fewer entry-level positions exist, new attorneys will have difficulty gaining the skills and judgment necessary to become the coveted value-adding lawyer that clients want and need. Namely, as the work done by first-year associates becomes routinized and fewer entry-level positions exist, how will a new attorney develop the pattern recognition and familiarity with granular aspects of documents sufficient to inform good judgment?

More broadly, even for more experienced practitioners, as legal work is increasingly compartmentalized and decentralized, these trends present unique challenges for attorneys to gain a “big picture” understanding of a client’s business sufficient to provide advice well tailored to a client’s needs.

This report, reflecting the structure of the Roundtable discussion itself, proceeds in three parts. Part I discusses the question of whether the “predicate” is correct. For example, is accelerating adoption of technological enablers qualitatively affecting business models for provision of transactional legal services? Part II next highlights a useful
framework for analyzing on-going changes – viz., what do such changes look like and is there a tractable framework to help understand them? Finally, Part III discusses the participants’ views on the near term consequences for transactional law; asking, descriptively, what the digital transition means for: (i) law firms; (ii) clients; and (iii) legal education and training.

Part I — Technological Enablers And Their Qualitative Effects On Transactional Law Business Models

Many technologies making their way into the daily practice of law are not new. Word processing and telecommunications technology – ever increasing in capacity, speed, and integration into all human activities, while generally continuing to decrease in price – have been available for decades. These technologies are affecting fundamental elements involved in the practice of law. Some of these technologies, or “enablers” as some participants called them, change the way lawyers interact with each other, the client, the substantive legal work, and their associate attorney apprentices. As technology comes to the law and begins to take aim at low complexity legal work, it increases efficiency, but disrupts existing models. Business models are changing in response, but only now is it beginning to become clear what the specific drivers of this change are, which substantive areas of legal practice may be more sensitive to technological innovations, and in what ways the old models are changing.

A. Technological Enablers Driving Changes in Legal Business Models

The growing use of technological “enablers” is facilitating change in many of the business models used in the legal world. This is often due to: (1) process automation in order to cut “legal time” out of the task; (2) labor arbitrage in the form of outsourcing low complexity work to lawyers in low wage countries; and (3) collaboration in standardizing terms, clauses, and whole documents. More than one participant pointed out how technology generally tends to be merely an “enabler,” but that the application of technology to business models is where the disruption occurs. Additionally, many thought there were both “disruptive” and “sustaining” technologies.3

3 Clayton Christensen notes that innovation can be disruptive, where an innovation leads to creation of a new market, or sustaining, where innovation results in improvement to a product or service within the existing market. Technological advancement is related to innovation, however, invention is not cotermoinous with innovation. Innovation connotes more than just technological improvement; it requires implementation by firms or users. Thus, Christenson has replaced his use of the term disruptive technology with the term disruptive innovation because “few technologies are intrinsically disruptive or sustaining in character.” The creation of technology alone is better construed as invention. For more on sustaining versus disruptive innovation, see CLAYTON M.
Darryl Mountain, a Vancouver-based lawyer who has written a number of journal articles on legal technology topics and is a member of the eLawyering Task Force of the American Bar Association, started the technological enabler discussion with a brief presentation. He cautioned how “disruption is a relative term” and underscored it is the changed business models that are disruptive and not necessarily the changes in the underlying technology. Mountain also referenced Richard Susskind’s list of ten disruptive technologies, which are:

- (1) document assembly;
- (2) relentless connectivity — the use of hand-held devices with wireless connectivity results in clients expecting constant lawyer availability;
- (3) an electronic legal marketplace — where clients have better pricing information and will be able to either auction or bid for legal services;

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4 According to the ABA website, eLawyering encompasses all the ways in which lawyers can do their work using the Web and associated technologies. Think of lawyering as a “verb” - interview, investigate, counsel, draft, advocate, analyze, negotiate, manage - and there are corresponding Internet-based tools and technologies. [http://www.abanet.org/dch/committee.cfm?com=EP024500](http://www.abanet.org/dch/committee.cfm?com=EP024500) (last visited Dec. 9, 2010).


6 For example, the Brightleaf document assembly software. According to its website, Brightleaf provides Intelligent Document Automation” by “combin[ing] advanced document assembly, document management, process automation, linguistic analytics, and collaborative dataspace technologies into one accessible, easy-to-use, professional-strength document automation system for law firms and legal departments alike.” See [www.brightleaf.com](http://www.brightleaf.com) (last visited Dec. 9, 2010).

7 According to the Law Bidding Website, Clients register and post their legal case and then interested lawyers can search through the postings by type of law or location. If the lawyer is interested in a case, he/she may place a bid and the client is then notified of that bid. The bid can be a flat fee, an hourly rate, a contingent basis, or an 'other' bid type. The client can then select a lawyer based on the bids they receive and by looking at the lawyer's profile, which includes information on who the lawyer is, and any previous feedback the lawyer has received. When a lawyer is selected, the client's contact information is emailed to the lawyer and work can begin. The site is free to use for all users. See Law Bidding, [http://www.lawbidding.com](http://www.lawbidding.com) (last visited Dec. 9, 2010)
(4) e-learning — law schools are beginning to use online tools to better train students for modern legal practice;

(5) online legal guidance — many websites and blogs are disseminating legal advice online;\(^8\)

(6) legal open-sourcing — some legal resources are gathered and offered online in a format very similar to Wikipedia;\(^9\)

(7) closed legal communities — more clients will form online communities to collect and share legal knowledge;

(8) workflow and project management — project management software and implementation of generally enhanced workflow and project management practices will improve margins on low value but high volume work;

(9) embedded legal knowledge — more systems and software at companies/clients will embed compliance requirements and remove the need for separate legal advice; and

(10) online dispute resolution — using online forums eliminates the expense of having to meet in person.

Mountain then talked about both “sustaining” and “disruptive” business models that used document assembly technology.\(^{10}\) He felt it was important to carefully consider and separate out those legal tasks that should be performed by legal software versus those that should be performed by humans. Combining humans and software in the proper combination is likely the optimal solution, according to Mountain,

\(^8\) For example, such websites as: (1) JD Supra – www.jdsupra.com; (2) Legal On Ramp – www.legalonramp.com; (3) Feld Thoughts – http://www.feld.com/wp/; and (4) Mendelson’s Musings – http://www.jasonmendelson.com/wp/ (collectively last visited Dec. 9, 2010).

\(^9\) Some of the U.S. focused legal websites of this nature are: Spindle Law – a Wikipedia-like collaborative legal resource that supports US authorities, including state and federal cases and federal statutes, regulations, and rules of evidence and procedure; and Wex – a free legal dictionary and encyclopedia sponsored and hosted by the Legal Information Institute at the Cornell Law School whose entries are stated to be collaboratively created and edited by legal experts, available at http://spindlelaw.com/start and http://topics.law.cornell.edu/wex, respectively.

\(^{10}\) Putting these business models on a continuum from “sustaining” to “disruptive,” Mountain listed out six examples: (1) the traditional model where the lawyer prepares documents and the law firm bills using an hourly rate; (2) same as the first, but the law firm uses an alternative billing method; (3) “Co-Production”—a hybrid of the client using self-help documents combined with professional legal advice, for example Cisco and its use of “trap doors” in its document assembly software; (4) client use of self-help documents combined with outsourcing to low cost lawyers in other countries; (5) business models that do not involve law firms or legal advice; and (6) clients using self-help documents combined with some sort of insurance (this last model being theoretical at the time of discussion). Also see infra note 31.
because computers will never “forget” to ask the questions on their programmed list while humans are uniquely able to identify and analyze new issues that are outside of the programmed parameters.

Moving to specific technologies, Mountain began by discussing “auto-generators.” These are software programs – whether hosted online in the form of software as a service (SaaS) or as an individual program residing on a user’s own computer – that automatically generate different types of transactional documents with minimal user input.\(^\text{11}\) He pointed to Wilson Sonsini’s free online term sheet generator as an example of this kind of technological “enabler.”\(^\text{12}\)

One participant thought this example was less than optimal and was in fact the “opposite” of what should be presented to a client. In this individual’s opinion, the form itself is the “least important” part of the legal task because many forms are very similar and ultimately would simply “ask too many questions” of the client and result in confusion. To some participants the term sheet generator seemed more an advertising tool designed to show the client the complexity of the document and the need for legal counsel rather than a useful online generator. It was thought that a potential client using this term sheet generator would simply exit out and “immediately” call a lawyer.

The group did think giving the client a checklist of some sort was usually a good idea though. Mike Platt, a Partner at the law firm of Cooley LLP (formerly Cooley Godward Kronish), said it many times it is easier for the client to draft the document on their own, because the lawyer’s value is not in document drafting but in reducing “misalignment” between the various parties to a transaction.\(^\text{13}\) Other tools mentioned during the discussion were the Terms of Service and Privacy Policy generators from Legal River that auto-generate the documents they are named after for incorporation into a website.\(^\text{14}\)

Carrie Schiff, Senior Vice President and General Counsel for Flextronics International, opined that online tools are more about “risk

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\(^{13}\) Here, Platt was referring to the lawyer’s value in reducing the differences in expectations between two different parties to a transaction – or misalignment – which could be seen as a part of the transactional lawyer’s role as a “transaction cost engineer.” See Ronald Gilson, Lawyers as Transaction Cost Engineers, 2 New Palgrave Dictionary of Economics and the Law 509 (Peter Newman, ed. 1998).

\(^{14}\) See General Counsel PC and Legal River’s Terms of Service and Privacy Policy Generators, at [http://terms-of-service-generator.legalriver.com](http://terms-of-service-generator.legalriver.com) and [http://privacy-policy-generator.legalriver.com](http://privacy-policy-generator.legalriver.com), respectively (last visited Dec. 9, 2010).
tolerance,” referring to the concept that an online tool could be “good enough” for most situations, and therefore the cost savings through automation would outweigh any increase in risk from a “one size fits all” approach. She also floated the idea that there is an upper limit to the number of transactional tasks that can be commoditized because each party will still need to physically read the other party’s documents. Fundamentally, according to Schiff, many lawyers are still reluctant to simply accept the other side’s documents without significant review and/or revision. One participant thought the motivation behind law firms providing online tools may be the mounting pressure from clients for firms to “prove the value” of legal work they provide. A final comment pointed out how clients tended to be satisfied and generally “happy” when it came to their complex legal needs, but there was significant pushback when it came to the value of the low-end commodity work. Along these lines, Jason Mendelson indicated that when it came to the lower end deals, there had been very little consensus on the content and structure of form documents.

Returning to the underlying narrative, Darryl Mountain identified two factors limiting how disruptive these tools could be. First, he said there was a knowledge acquisition “bottleneck” because it can take significant time to automate legal tasks and create tools for the end user, especially when the end user is a lay person and not a trained legal professional. Second, there are the ethical rules of the legal profession itself, specifically the licensing requirements and attendant restrictions against the unauthorized practice of law.

Another related issue, according to Mountain, is the state-by-state licensing requirements in the U.S. and the resulting “lack of mobility.” He said that in Australia and Canada the legal profession is moving towards more flexible licensing regimes and allowing a lawyer to practice in either all or multiple jurisdictions with a single license. Liz Harding, Of Counsel at the law firm of Holland & Hart LLP, asked about malpractice concerns and whether the “fear” of malpractice suits would affect or stifle the automation and commoditization of legal services. Of note were questions of whether, in the end, the sophistication of the individual client would dictate what can or cannot be automated.

B. Analysis of “Work Complexity” Highlights What Types of Legal Work Will Likely Be Commoditized

Jason Mendelson outlined what he termed as the “work complexity premise,” setting forth a framework ranking the complexity of different types of transactional work.
Mendelson initially detailed work commonly conducted on behalf of public companies (left side of X axis) and private companies (right side of X axis). (See Figure 1 above). Legal work at the “top” of the spectrum is the most complex and is unlikely to be “commoditized” in the near term. The complexity of litigation or navigating the statutory requirements of various areas of regulation is among the most complex which lawyers engage in. Private companies, he said, would be somewhat in the middle in terms of complexity.

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15 According to one source, legal commodities are “legal services that have become so standardized in concept and execution that any one of a large number of law firms can produce a good enough version to meet the needs of most clients. As a result, law firms are increasingly being forced to compete on price for the opportunity to do such work.” Michael H. Trotter, Commentary: Legal Services Have Transformed Into Legal Commodities, Nov. 4, 2008, http://www.law.com/jsp/cc/PubArticleCC.jsp?id=1202425752769.

Mendelson then discussed a second framework, displaying the types of legal tasks that are likely to be commoditized, contrasting those with the tasks that might be the least. The diagram reflects a “spectrum of complexity,” starting with the least complex tasks (and least expensive to commoditize) on the left and moving to the most complex (and most difficult to commoditize) on the right. (See Figure 2).

Finally, Mendelson overlaid the two frameworks and pointed out how, in his opinion, those lawyers or law firms specializing in legal work
in the “lower left corner” were in danger of being commoditized “out of their practice.” (See Figure 3).

Bill Mooz, Associate General Counsel of VMware, said the lower left hand quadrant should not be considered “absent” of necessary legal tasks. He felt many companies would rather automate this work and take it in-house by gathering quality legal advice and integrating it into their own automated systems. Kraig Washburn, General Counsel of Flexera Software, pointed to the company Cisco as a good example of this because it has already created an automated Non-Disclosure Agreement (NDA) generating system in order to facilitate working with contractors, new employees, and others. Washburn, formerly with Cisco, described how this system allowed any Cisco employee or affiliate around the world to login to the system at any time of day or night and have an NDA generated automatically without having to interface with and wait for the legal department.17

Some agreed with Mendelson that the lower left of his diagram in Figure 3 represents legal work where the “entire practice area” could be commoditized through the introduction of automated tools and increased efficiency, but thought elsewhere on the chart only a percentage of the billable hours would “walk out the door.” One participant asked if, assuming the thesis was correct, law firms were concerned about holding on to the commoditized work since this had direct implications for the current law firm model, where the partner usually profits off of the commodity work done by associates. Some felt this traditional model was what allowed the “key” legal advisor to maintain their compensation at a level that permitted him or her to continue working in the high complexity practice areas.

Tracy Gray, a Partner at the law firm of Jacobs Chase Frick Kleinkopf & Kelley LLC, felt that if the client engages the “right” law firm, much of the low complexity work should already be commoditized within that firm. The idea here being that many of the larger law firms had already automated the low complexity tasks and often in the form of “document banks” where the firm had already done the same legal task at least once before and would be reusing those forms, often with only slight modification and thus greater efficiency. That is, by leveraging the experience of the firm, the client should be getting better value. Taking this to its logical conclusion, the group felt the “low-complexity client” should in the end only be paying for the time it takes to mold the ready-made form to the specific situation.

A few participants pointed out how the commoditized, low-complexity tasks were often “embedded” in and “intermixed” with the high complexity tasks and many times these were being handled by associate attorneys at very high billing rates.18 Another participant felt the mix of both simple and complex tasks inherent in the high complexity practice areas

18 As discussed supra, the low complexity work being done by associates was in the end seen by participants as having both positive and negative aspects.
complexity work was in the process of being “disaggregated.” As discussed, there are a number of technological changes enabling this disaggregation.

C. Case Studies: Changed Business Models and Examples of Technological Enablers

Mendelson wondered why technology had not brought change to legal practice much sooner, as there was significant technology available ten or more years ago that has only recently been adopted. Possibly, he thought, there were three necessary underlying changes for technology to start affecting the practice of law itself: (1) technology; (2) attitudes; and (3) economic realities. Andrew Hartman, Experiential Learning Program Coordinator & Adjunct Professor at the University of Colorado Law School and former head of the IP/Litigation practice at the law firm of Cooley Godward Kronish LLP,\(^\text{19}\) characterized these as: (1) means; (2) motive; and (3) opportunity. He saw the means or technology as cloud computing and word processing, among other innovations, starting with simple but powerful tools such as “cut and paste” within a document or between documents. The motive or attitude, as he saw it, is a “breakdown” or change in the lawyer-client relationship, while the opportunity or economic reality is non-legal companies trying to tap into the easily commoditized or “routinized” legal matters (or anyone outside of “big law” practice attempting to operate their firm in a non-traditional manner).

A few participants were from organizations – whether a law firm or a company – that had “fully” embraced technological change to operate their businesses in a different way. Each was given a short time to relate the specific technologies they used and what changes, if any, those technologies allowed for.

i. Subscription Billing: Hiring for Solutions, Not for Time

The billable hour is in retreat. According to recent surveys, clients potentially save between 15-30% on their legal bills by switching to alternative fee arrangements, with benefits such as reduced administrative costs, incentives that are better aligned, and more predictable costs.\(^\text{20}\) In contrast, it is estimated that over the past decade U.S. companies’ legal costs have risen 75% or more, which is a significantly higher increase than the rise in overall costs for those same companies, suggesting that legal costs have “spiraled out of control.”\(^\text{21}\) For many clients, there looks to be a business case for alternative, “value-based,” legal fee structures that incentivize outside counsel to:

\(^\text{19}\) Now simply known as Cooley LLP. See [http://www.cooley.com/index.aspx](http://www.cooley.com/index.aspx) (last visited Dec. 9, 2010).


\(^\text{21}\) Id.
(1) reduce inefficiencies; (2) increase productivity; (3) improve the way legal services are produced and delivered; and (4) focus on results and outcomes that add value for the corporate client. According to one recent report, a high and significant percentage of recent legal fee arrangements with outside counsel have been based on “alternative” fee arrangements and not the billable hour.

The law firm of Smithline Jha exemplifies the trend toward alternative billing arrangements. Todd Smithline, named partner, described his firm’s model as “subscription billing” for legal services. He explained how his firm moved from the standard legal industry billing structure, the “billable hour,” to a “fixed fee” approach about two years ago. Smithline said that neither his firm nor his clients were interested in going back. The client “hires for solutions not for time,” he said, and as a result any new billing process should be transparent to the client from the outset. He felt that optimally the fee should be determined before the work begins, but at the least should be agreed upon before the work is finished. He then described his firm’s model in detail.

Smithline said his firm starts with a new client by “not deciding.” In this way they begin the process with an “exploratory month” of handling the client’s legal matters below the firm’s lowest subscription rate, though there is a minimum amount that each new client pays. Sometime during that month, when both the firm and the client are ready, there is an “anchor discussion” that sets the framework for how to correctly price the ongoing monthly fee, often using a “fee range worksheet” and comparisons with similarly situated clients. The goal is to “keep it simple,” he said, with a month-to-month arrangement that can be ended or changed mid-month and pro-rated, but never retroactively adjusted.

In terms of results, Smithline said there has been greater satisfaction for the firm, for the attorneys, and the clients. He pointed out that clients tend to be more “selective” at the beginning of the process and there are no more “fee avoidance games.” At times, he said, the client will pay the monthly fee simply to have the security and peace of

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22 Id.

23 A recent ALM survey estimates that 72.8% of the fees in 2009 were based on arrangements other than the billable hour. See Shannon Green, Death of the Billable Hour, LAW.COM (Oct. 12, 2010), available at http://www.law.com/jsp/article.jsp?id=1202473229861&src=EMC-Email&et=editorial&bu=Law.com&pt=LAWCOM%20Newswire&cn=nw20101012&kw=Death%20of%20the%20Billable%20Hour%20of%20Discounts%3F.


25 As an aside, Smithline pointed out there were some clients who at first were “disconcerted” with such a model, since in the old model clients may have felt they had more control because they could compare rates across different firms and seek “write offs” after the fact.
mind in knowing the attorney is available. Concluding his presentation, Smithline said that for firms on the billable hour model, it can be hard to make the transition and it is difficult to change “overnight.”

Starting off the question and answer period, one participant asked which model was less expensive for the client. Smithline said there were often fewer clients in his model, but they tended to pay the firm more over time. Another participant asked what the “attrition rate” was for the firm. Smithline said attrition rates had been “good” and that many clients, once they start the subscription model, do not cancel it. Also, if the client feels the workload has been minimal or the arrangement is not beneficial then there will be communication with subsequent adjustments made to the subscription rate. Or, in his words, the “client will call and ask about it.” Andy Hartman felt this model was actually “back to the future” and pointed out that the billable hour is a relatively new concept, created in response to the rise of insurance companies as third party payees of legal fees. He also thought one of the looming questions in a subscription model is what happens in unique and/or difficult situations where the lawyer wants to withdraw representation, such as in the litigation context or when the client is in the “zone of insolvency.”

Other participants thought a subscription model was a step in the “right direction” because it would encourage clients to be more proactive in engaging a lawyer. Moreover, the subscription model would allow corporate clients to reap the benefits of increased and proactive interaction with their attorney because they would not be afraid of incurring additional fees for non-urgent matters. Anecdotally, Kraig Washburn related how Cisco would pay a single large fee to a single law firm for an “all you can eat” model involving all of the company’s deal flow, which resulted in less disagreement over minor deal points and more efficiency. Smithline pointed out that with a subscription model there are incentives for lawyers to build a tool or standard template for a particular process or task in order to make similar future deals cheaper and more efficient by lowering costs, thus increasing their own profitability.

Mike Platt wondered if this model works better for smaller, more specialized firms, because in a larger firm there can be problems with how the client interacts with the different structures in each of the various practice groups. Here, referring to potentially different billing structures for the different practice groups, Smithline felt it was difficult to offer the subscription legal service model alongside the billable hour.

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26 The “zone of insolvency” has not been clearly defined by courts, but it is a period of time prior to a corporation actually declaring bankruptcy. See *Geyer v. Ingersoll Publications Co.*, 621 A.2d 784, 787-90 (Del. Ch. 1992) (“An entity is insolvent when it is unable to pay its debts as they fall due in the usual course of business. That is, an entity is insolvent when it has liabilities in excess of a reasonable market value of assets held.” (quoting Webster's Ninth New Collegiate Dictionary 626 (1988))). There has been some dispute as to the exact nature of duties and liabilities of corporate officers during this period though suffice to say the “zone of insolvency” is considered somewhat of a unique period in the lifecycle of a corporate client. See generally, *N. Am. Catholic Educ. Programming Found. v. Gheewalla*, 930 A.2d 92 (Del. 2007).
Smithline said another issue with this model, as it relates to the size of the client versus the size of the firm, is the dynamic range of the workload. Smithline JHA tends to be limited in the number of clients it can handle because of the firm’s commitment to servicing any workload the client may have in a given month, which can vary significantly. He felt the subscription model would only really work with smaller venture capital backed companies in the $1 - $100 million annual revenue range, because larger companies could easily “flood” the firm with work and overwhelm the model. When it comes to subscription billing, he said, regardless of the size of the client there needs to be a close relationship with significant communication between the firm and the client.

One critique of the subscription approach, according to Carrie Schiff, is that it requires the firm to know its own costs with a fairly high level of accuracy, and this is not always easy to do in the law firm context. In contrast, Smithline felt that with modern technologies allowing for a distributed workforce and outsourcing, as well as a generally lean support and administrative staff, the monthly budget and costs for his own firm have become fairly certain. In the same vein, Rich Baer, General Counsel and Chief Administrative Officer for Qwest Communications, thought the client should know the market costs of its own legal work in order to understand the “value” provided by the subscription model, or in the words of Schiff to be a “smart buyer” and comparison shop. Here, the “enabler” is to be full and complete use of modern billing software. Baer felt it would be very useful if all of the data on the legal costs of various projects, or the costs of court cases even, could be aggregated in a large database, thus showing the “cost per megabyte” of particular legal tasks. He also suggested “fixed pricing” for well-known or standard legal items because there are many of the same elements to a number of different legal tasks.

There may be unique issues that can greatly expand the workload in the subscription or flat-fee billing context due to “unknown quantities” in many legal tasks. For example, Trish Rogers, a Partner at the law firm of Moye White and Adjunct Professor of law at the University of Colorado Law School, highlighted that one unknown quantity is the extent to which the client wants the lawyer to negotiate deal points that are actually business issues. Another large unknown, she said, is who exactly is on the “other side of the table” in a transaction, as an attorney’s relative experience with a particular topic and the relationship between the two attorneys can affect the workload involved in, and the resultant cost of, a deal. Similarly, Jason Mendelson said his company keeps statistics on the different costs for each of their deals and knows the relative costs of each of the lawyers they use.

**ii. Document Management and Process Automation:**

*Separating Out “Practice” from “Process”*

In the practice of transactional law, some of the more powerful technological “enablers” involve document management and legal task or drafting automation. Brightleaf, a document automation company, uses technology to help lawyers and legal departments streamline their practice.
According to Luke O’Brien, VP for Strategy and Senior Corporate Counsel, legal tasks can be broken up into two fundamental parts, “practice” and “process.” Process, he said, refers to the more routine and mundane elements of practicing law — those things that can be standardized or automated and are generally less interesting. Process work often is: (1) costly; (2) time consuming; (3) highly variable in quality; (4) volatile — in that at times the process can take a small amount of time and others it can take much larger amount; (5) generally thought to not be enjoyed by the lawyers who do the work; and (6) not the work clients want to pay for. Practice, according to O’Brien, refers to the unique and complex work where lawyers add significant value and often includes more of the “interesting work” lawyers likely prefer. There are important elements of both process and practice in most transactional work, he said, but it can be very difficult to “unbundle” them.

O’Brien said Brightleaf attempts to “strip out” the process portions of the work, with the underlying philosophy that lawyers should do less process and more practice. The company provides a “cluster of software-based document automation and collaborative solutions” including database and business process automation. The question Brightleaf is always asking itself and attempting to answer, according to O’Brien, is what should “machines do automatically and what should be reserved for lawyers.” Thus far, he said, their tools have been able to reduce the process portions involved in document creation by “almost 80%” and reduce the total time taken to create these documents by between 30-80%, with concurrent increases in quality. He felt these efficiency savings should lower a law firm’s “cost of goods sold” and generally increase firm profitability.

Moving on to some of the details of how Brightleaf operates, O’Brien felt in many ways it allows lawyers to continue to “work in the way they want to work” with tools designed around Microsoft Word. As the user makes certain choices with the tools, Brightleaf populates and revises the document to reflect those choices; allowing the user to

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27 According to their website, Brightleaf is a “technology company focused on bringing intelligent document automation to law firms and legal departments.” They have a number of technology offerings, described as “advanced, inline document assembly, integrated document management, embedded process automation, real-time linguistic analytics, and collaborative dataspace technologies.” Finally, their intent is to “free[] lawyers to work the way they want to work” and make lawyers “more productive and their businesses more profitable.” See Brightleaf, http://www.brightleaf.com/company/ (last visited Dec. 9, 2010).

28 As a side note, one participant felt profitability analyses were rarely done in the law firm context because historically the profit margins have been so high.

29 Roger Glovsky, Manager and Corporate Attorney at Indigo Venture Law Offices, had some experience with the Brightleaf tools, and said they worked well with Microsoft Word and Word’s native formats. He had tried other similar software solutions, but indicated those solutions required significant time reformating the document and thus tended to be a “bad use of the lawyer’s time.” Rich Baer wondered if Brightleaf should be expanded to other types of documents because so much of what a lawyer does is “form work.”
spend less time “cross-checking” and more time reviewing or negotiating key deal points or terms. The key, he said, is how Brightleaf does not try to replace any of the lawyer’s work that is judgment-based. Instead it attempts to automate the repetitive, costly, and time consuming activities that are done “over and over” or instances where a single decision forces changes to multiple elements of a document.

Initiating the question and answer period, one participant asked what type of clients use Brightleaf. O’Brien said their clients are law firms and corporate legal departments of all sizes, and the tools were delivered in a software as a service (SaaS) model. He then described how Brightleaf approaches new clients. Initially, Brightleaf analyzes the entire work flow of the firm or legal department and looks at the “silos of work” in order to identify areas where its tools are able to help. One approach is to start using the Brightleaf tools on smaller items – such as non-disclosure agreements (NDA) or discovery requests for example – and then compare how long it takes Brightleaf to accomplish the task versus how long it normally takes the client otherwise. This gives the client an estimate of the return on investment (ROI) or some indication of the efficiency savings and, he said, Brightleaf then lets the “data speak for itself.”

O’Brien was unsure if Brightleaf was “sustaining” or “disruptive” in the ways referred to earlier in the Roundtable, but pointed out the intent is to merely automate already existing content and processes in order to get the work done faster. Along these lines, O’Brien said many transactional deals are never consummated and highlighted the “wasted effort” involved in each one of these failed deals. He felt Brightleaf could help to reduce the potential losses the firm usually sees in each one of these “failures.”

Vic Fleischer, Professor of Law at the University of Colorado Law School, thought Brightleaf would change the way law firms operate, making them more efficient and thus more profitable. In the long term though, he said, the new “efficiency rent” created by such tools would eventually go to the “customers” of law firms as competition “heats up.” As a corollary, Jeff Vail, an attorney at Davis Graham & Stubbs LLP, wondered if the savings realized through automation would in the end serve to increase the size of the legal services market through lowered costs.

Along these lines, one participant thought these tools could also empower clients, because if the legal task is merely data entry then the client should be able to input their information into the transaction document without involving their “entire legal team.” Another question from the group was whether tools like this would change the way associates are trained and what implications this had for the entire legal education and training model. Expressing the client point of view,

30 For a description of SaaS, see generally ARMBRUST supra note 10.
31 Mike Boucher, Founder of Dakota Software, thought Brightleaf might be considered “sustaining” because it allowed lawyers to “do what they are doing now, but better and faster.”
32 These changes were themes underlying much of the discussion and are more fully discussed elsewhere in this report. See discussion infra at Sec. III B.
Mendelson asked what exactly the difference would be between trusting software with these routine items or trusting a group of junior associates making untrained and potentially “poor judgments” in “a room somewhere.”

Finally, Mike Boucher, Founder of Dakota Software, asked if tools such as Brightleaf would do away with the necessity of reading the entire document. Could attorneys become familiar enough with the software that they could merely look at the “input” and be satisfied that the software would take care of the rest? Pushing back, a number of participants thought it would always be necessary to read the entire legal document because there were no “guarantees” and such an approach may subject the attorney to malpractice claims. Along these lines, some in the group expressed concern that as attorneys become more familiar and comfortable with these types of tools they may end up trusting the tool to the point where they do not catch changes or other issues in the underlying document.

iii. Other Tools

A few other legal technology tools were mentioned as well. Of particular note was the system Cisco uses in its legal department to generate documents and contracts. As described, the system resembles an “expert system”33 of sorts and gives the user a variety of choices as to certain clauses, containing what one participant described as “trapdoors” for different elements of the document.

Todd Smithline felt that structuring information is one of a lawyer’s primary functions and asked if there was a tool to organize various types of information, one that would enable lawyers to “lay down” and organize their entire “constellation” of thoughts on a subject. Kraig Washburn observed that Cisco had a constantly updated and highly useful internal legal “wiki” that aggregated all of the company’s information on a particular legal topic and also used Legal On-Ramp to address such concerns.34 The group pointed out that Cisco had massive resources and that for smaller organizations it was very difficult and expensive to find a platform to allow for similar sharing and collaboration. Mendelson said that his VC firm, the Foundry Group, used SharePoint but had reservations about its utility in comparison to the Cisco tool.

33 See GARY WILLIAM FLAKE, THE COMPUTATIONAL BEAUTY OF NATURE COMPUTER EXPLORATIONS OF FRACTALS, CHAOS, COMPLEX SYSTEMS, AND ADAPTATION 451 (2000) (Defining expert system as “[a] special program that resembles a collection of ‘ if ... then’ rules. The rules usually represent knowledge contained by a domain expert (such as a physician adept at diagnosis) and can be used to simulate how a human expert would perform a task.”).

Is the legal profession in the midst of a “phase change” when it comes to its use of technology? If the answer is yes, is there a framework or roadmap that will allow lawyers and law firms to approach these changes in a proactive and more fruitful manner? Alternately, assuming that the tipping point has yet to be reached, how will the legal profession be able to recognize the change over?

Having discussed some of the low complexity legal work that may be amenable to commoditization, and the various technologies and tools that allow for these low complexity tasks to be automated, the group moved on to whether a fundamental change in the practice of law is actually underway, and if so, how the change is manifesting itself. One looming question, and an overarching goal of the Roundtable itself, was whether an appropriate framework for evaluating this change could be developed.

Professor Brad Bernthal took the lead and proposed an initial framework for looking at how technology has been working its way into the practice of law over the past few decades. The framework would have four substantive categories: (1) legal tools or services; (2) technological enablers; (3) norms and regulations; and (4) business models (or the economics). He then compared the changes in these categories over time and thought they could be characterized according to possible “eras” in the legal field, roughly corresponding to: “Law .5” — with the technology of roughly a decade or more in the past, “Law 1.0” — with recent technological changes occurring in the past decade, “Law 2.0” — current and near future technological changes, and “Law 3.0” — technology changes predicted to occur five or more years in the future. (See Figure 4).
<table>
<thead>
<tr>
<th>Era</th>
<th>Legal Tool or Service</th>
<th>Technological Enabler(s)</th>
<th>Norms and Regulations</th>
<th>Business Model (Economics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law .5</td>
<td>• Fax Filings</td>
<td>• Phone Line • Fax Machine</td>
<td>Ok in California</td>
<td>Reduced need for local presence</td>
</tr>
<tr>
<td>Law 1.0</td>
<td>• Automated Forms • Precedent Docs</td>
<td>• Digital Format • Decision-Tree Software</td>
<td>• Associates “taking” form bank as they make lateral moves • Law as software</td>
<td>• High fixed/low marginal costs • Economies of Scale • Hard to Protect</td>
</tr>
<tr>
<td>Law 2.0</td>
<td>• Advanced Online Data Rooms</td>
<td>• Cloud Computing: (1) increased broadband connectivity; (2) larger and cheaper storage; and (3) faster and cheaper processing. • Simple Artificial Intelligence</td>
<td>• Lawyers beginning to trust the “cloud” (not requiring all computing, storage, and communication activity to reside behind their firm’s own firewall)</td>
<td>• Location Increasingly irrelevant • Decentralized and distributed work environments</td>
</tr>
<tr>
<td>Law 3.0</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Figure 4.

Bernthal touched upon each of the four categories and questioned the group on whether the framework was useful. Analyzing each category in turn and starting with technological enablers, he felt there were three fundamental operations performed with information; it can be: (1) moved; (2) processed; or (3) stored. Bernthal highlighted how attorneys were beginning to trust the “cloud” and firms no longer felt the need to have their entire IT infrastructure behind their own firewall. In terms of norms and regulations, he pointed out there were norms both within and between law firms and that many of the technological innovations and changed business models come closer to bumping up against restrictions against the unlicensed practice of law.

Bernthal also highlighted how location was quickly losing its relevance. Participants commented on how many lawyers’ practices were practically almost entirely “on their Blackberry.” He echoed many participants’ comments about how the value of an attorney can be found in the relationship with clients, but asked how the current trend towards a distributed and decentralized nature of legal work might alter and disrupt

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this dynamic. That is, are the technological drivers moving the client towards a customer-like relationship and away from being a trusted business partner? Rounding out his introduction, he asked the participants to specifically think about what separated Law 1.0 from 2.0 and how the framework could be further populated.

Karl Okamoto, Associate Professor of law at Drexel University, thought the framework might be missing some items under “Law 2.0” such as blogs, databases, scrapers, and the search engine. As an aside, he felt the search engine may be much more meaningful than all the others. Another participant asked whether the framework did or could account for the customer’s perspective. There was some debate as to which existing category the customer might fit – one possibility was the “Norms and Regulations” section – but the group generally agreed the customer was absent from the framework as presented and this might necessitate a fifth category. One participant felt this fifth “customer” category could also be titled the “Value Proposition.” With this modification, the framework for considering the intersection of technology adoption and legal practice is reflected in Figure 5.

<table>
<thead>
<tr>
<th>Era</th>
<th>Legal Tool or Legal Service</th>
<th>Technological Enabler(s)</th>
<th>Norms and Regulations</th>
<th>Business Model (Economics)</th>
<th>Customer (Value Proposition)</th>
</tr>
</thead>
</table>

Figure 5.

Another concept discussed was that of adoption. Ben Oelsner, Partner at the law firm of Kendall Koenig Oelsner PC, pointed out how there were a number of lawyers who still do not use, or in some cases do not know how to use, the currently available tools. Using Microsoft Word to create and edit documents and then pass versions or iterations back and forth is pretty much industry standard in this day and age, but anecdotal evidence suggests there are still clients who use far less efficient or even “archaic” software and processes. Another comment suggested there might be contrary incumbent interests, or “choke points,” since many of the available technologies and tools under discussion are not currently used in many firms, regardless of whether the lawyers know how to use them. One participant asked if part of the adoption problem was whether the fundamental changes allowed for by these tools were good for the law firm itself and whether highlighting a broader and more fundamental value proposition might increase adoption. One problem, it was thought, may be how many of these technologies are very disruptive, in the “Clayton Christensen sense.” Pointing back to the proposed framework, one participant asked if adoption should be put under the “Norms” category.

The structure of the law firm was discussed at length. Jeff Vail thought there seemed to be an assumption of a static structure in law

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36 One participant, voicing the general counsel perspective, felt the “low hanging fruit” was a tool that would allow general counsel to manage outside counsel, with all legal entities involved with a company “controlled” or “maintained” in a single, simple, and automated interface. For more on sustaining versus disruptive innovation, see CHRISTENSEN supra note 3.
firms, regardless of the size of the firm. Again referring back to the framework, he asked if there was a new category that might encompass more dynamic structures for law firms, especially versus the monolithic structure that has been the norm historically. Vail felt change and disruption could also be driven by a shift in the organization rather than strictly by changes in the technology. In many instances, he said, the reason why a particular law firm gets so large is because it allows for various areas of expertise to be brought together quickly “under one roof.” The big law firm, according to Vail, used to have an advantage in targeted expertise and the ability to bring together teams with particular skills, whereas now it is possible to gain many of the same advantages as quickly – and often with even greater breadth – in a more distributed manner. Roger Glovsky, Manager and Corporate Attorney at Indigo Venture Law Offices, thought new law firm business models should in some senses be “backwards compatible” and fit the traditional law firm as well as law firms and organizational structures of the future. Here, Glovsky said the concept of "backwards compatibility" is taken by analogy from the software industry, which normally provides a migration path so that users of the old system can seamlessly adapt and use a new platform. He pointed out it is not that the new business model for law firms should fit perfectly with the old model, but that there needs to be a transition path for existing lawyers that will enable them to adapt and change to the new model. The new model will likely be disruptive, he said, but should take into account that tools, training and support may be necessary to migrate lawyers over to a new approach to the practice of law. Glovsky felt that unless there is a migration path, lawyers will be reluctant to change.

Bill Mooz, pointing to the proposed framework and, highlighting the in-house counsel and corporate client point of view, felt the law firm’s business model was “not all that important.” What was important, according to him, was the firm should provide “good advice” that “increases profits” for the corporate client. He felt the focus should be more on how value is created and that it is done in a way to create “rents” that can then be distributed. Along these lines, he felt the real question is what are the “enablers” that will allow corporate clients to reduce their legal costs. Continuing in this vein, Scott Beer, General Counsel of Zayo Group, related how his company generally does not look for technological solutions to reduce their legal costs. As a “distributed” company with many sub-parts, he said, there is a “laser focus” on how each member of the legal team is responsible for making their group profitable. He felt that a small legal team, with little to no budget for technology or outside counsel, forces the lawyer to rely on their skills, experience, and professional network to reduce costs and

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37 A recent workshop on in-house “best practices” in transactions management identified four common “business problems” for in-house legal departments: (1) Efficiently allocating resources within a leanly staffed commercial transactions team; (2) Utilizing metrics to drive performance; (3) Aligning more closely with the business, without compromising ethical responsibilities; and (4) Keeping attorneys motivated and engaged with the needs of the business. See Axiom Workshop Series: Best Practice in Transactions Management (May 5, 2010) (on file with author).
increase profits.

Part III — Intelligent Architecture: Where Are Technology And Transactional Law Going And Where Should They Be Going?

One of the overarching themes for the Roundtable discussion was whether and how the increasing use of technology and the trend towards “routinization” might start calling into question the traditional attorney-client relationship. Bernthal asked whether automation, distance, and the fragmentation of legal services would begin to chip away at the importance of the lawyer’s good judgment or might these new tools instead allow attorneys to focus more intently on being the client’s “trusted business advisor.” Time and again, the group highlighted how the accelerating adoption of technological enablers is not only affecting business models but is changing the relationships between stakeholders at all levels within the legal sector. The group saw some of these changes as “disruptive,” others as “sustaining,” but overall thought the practice of transactional law is undergoing significant and likely irreversible change.

A. Fundamental Value of an Attorney

Throughout the discussion, the group often asked what value an attorney provides to clients and agreed that one of the fundamental ways the attorney provides value involves judgment. There was significant discussion, similar to the discussion above on how Brightleaf tries to separate out “process” from “practice,” concerning how to separate out and identify the ways in which lawyers provide value in the face of routinization and commoditization. Here, one participant said the goal should be for the lawyers to address the “lawyer stuff.” A separate yet related goal should be to allow a client to accomplish the less legal and more routinized or data entry type activities without involving the “entire legal team.”

Prefacing the general topic, one participant said there will likely always be a need for lawyers as our society “likes” to create rules and lawyers are necessary to help navigate them. Focusing specifically on the transactional value of attorneys, Vic Fleischer pointed to academic work on “transaction cost engineering” and said a lawyer’s value is in identifying risks in transactions and helping clients to structure transactions to avoid these in an efficient manner. He also pointed to “regulatory engineering” and how the lawyer provided value by reducing the uncertainty around regulation – an area thought to be very complex, difficult to routinize, and constantly changing – through exercising professional judgment under conditions of uncertainty. Or in other words, helping clients to “navigate” the “regulatory thicket.” Fleischer commented, however, that “regulatory engineering” was often only of value and worth engaging in for the larger deals or transactions.

Another way attorneys make themselves valuable is by

38 See generally Gilson, supra note 10.
“quarterbacking” the deal. The lawyer often takes the lead role in a deal, gathers all the parts, makes sure all the open items and issues close, and ensures the deal gets done. Fleischer asked if the increasing sophistication of in-house counsel looked to be transitioning the role away from outside counsel and moving it in-house. Rich Baer felt lawyers were still doing “too much” and there is “room” for “unbundling” many of the tasks in order to use lower cost providers. For example, getting ex-FBI agents and other specialists to gather facts and having a project manager quarterback deals instead of a lawyer. Another participant thought the value of an attorney came in helping the client to understand the documents or issues involved. Mike Boucher, one of the participants with a background as an entrepreneur, felt the law was complicated to the point where the lawyer would “never go away,” but thought that the more informed the client is, the more costs can be managed and the lawyer can be used as a “tool” or a “contractor.”

As a final note, Fleischer pointed out that technology is bringing down information costs, but lawyers address certain information costs that cannot be reduced by technology. Some types of transactions will be routinized, he said, but the future of the transactional attorney lays in “higher end” and more difficult or complex work.

B. Changing Relationships

Much of the discussion involved how there seemed to be a “breakdown” in “all” of the relationships in the legal field, for example between: (1) the lawyer and the client; (2) the lawyer and the law firm; (3) the law student and the law firm; and (4) the law student and the legal curriculum (which of course includes the law professor). These elements of the discussion are reported below.

i. The Lawyer and the Client

Looking at the relationship between the client and the lawyer, one participant pointed out how there was significant client “frustration” because, from the outside looking in, there seemed to be no attempt to increase efficiency within law firms; firms were not even “going for the low hanging fruit.” Many participants felt clients often want the lawyers to operate more like the client’s in-house legal team does, with more collaboration and more knowledge of the client’s business model and product. Trish Rogers thought one perspective might be that the client is focused merely on the “price point” and thus is pushing for least cost providers or pricing. In the same vein, she asked whether the law firm might want to give a certain amount of fairly “easy” legal advice away for free in order to retain the client and then provide the “hard” advice later for a fee.

Rich Baer pointed to issues with excessive fees for negotiating certain terms in transactions. More clients seem to be asking, at least in the transactional work, whether many of the heavily negotiated provisions in a deal are actually necessary (in terms of the protracted negotiation), since the cost of “losing” on these provisions did not always
outweigh the high legal costs.\textsuperscript{39} Vic Fleischer commented on how clients are becoming more “sophisticated” and more often are pushing for flat fees, which seem to more closely align the lawyer’s incentives with that of the client.\textsuperscript{40}

Citing a common theme, one question was whether the way law firms are structured gets in the way of change and if this affects pricing. Jason Mendelson pointed to the billable hour pricing model as a potential obstacle to change, the theory being that any professional service “ecosystem” that charges by the hour will contain more locked in processes. In contrast, he said, where a business operates on “the margin” there tends to be a more dynamic and fluid environment that incentivizes the reduction of costs, especially a reduction in the number of hours worked by employees.

Underscoring the breakdown in the lawyer-client relationship, Mike Boucher – a “client” himself – felt this breakdown was very real because he makes business decisions on much more than “just the law.” Accordingly, he is interested in a service provider with a much “broader” view and not merely the narrow “specialized” view of the average lawyer, where often the perceived level of legal risk may not reflect the “correct” business decision. Another participant pointed out how the right level of interaction with a lawyer – whether, when, and where to bring a lawyer in – involved the client’s appetite for risk “across the board.” In the same vein, Boucher felt that risk assessment was always a “business assessment” and he found it difficult to lend credence to a lawyer making business decisions since the lawyer often did not understand the bigger “business” picture. Baer felt the real risk involved those items a client was willing to \textit{not} have a lawyer opine on, and then how to assess the associated risk of these unanalyzed areas properly. A final comment on risk involved balance and how there are certain areas where it would be good to allow more risk and others where it would likely be better to reduce risk.

Highlighting a group dynamic, and how this likely reflected the broader attorney-client dynamic at issue, Betty Arkell, a Partner at the law firm of Holland & Hart LLP, pointed out how at times during the discussion there seemed to be an “us against them” feeling around the table. The suspicion, she thought, came from those that had previously been at large law firms and were now working in-house at a corporation or business. She said there might be some over-generalization as to “Big Law” law firms. Continuing the discussion about “Big Law,” another participant wondered if there may be a “fiefdom” problem at the big law firms and asked if it was difficult for the client to hire the particular individual they wanted to work with and trusted at a particular firm. Or, in other words, the group had returned to asking if there were systemic

\textsuperscript{39} Mendelson related how VC firms would often heavily negotiate certain provisions with their portfolio companies (such as warranties or non-disclosure agreements), but there had yet to be a single venture capitalist sued by a portfolio company on these items. This being the case, he asked, “why are these terms so heavily negotiated?”

\textsuperscript{40} See Green \textit{supra} footnote 22.
problems within large law firms that got in the way of working the way the client would prefer.

**ii. The Young Attorney and the Law Firm**

The group thought one version of this relationship “breakdown” problem was of particular import for young attorneys. The best lawyers and partner-level attorneys, many thought, will likely always have work since the high complexity legal tasks are not easily automated. In sharp contrast, however, participants thought that when the “low-level” work given to first year associates is taken away and fewer entry-level positions exist, new attorneys will have difficulty gaining the skills and judgment necessary to become the coveted value-adding lawyer that clients want and need.

Participants felt an associate needs to see these low-complexity problems and be asked to solve them. Lower level and less complex legal work, according to Karl Okamoto, is critical to “schema development”: learning by doing, learning by doing repeatedly, then taking the framework developed through this exposure and transferring it to other, more complex, situations. Carrie Schiff pointed out how associates learn a lot from doing the “process” elements of legal tasks and that it may not be a good idea for these items to be “shoved offshore.” Another participant also felt associates learn by “doing the process” and “grinding it out.”

The group discussed how to engage in this “schema development” more systematically, even if the low-level work is outsourced or routinized. One idea was to have a software program, similar to the Brightleaf software discussed above, collecting all of the lessons learned by low-level simple legal tasks and “feeding it back” to associates. Another idea was to have a “work book” of sorts, and still another idea suggested by Okamoto is a “moot court” for deal work or a computer simulation that would give the associates practice.\(^{41}\) In terms of simulation, one participant thought it could be something akin to a multiplayer video game or similar to “Second Life,”\(^ {42}\) but for legal issues. One critique of simulations, depending on how labor intensive the simulation turned out to be, was how there may be an issue with scalability. Another critique was the fundamental limitation on how far any simulation can be taken before there is a need to shift into a real-life or in-person model. Other training ideas involved blogs or listservs.\(^ {43}\)

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\(^{41}\) Indeed, Okamoto helped launch the nation’s first transactional lawyering meet at Drexel in Spring 2010.

\(^{42}\) Second Life is a 3D virtual world where users can socialize with others using free chat or instant messaging services. Users can participate in activities and trade virtual property and services. See [http://secondlife.com/whatis/?lang=en-US/Welcome](http://secondlife.com/whatis/?lang=en-US/Welcome) (last visited Dec. 9, 2010).

\(^{43}\) Google Groups is one of many providers of basic listserv hosting and maintenance. Google Groups also allows for file sharing and collaboration on shared web pages, see [http://groups.google.com/](http://groups.google.com/) (last visited Dec. 9, 2010). A listserv allows each member to send an email to the entire group simply by sending it to a single address, for a history of ListServ please see the L-Soft
Law firms, and the legal field generally, need highly trained associates, but there is a concurrent and competing need to make the training process more efficient. Currently, the on-the-job training process requires law firms to overstaff and bill high rates – especially for the young associate attorneys – in order to provide opportunities for training and cover the costs involved. Bill Mooz felt a significant reason that in-house legal departments are looking to disaggregate less complex tasks is the astronomical billing rates being charged for newly minted attorneys who have little to no real experience. Those rates, he said, are due in part to the high levels of compensation top new law graduates are able to command.

Betty Arkell thought one way to begin attacking the high cost of training problem would be to bring associates to the meetings with clients but simply not bill for the associate’s time. One participant pointed out moving from the billable hour to the all “you can eat” model, discussed previously, would take care of the problem because clients would not then be paying higher fees when new associates worked on a deal. Mooz thought young lawyers might also find better development experiences in firms with subscription billing models, as this lessens client pressures not to use or bill for associate training on their own matters.

iii. The Law Student and the Legal Curriculum

Some of the changes to associate training were thought to either start with or be supported by concurrent changes to the legal education model at the law school level. As technology works its way into the practice of law at the firm level and reduces the number of entry-level positions for law students, participants thought this might stress the current structure of legal education in the United States.

Historically, in the U.S. law school has been reserved as a time to train students how to “think like a lawyer” and teaching the practice of law is left to the law firm in a more apprenticeship-like approach. Referring to the discussion around shifting out of “process” and into “practice” at firms and changing how associates are trained, Karl Okamoto felt that if the pressure to take “fodder” away from law firms is so high, then it will likely be necessary to provide this training at the law school level instead. Pointing to other legal training models, Bill Mooz said there are certain countries outside of the U.S. that use a different approach and tend to provide a greater mix of theory and practice in their schools. In these countries, he said, there is a required time of training built into the educational process itself.

In terms of suggestions for change, one participant thought U.S. law schools could be changed into a single year of legal education, where the student is taught to “think like a lawyer” and then a single year of business school along with a final year of “information structuring.”


As Mendelson put it, “law school teaches the thinking and not the nuts and bolts.”
Another participant wondered if increasing the use of adjunct professors could have the desired effect of increasing some of the “real world” training at the law school level. The thought here was adjuncts tend to teach smaller classes than full law professors and could give greater training to the students. Finally, one participant pointed out how many schools were already experimenting with their curriculum.\(^{45}\)

**CONCLUSION**

As the Roundtable came to a close, it was clear the group agreed on how the accelerating adoption of technological enablers in the field of transactional law was beginning to drive significant change at all levels. The participants generally felt the magnitude and extent of the change would only increase over time and throughout the discussion there was consensus around how the fundamental value of legal services – judgment and relationships – will likely not change nor be lost with the increased use of technology.

There was no clear agreement on where the legal field should be going when it comes to the use and integration of current and future technological “enablers.” The group generally left unanswered the question of what intelligent architecture might look like when it came to integrating technology into transactional law moving forward.

Finally, the group felt the trend towards “routinization” and the increasing use of technology has led to, and will continue to exacerbate, a central tension of how the increased automation, geographically distributed nature, and fragmentation of legal services interacts with developing the judgment central to an attorney’s role as a trusted business advisor. There was also general agreement on how this tension may be at a crisis point for young attorneys, law professors, and law students alike. On the one hand, the use of various technological “enablers” may be creating issues concerning how a new attorney develops pattern recognition abilities sufficient to inform the necessary good judgment of the valuable senior attorney. On the other hand, when it came to how the tension may affect legal educations, law schools and the appropriate changes to the legal curriculum, the participants did not have clear answers but felt the next step might be a follow up Roundtable titled, “Law School 2.0.”

\(^{45}\) One example is the Entrepreneurial Law Clinic at the University of Colorado Law School, which allows law students the opportunity to work with local businesses and provide legal services under the guidance of the clinic director, Associate Clinical Professor Brad Bernthal, and a group of volunteer attorneys from the community. The Clinic website is available at: [http://www.colorado.edu/law/clinics/entre/](http://www.colorado.edu/law/clinics/entre/) (last visited Dec. 9, 2010). Another example from Colorado is the Quantitative Methods for Lawyers class taught by Associate Professor Paul Ohm, for which he allowed students to write a computer program in lieu of one of the graded papers. The course web page is available at: [http://paulohm.com/classes/qm10/](http://paulohm.com/classes/qm10/) (last visited Dec. 9, 2010).
Attachment A – Law 2.0 Participants
(Alphabetical by Last Name)

Betty Arkell  Holland & Hart LLP, Partner
Rich Baer  Qwest, General Counsel and Chief Administrative Officer
Scott Beer  Zayo Group, General Counsel
Travis Bell  University of Colorado Law School, Student
Brad Bernthal  University of Colorado Law School, Silicon Flatirons, Associate Clinical Professor
Mike Boucher  Dakota Software, Founder
Rachel Czyszelewski  University of Colorado Law School, Student
Victor Fleischer  University of Colorado Law School, Professor
Roger Glovsky  Indigo Venture Law Offices, Manager and Corporate Attorney
Tracy Gray  Jacobs Chase Frick Kleinkopf & Kelley LLC, Partner
Liz Harding  Holland & Hart LLP, Of Counsel
Andrew Hartman  University of Colorado Law School, Experiential Learning Program Coordinator & Adjunct Professor
Mark Kurtenbach  Hogan Lovells, Associate Attorney
Jason Mendelson  Foundry Group, Co-Founder and Managing Director
Bill Mooz  VMware, Associate General Counsel
Darryl Mountain  Ontago, Inc., President
Luke O’Brien  Brightleaf, Vice-President of Strategy and Senior Corporate Counsel
Ben Oelsner  Kendall Koenig Oelsner PC, Partner
Paul Ohm  University of Colorado Law School, Silicon Flatirons, Associate Professor of Law
Karl Okamoto  Drexel University, Associate Professor of Law
Mike Platt  Cooley LLP, Partner
Trish Rogers  Moye White, Partner
University of Colorado Law School, Adjunct Professor
Carrie Schiff  Flextronics International, Senior Vice President and General Counsel
Paul Shoning  Hogan Lovells, Associate Attorney
Kaleb A. Sieh  University of Colorado Law School, Silicon Flatirons Research Fellow
Todd Smithline  Smithline Jha, Partner
Jeff Vail  Davis Graham & Stubbs LLP, Attorney
Kraig Washburn  Flexera Software, General Counsel
Kimberly West  University of Colorado Law School, Student
Attachment B – Selected Bibliography

Brightleaf
http://www.brightleaf.com

Jason Mendelson, Law Firm 2.0 Blog Series


Legal OnRamp
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