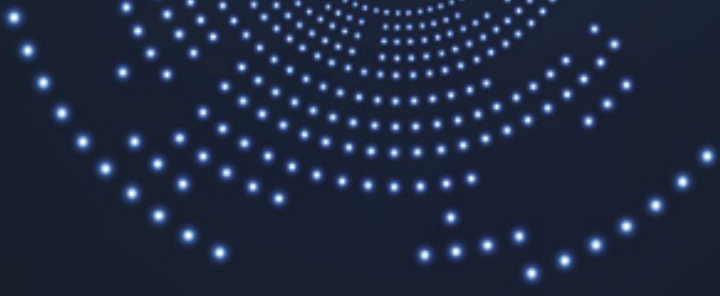


Leveraging legal innovation and technology to improve legal services.

Legal-Services Innovation: A Framework and Roadmap for Leveraging Technology





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By Daniel Linna on July 6, 2017

When the State Bar of Michigan invited me to write an article about legal technology, I aimed to make it a call to action with a framework and roadmap for legal-services innovation. Many lawyers and legal-services organizations now grasp that they must engage in innovation to improve legal services. But where and how should they begin? That's what I attempt to address in ***Leveraging Technology to Improve Legal Services: A Framework for Lawyers***, published in the June 2017 Michigan Bar Journal.

My article focuses on a “people, process, technology” framework for re-engineering legal services, identifying categories of legal-technology competences, and employing “lean thinking,” not only to improve processes, but to create organizations focused on continuous improvement and innovation from the bottom up. My proposed roadmap, however, is less explicit. I plan to develop this further in future posts. For now, I'll highlight a few key components of the roadmap:

1. **Client Focus** – Begin with your clients (the “voice of the customer”). What problems do you solve for clients? Engage with your clients to learn how you can provide greater value to them and work with them to co-create value. Remember, the client

defines value.

2. **Lean Thinking** – Lean is about more than process mapping and eliminating waste. Lean provides a framework for innovation and empowering everyone in an organization to provide greater value to clients. For an introduction to lean for legal, take a look at the slide deck that Jim Manley and I created for a 2014 presentation (when I was an equity partner at Honigman): [Applying Lean Thinking to Legal Services](#). (Also see Bradley Staats and David M. Upton, [Lean Knowledge Work](#), Harvard Business Review (October 2011)).



3. **Plan, Do, Study, Act** – PDSA is the fundamental scientific method as applied for continuous improvement, knowledge creation, and innovation. Lawyers spend the vast majority of their time in “do” mode. Said another way, we lawyers spend our time working “in the business,” but very little time working “on the business.” We spend little time planning to improve legal services and even less time studying how things went after we undertake

action to improve. Walter Shewhart from the famed Bell Labs originally developed PDSA, a foundational tool for lean. Many systems for improvement and innovation promoted in books and articles mirror PDSA, with little difference other than terminology. Whatever it may be called, PDSA is an essential element for continuous improvement and innovation. The Deming Institute provides an overview of the [PDSA Cycle](#), including a video by quality-movement leader Dr. W. Edwards Deming, who popularized PDSA. (Some refer to PDSA as [Plan, Do, Check, Act](#), but Deming preferred “study” to emphasize the analysis required, as opposed to a mere “check” of the results following the “do” stage.)

4. **Business Model Canvas** – Use the [Business Model Canvas](#) or [Lean Canvas](#) to quickly capture your legal-service delivery model and communicate it to others. Iterate through various versions of your business model, creating a new canvas for each. This exercise will help you and your colleagues evaluate your



value proposition, competitive advantage, and other important elements.

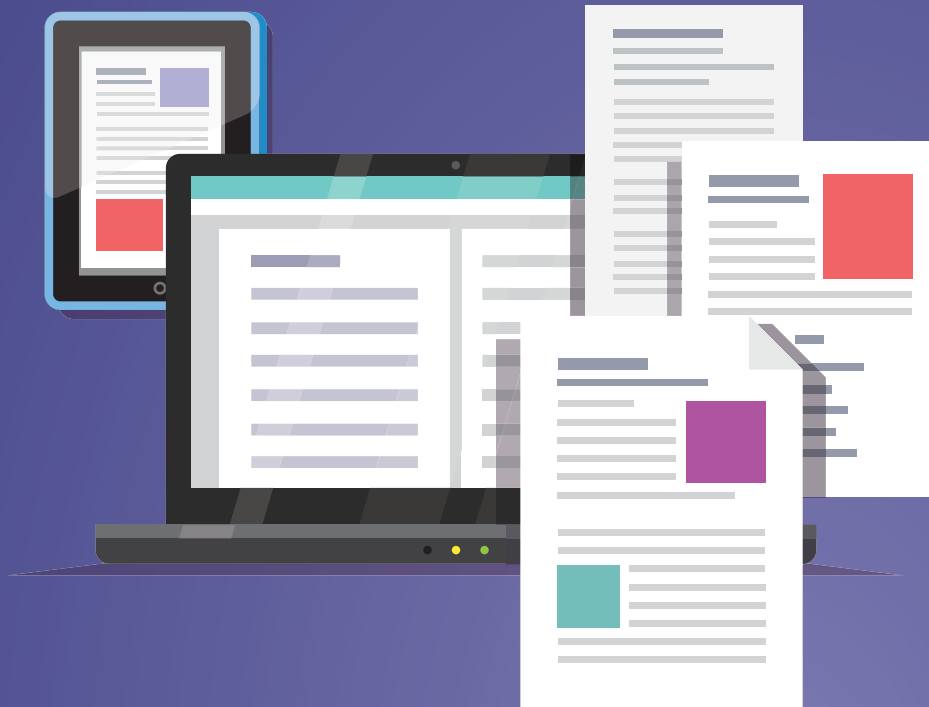
I look forward to further developing these ideas in future posts. If you have any questions or comments about this post or my [**Michigan Bar Journal article**](#), please comment below, tweet at me ([**@DanLinna**](#)), or send me an email at the address in my MSU [**bio**](#).

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Leveraging Technology to Improve Legal Services

A Framework for Lawyers

By Daniel W. Linna Jr.

Technology will revolutionize the delivery of legal services. In fact, it had better. Let's face it: the current legal-service delivery model needs updating. Experts estimate that about 80 percent of the impoverished and more than half of the middle class lack access to legal services.¹ Small businesses and startups often go without legal services. Even large companies say they do not get what they need from their lawyers.

Technology can help lawyers solve these problems, but it is not a silver bullet. Lawyers need to do more than subscribe to a suite of the latest apps. In fact, they should not start with technology. Instead, lawyers should carefully examine their business models and commit to a course of sustained innovation, improvement, and development of better legal-service delivery models.

People, process, and technology

The legal industry is evolving rapidly—from legal aid and the consumer legal market to complex work in corporate legal departments and large law firms. The pace of change will continue to accelerate. For practicing lawyers, it may feel overwhelming, particularly when combined with the growing hype about artificial intelligence and automation. But practitioners, academics, and prospective and current law students must understand where the future lies for the legal industry. To guide that thinking, it is useful to analyze legal services through a framework commonly used to evaluate other industries: people, process, and technology.

People—almost exclusively lawyers—drive the traditional legal-service delivery model. Under the traditional conception,

lawyers produce value and mostly view others as overhead. But there remains great potential for others to contribute value for clients when delivering legal services. Many point to the healthcare industry to illustrate appropriate industry diversification and specialization. For example, trained phlebotomists, not doctors, draw blood. With this in mind, Washington State introduced (and other states continue to explore) limited license legal technicians²—legal professionals restricted to practicing within particular subject matters and tasks.³ Change like this has only begun. As the legal industry evolves, lawyers must embrace opportunities to enlist not only legal specialists but also other professionals such as project managers, technologists, and data scientists.

As for process and technology, lawyers at all levels have largely ignored these disciplines. Lawyers and legal services organizations seldom think beyond substantive legal expertise when offering their services. Law firms, for example, tend to emphasize to clients that they have the best lawyers. Clients, on the other hand, do not view expertise as a differentiating factor for the majority of the legal work they procure. They believe that many lawyers possess sufficient expertise to handle the vast majority of their legal problems. Further, clients want law firms who understand them and their businesses and who deliver excellent results with efficiency and quality improving over time.

Satisfying these clients requires attention to process improvement and technology. Given the current state of the industry, lawyers at all levels have great opportunities to differentiate themselves from competitors by demonstrating their ability to increase the efficiency and quality of their services through improved processes and technology.⁴

Technological competencies

To improve legal-service delivery, all lawyers must improve their technology knowledge and usage. I have placed technology for lawyers into five categories: competency, personal document and information management, business operations, data analytics, and automation.

Competency

Lawyers have a professional obligation to deliver legal services competently, which includes technological competency.⁵ To fulfill this obligation, lawyers must understand metadata, cybersecurity, and e-discovery, to name just a few technology topics.

Personal document and information management

Most lawyers spend the majority of their time drafting e-mails and documents. Yet too many lawyers use computers as little more than elaborate typewriters. For example,



FAST FACT

Experts estimate that approximately 80 percent of the impoverished and more than half of the middle class lack access to legal services.

lawyers should know how to use styles and dynamic cross-references in Microsoft Word, create PDFs with bookmarks and hyperlinks, and analyze data and create charts and graphs in Microsoft Excel.

Lawyers must make greater use of document automation tools rather than using old documents as precedents and relying on the find-and-replace command. Competency with document and information management tools helps lawyers improve efficiency and quality. It also paves the way for better organizational knowledge management.

Business operations

Lawyers have many options when it comes to back-office technology, case management systems, and other tools to help them run their practices. For example, e-mail is a terrible medium for managing projects, including communicating about projects. Yet most lawyers spend the bulk of their time working from their inboxes, which results in time wasted searching for information and documents. Lawyers must embrace new platforms that foster project management, collaboration, and better communication.

Data analytics

Lawyers can use data to improve both legal-service delivery efficiency and quality, which includes improved substantive outcomes. While “big data” tends to dominate this discussion, lawyers should start by establishing metrics, capturing “small data,” and creating a data-driven decision-making culture. Small data opportunities include systematically capturing information about matters that help lawyers improve fee

and outcome predictions. Lawyers frequently make these predictions for their clients. Seldom, however, do we keep score and assess how lawyers can improve future predictions through data collection and analysis. Lawyers must have a basic level of competence in this arena to spot opportunities to collect the right data, use external data sources, and engage other experts, such as data scientists.

Automation

Today's technology is sufficient to automate tasks performed by lawyers. Thus, any claim that artificial intelligence cannot replace lawyers is demonstrably false. Perhaps the finer point some want to make is that technologists are decades from creating conscious machines. But today's expert systems and artificial intelligence—largely machine learning—can be used to automate many tasks currently performed by lawyers, and that list will grow over time.

Expert systems can be described as “Turbo Tax for law.” Legal aid organizations such as Michigan Help Online⁶ and Illinois Legal Aid Online⁷ use expert systems with document automation to help people solve basic legal problems. Law firms and legal departments use tools like Neota Logic⁸ and ThinkSmart⁹ to automate tasks, manage knowledge, and guide users to solutions. Lawyers should not only consider how expert systems can solve end users' problems, but also how to use them to capture senior lawyers' knowledge for use by junior lawyers.

Machine learning and other branches of artificial intelligence have far-reaching potential for automating higher-level lawyer tasks. Machine learning is the technology behind the technology-assisted review of documents. As proven in studies, technology-assisted review outperforms humans when reviewing and classifying documents as relevant or not relevant.¹⁰ This same technology works well in corporate diligence and has great potential for corporate compliance. The technology in this space has already gone well beyond merely categorizing documents as relevant or not. For example, given a large corpus of documents, it can help lawyers identify specific information such as parties, particular types of clauses, potential liabilities, and much more. This technology has advanced well beyond these tasks in other industries. Many aim to bring these advances to the legal industry.

Disaggregation of legal matters

Clients' disaggregation of legal matters is driving innovation and the automation of legal tasks. Traditionally, clients engaged counsel to handle complete legal matters. The lawyer handled everything, sought client input when appropriate, and billed the client for the work.

Today, corporate legal departments disaggregate many legal matters—breaking each matter into discrete tasks. For

each task, the client decides whether to do the work internally, engage a law firm or legal-service provider, outsource, or automate with technology. As clients carefully examine legal-service delivery processes, they identify discrete tasks that lawyers do not need to perform. This attention to process also reveals many opportunities to improve efficiency and quality.

Consumer clients engage in a similar calculus, unbundling legal matters to identify tasks they will do themselves and tasks for which they will hire a lawyer. Consumer clients have a vast amount of information available to engage in self-help, including tools provided by legal aid organizations and an increasing number of companies. Those who see unbundling as a threat will find it increasingly difficult to compete with legal startups.

Process improvement—standard work and best practices

Some studies of the legal industry have concluded that automation will have a modest impact because lawyers' work is largely unstructured.¹¹ But why is so much legal work unstructured? The answer is not that it is too complex for standards and best practices. For the vast majority of legal work, it is only because lawyers as a group have not expended much, if any, effort to structure their work.

The legal industry lacks standards and best practices for much of what lawyers do. Lawyers within the same department of a law firm ordinarily take differing approaches to identical legal issues. Even a given lawyer often lacks consistency on the same task, without any rationale.

Richard Susskind discusses a continuum of legal work, from bespoke to commoditized.¹² Lawyers do a lot of bespoke work—custom, ad hoc work, reinventing the wheel repeatedly. This lack of process control and variance causes inefficiency and quality problems. Lawyers can develop best practices and standards for their work and move along this continuum from bespoke to standardized, systematized, packaged, and, for some subset of tasks, commoditized.

While some fear that improved processes and technology will lead to fewer lawyers, the failure of lawyers to improve their services and provide value to clients is the greater existential threat. By embracing these disciplines, lawyers can create the capacity to focus on solving complex problems, which are not in short supply in our global economy.

Lawyers and law firms can start by using process improvement disciplines like “lean thinking” to develop best practices and standards for their work.¹³ Lean thinking—developed by Toyota and deeply embedded in the automotive industry—is relatively new in the legal industry but commonly employed for other knowledge work, such as in the medical industry.¹⁴ Lean thinking focuses on eliminating waste, improving quality, and delivering the greatest value possible to clients. It is a

client-centric approach. The client's definition of value drives the process.

Lean thinking engages everyone involved in the delivery of services. In an organization, for example, lawyers, paralegals, administrators, technologists, project managers, and others involved should gather to create a "process map" of the service delivery. Lawyers should include their clients and frequently seek feedback. Identify tasks that do not provide value to the client—eliminate them; they are waste. Move value-producing tasks to earlier in the process, when possible. These initial steps will quickly reveal significant low-hanging fruit.

While legal innovation and process improvement initiatives will likely produce early returns, they are not quick fixes. Long-term success requires leadership and attention to change management. Organizations must commit to developing a culture that values lean thinking, continuous improvement, and innovation from bottom to top. As organizations mature through process improvement and innovation, best practices and standards will emerge. Improved process and project management frees lawyers from the drudgery of routinized work and exhaustion of chaotic "firefighting," allowing lawyers to focus on solving challenging problems and delivering greater value to clients.

Take action now

New entrants in the legal services marketplace will continue to exert pressure on lawyers. There is no time for complacency. Lawyers must develop new business models¹⁵ that leverage not only substantive legal expertise, but also the expertise of other professionals, process improvement, and technology. If lawyers do not respond to today's challenges, then we risk irrelevance.

When many lack access to legal services and question our justice systems, one could ask whether lawyers are already irrelevant for most people. There is a better story. Lawyers today and in the future have much to offer around the globe. Let's embrace today's challenges and forge a new path for our profession. ■



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ENDNOTES

1. See Linna Jr., *What We Know and Need to Know About Legal Startups*, 67 SC L Rev 389, 392 (2016).
2. Washington State Bar Association, *Limited License Legal Technician Program* <<http://www.wsba.org/Licensing-and-Lawyer-Conduct/Limited-Licenses/Legal-Technicians>>. All websites cited in this article were accessed May 10, 2017.
3. Ambrogio, *Authorized Practice: Washington State Moves Around UPL, Using Legal Technicians to Help Close the Justice Gap* 101 ABA J 72 (January 2015).
4. Daniel Linna Jr., *LegalTech Lever, 21st Century Legal Services? Lawyers and Law Students, You Can Learn These Skills* <<http://www.legaltechlever.com/2016/08/21st-century-legal-services-lawyers-law-students-can-learn-skills/>> (posted August 16, 2016).
5. MRPC 1.1 (stating "A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."). Comment 8 confirms that this includes technological competence. *Id.* at comment 8 (stating "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology..."). Comment 8 has been adopted in no less than 27 states, but not in Michigan. Robert Ambrogio, *LawSitesBlog, 27 States Have Adopted Ethical Duty of Technology Competence* <<http://www.lawsitesblog.com/2015/03/11-states-have-adopted-ethical-duty-of-technology-competence.html>> (posted March 16, 2015). Even absent the adoption of comment 8, a strong argument can be made that competence under the rules and other applicable law includes technological competence.
6. Michigan Legal Help <<http://michiganlegalhelp.org/>>.
7. Illinois Legal Aid Online <<https://www.illinoislegalaid.org/>>.
8. See Akerman, *Akerman Data Law Center* <<https://www.akerman.com/practices/practice.asp?id=595&more=1>>; Foley, *Foley Global Risk Solutions* <<https://www.foley.com/grs/>>.
9. ThinkSmart <<https://thinksmart.com/legal-operations/self-service-nda/>>.
10. E.g., Grossman & Cormack, *Technology-Assisted Review in E-Discovery Can Be More Effective and More Efficient Than Exhaustive Manual Review*, 17 Rich J L & Tech 11 (2011) <<http://jolt.richmond.edu/v17i3/article11.pdf>>.
11. See, e.g., Remus & Levy, *Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law* (November 27, 2016); McKinsey & Company, *A Future That Works: Automation, Employment, and Productivity* (January 2017) <<http://www.mckinsey.com/global-themes/digital-disruption/harnessing-automation-for-a-future-that-works>>.
12. Susskind, *Tomorrow's Lawyers: An Introduction to Your Future* (Oxford: Oxford University Press, 2013), ch 3.
13. Manley & Linna Jr., *Applying Lean Thinking to Legal Services*, SlideShare (July 15, 2014) <<https://www.slideshare.net/DanielWLinnaJr/5final-lean-for-legal-15july14-45865373>>; Finkel, *Mapping the Relentlessly Efficient Law Firm*, 104 Ill B J 22 (August 2016).
14. E.g., Govindarajan & Ramamurti, *Why Can't U.S. Health Care Costs Be Cut in Half?* (October 29, 2013) <<https://hbr.org/2013/10/why-cant-us-health-care-costs-be-cut-in-half>>.
15. Use the Business Model Canvas or Lean Canvas to quickly, systematically capture your thoughts and develop a new legal-service delivery model. These visual tools guide thinking and help you communicate your ideas to others. Canvanizer, *Create a New Business Canvas* <<https://canvanizer.com/new/business-model-canvas>>; Canvanizer, *Create a New Lean Canvas* <<https://canvanizer.com/new/lean-canvas>>.