
21. Evaluating legal services: The need for a quality movement and standard measures of quality and value

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I INTRODUCTION

How do we evaluate legal-services delivery, legal organizations, and lawyers? The honest answer is that we do not, at least not in a way that other industries would recognize. Law has not undergone a quality movement—the legal industry has not fostered a culture of standard work, error detection, peer review, performance measurement, and continuous improvement. Likewise, law does not demand evidence-based, data-driven practice. The legal industry does not rigorously assess the efficacy, quality, and value of legal services.

What costs does our lack of systematic rigor impose on society and the legal profession? Like many, I assert that these failings are root causes of legal services falling far short of the standards for efficiency, quality, and value that we could require and attain in light of today's available technologies and management practices in other industries. Data tells us that even wealthy countries provide grossly inadequate access to law, legal services, and justice. Individuals suffer the most, but businesses, small and large, also bear significant costs. To what extent does our lack of systematic rigor lead to inefficient, poor quality, low-value legal services and contribute to these problems? We do not know. To solve these problems, we must ask better questions, gather data, and test our ideas to create opportunities to improve.

This is also a big problem for big data and artificial intelligence researchers and solution developers. Data analytics, artificial intelligence, and other technologies offer great promise for improving legal services and legal systems. But the lack of a culture of quality and standard metrics and methods for evaluating legal services and legal systems is a significant obstacle to serious progress. When we cannot effectively evaluate the status quo, it is extremely difficult to evaluate the impact of introducing technology into legal services and systems. Additionally, artificial intelligence and data analytics need high-quality input and outcome data. If our services and systems lack in quality, our data will be no better. Worse yet, we lack the fundamental building blocks to evaluate the quality of data.

The absence of a quality culture in law contributes to other pernicious problems. For example, how do our chaotic legal industry work environments—largely devoid of quality, process improvement, and project management initiatives—contribute to job dissatisfaction, work-life imbalance, depression, alcoholism, suicide, bias, and the lack of diversity across the legal industry? Creating quality standards and holistic models for value that assess all costs and benefits will require us to engage with and account for these problems. Likewise, undertaking a quality movement can help us to restructure and improve our workplaces, the legal profession, and the broader legal industry.

In the legal industry, it is all too easy to rest on platitudes. It is easy to stand in support for access to law, legal services, justice, and equal opportunities; fostering public confidence in the justice system; and preserving and expanding the rule of law.¹ But we lack leadership and meaningful accountability to fulfill these promises. Committing to a serious quality movement and creating standard metrics for evaluating legal services will provide a foundation to establish audacious goals and hold our profession and the broader legal industry accountable for achieving those goals.

Ten years as a practicing lawyer convinced me that law practice needs less art and more science. Yet, I felt uncertain about taking that position in a public talk in New York in February 2014, at a time when I was still practicing.² Given my background in information technology and public policy and administration, I believed that legal-services delivery at all levels could be much better, in many ways. But I found it difficult to find resources that support my hypotheses. Since then, I have discovered additional relevant research and others have contributed new resources. But we need more research and much more action to implement these ideas.

With this chapter, I aim to demonstrate the need for a quality movement and standard measures of quality and value, and highlight some of the research and resources. First, I discuss how data analytics and artificial intelligence will benefit from a quality movement and metrics for quality and value (section II). Next, I provide an overview of the reforms at the core of the quality movement (III.A) and discuss the need for evidence-based practice and empirical standards in law (III.C). I discuss types of data and metrics for evaluating legal services: output, process, and input (IV). I summarize multiple models for measuring legal-services value, including from Noel Semple (V.B), Rebecca Sandefur and Thomas Clarke for “roles beyond lawyers” (V.C), and Paul Lippe for contracts (V.D). I identify several initiatives contributing to the development of quality and value metrics (VI). Finally, I briefly summarize the stakeholder benefits of a quality movement and standard metrics for legal-services quality and value (VII).

My goal is to catalyze debate, rigorous research, and sustained action to undertake a quality movement and develop standard metrics for legal-services quality and value. If we do not undertake this work, we risk squandering abundant opportunities to improve legal services, legal systems, justice, and the law itself.

II DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE THRIVE WITH STRUCTURED WORK AND HIGH-QUALITY INPUT AND OUTCOME DATA

To make progress with artificial intelligence and data analytics, we need (1) high-quality input and outcome data and (2) an understanding of what outcomes are optimal. There has not been enough discussion about the quality of legal industry data. A sober assessment of legal industry input, process, and outcome data would reveal serious shortcomings.

Where we have data, we lack standards for the quality and value of the underlying tasks and outcomes. Where we have standards, they are almost exclusively normative (based upon the judgment and opinions of lawyers), not empirical (evidence-based; determined by observable impact on outcomes). Without better data, standards, metrics, and evaluation methodologies, we will struggle to improve legal services demonstrably, never mind seriously augmenting and automating legal services. Thus, it is important that we extract the “objective, measurable

characteristics of legal work product that [will] help facilitate automation, quality control, and continued improvement of the field.”³

Without quality and value metrics, we will find it very difficult to achieve artificial intelligence advances in law on par with those in other industries.⁴ For example, if we had all of the contracts in the world to use as training data for a natural language generation system that drafts contracts, could this system draft high-quality contracts? How would we evaluate the quality of the contracts it generates? What standard, objective metrics for quality and value would we use? Certain aspects of quality and value would depend upon the client’s subjective goals. How do we determine these goals and measure whether the contract addresses them? We generally lack answers to these questions, and we have barely begun to explore and test the possibilities.

Analyses of the extent to which we can automate legal work illustrate the need for a quality movement and standard metrics for quality and value. For example, Dana Remus and Frank S. Levy analyzed aggregated law firm billing data and assessed the likelihood of being able to automate discrete tasks performed by lawyers using technology available as of 2015.⁵ They concluded: “A careful look at existing and emerging technologies reveals that it is *only relatively structured and repetitive tasks that can currently be automated. These tasks represent a relatively modest percentage of lawyers’ billable hours.*”⁶

This study makes assumptions and choices that we could question. First, it assumes that the current legal-services delivery model, mostly based on hourly billing and misaligned incentives, will not change. Second, it accepts lawyers’ assignment of their work to particular categories, in bills that made it through the billing process, as representative of the work that lawyers actually do. We should question the extent to which this study validly and reliably measures the tasks that lawyers actually perform. Finally, the study considered technology available in the legal industry in 2015, without seriously considering technology already adopted in other industries or future advancements.

Setting these critiques aside, the conclusion raises an obvious question: Why is so much legal work unstructured? The answer, at least in part, is that the legal industry has not had a quality movement, which would lead to more structured work, best practices, standards, and metrics for value and quality. If the legal industry developed a culture of evidence-based practice and continuous improvement, as discussed below, we would find that more than a “relatively modest percentage” of lawyers’ work today could be structured and automated.

The path of eDiscovery provides an interesting example, highlighting the need for assessment of current methods for delivering legal services. When technology-assisted review first became available, many lawyers insisted that machines could not meet the quality of work performed by humans. Thus, the evaluation of technology-assisted review required a closer look at human review of documents for comparison. Researchers found that the quality of human review was in fact low, and technology-assisted review could be both more effective and efficient.⁷

We must evaluate our current legal-services delivery methods and establish standards that put us on a path to make access to law, legal information, and basic legal-services commodities accessible by all at little to no cost.⁸ A significant amount of today’s legal work is done in a bespoke fashion, leaving each lawyer to idiosyncratically reinvent the wheel each time. Richard Susskind has described the evolution of legal services that must occur across a continuum, from bespoke services, to standardized, to systematized, to packaged, to commoditized,⁹ as legal services become not only cheaper, but also better and faster. Even when legal work

today has been standardized or systematized, it nearly always has been based on local normative standards, rather than as a result of evidence-based practice, and without metrics for evaluating quality and value. As a consequence, we lack fundamental processes and metrics to evaluate, improve, and expand access to legal services.

Conventional wisdom seems to be that the progression of legal services from bespoke to commodity requires that quality declines along the way. But our objective must be exactly the opposite: quality should demonstrably improve as we move towards commoditizing legal services. In fact, we must show empirically that scaling law results in not only greater efficiency, but also better quality, better outcomes, and greater value for everyone.

Undertaking legal technology, data analytics, and artificial intelligence projects in law can help us establish standards and metrics for quality and value. The benefits of using technology to augment and automate legal services include that: (1) It requires us to look in the mirror and see the problems with the status quo. Upon evidence-based inspection, we find that legal-services delivery by humans is not as efficient, high quality, or effective as we may assume.¹⁰ (2) It requires us to improve our processes and create metrics for evaluating legal-services delivery. Doing so leads us to improve efficiency, quality, outcomes, and value. (3) Once we establish standard metrics for the quality and value of legal services and legal objects, we can capture high-quality data and train machine learning models that can augment and automate legal tasks.¹¹ We also need these standard quality and value metrics to evaluate the legal-services delivery applications that we develop.¹²

As we do this work, we will find that “[s]ystematic redesign of workflows is necessary to ensure that humans and machines augment each other’s strengths and compensate for weaknesses.”¹³ Lawyers will have abundant opportunities to demonstrate the areas in which “humans + machines” will produce greater value for clients and society.¹⁴ But without a deep understanding of legal-services workflows and objective metrics for legal-services quality and value, progress will be slow on all fronts.¹⁵

III LAW LAGS BEHIND THE OTHER PROFESSIONS ON QUALITY

The quality movement that has transformed manufacturing and many professions has had surprisingly little impact on law.¹⁶ Various law firms, legal departments, and legal aid organizations use “Lean Thinking” and “Lean Six Sigma” in connection with process improvement initiatives.¹⁷ But adoption rates in the legal industry remain low.¹⁸

More than 40 years ago, U.S. Supreme Court Chief Justice Warren Burger commenced a campaign to convince the legal profession that it has a significant quality problem.¹⁹ By his estimates, as many as half of all lawyers appearing in court were incompetent. Among the problems created, Chief Justice Burger said, was that lawyers made legal help too expensive. These problems persist today.

Long before Chief Justice Burger began blasting lawyers, Attorney General Robert F. Kennedy emphasized the need to simplify law in a 1964 Law Day speech:

We have to make law less complex and more workable. Lawyers have been paid, and paid well, to proliferate subtleties and complexities. It is about time we brought our intellectual resources to bear on eliminating some of those intricacies.²⁰

In a January 2020 talk, Jim Sandman, then president of the Legal Services Corporation, reflected on Robert Kennedy's speech and observed that the situation has not improved; instead, things have gotten worse.²¹

In the 1930s, medical professionals began the careful scrutiny of their practices and the outcomes they produced.²² In medicine, quality reform gained momentum when studies revealed high error rates.²³ We have plenty of reason to believe that law has its own quality problems.²⁴

In this section, I first discuss the elements of a quality movement. In the legal industry, this would require a change in culture, with organizations embracing the reforms at the core of the quality movement to guide their operations and engage in the continuous improvement of their services and products. Next, I discuss the need to go beyond a quality movement to establish industry standards and metrics for quality and value. Without standards and metrics, the evaluation of legal services lacks critical elements.²⁵ Finally, I discuss the need to move from normative to empirical standards for quality and value.

I do not deeply explore why lawyers have not embraced a quality movement. Others have said that lawyers view the quality movement as counter to their professional culture²⁶ and not in their economic interests.²⁷ This seems only to begin to describe the obstacles and does not tell us a lot about how to overcome them. My hypothesis is that a quality movement is necessary and in the best interests of lawyers, their clients, and society. Rather than blame lawyers and other stakeholders, we must engage with them. This does not mean that those who favor reform bear the burden of persuasion. Abundant data shows that the current state is not working. But if reformers wish to succeed, they must embrace the very methods they propose, including engaging all stakeholders, listening with empathy, and acknowledging and addressing criticisms and concerns.

A Reforms at the Core of the Quality Movement

William Simon describes four basic reforms at the core of the quality movement: standard work, systematic error detection, peer review, and performance measurement.²⁸

1 Standard work

Creating standard processes for work establishes a baseline from which improvement is possible. Today, there is great variance in the way lawyers perform the same task. Even the same lawyer may perform the same task differently each time, for no reason. To develop standard work, lawyers can create process maps to guide legal work, with accompanying checklists, templates, and other resources. By using these tools, lawyers can reduce variance, and in many cases eliminate it.²⁹

Most standardization efforts have been limited to simple and repetitive tasks. Lawyers tend to assert that their work is particularly complex and important to the client, and therefore process improvement is not relevant.³⁰ These lawyers have it backwards. If the matter is complex and important, there is even more to gain by applying process improvement and project management with a focus on improving quality and producing better outcomes.³¹

Some lawyers assert that they cannot articulate the criteria for high-quality work, but they know it when they see it.³² Seasoned researchers question such assertions.³³ They note that the judgment of purported experts differs, is inconsistent across experts, and is even inconsistent when judged by the same individual expert.³⁴ The study of artisanal, bespoke work reveals the processes for completing the work, and creates opportunities to engage in the continuous

improvement of those underlying processes. Introducing transparency and fostering a shared understanding of work processes leads to standard work and a foundation for the continuous improvement of that work.

2 Systematic error detection

In law, a surprising number of important tasks are subject to one point of human failure, with no systematic error detection as part of a quality control process. We can improve these processes and improve the quality of legal services. Even if error rates are low, we should assess the cost of our current ways of doing things, including in terms of resources and stress on individuals. Standard processes combined with systematic error detection can greatly reduce the effort required to produce high-quality results.

Engaging in systematic error detection would require lawyers to change their mindset. When mistakes happen, we tend to blame people. On the other hand, organizations focused on quality engage in root-cause analysis, seeking to find the underlying cause of error so that they can prevent its reoccurrence in the future.³⁵ Leaders of those organizations celebrate people for acknowledging errors, as this provides an opportunity to enact countermeasures to prevent the error in the future.

In organizations that foster a quality culture (also known as a “continuous improvement” culture), a common saying is “hard on processes, easy on people.” Processes should be improved to reduce or eliminate errors. When an error is acknowledged, this provides an opportunity to improve processes and thereby improve the quality of the services and products delivered.

3 Peer review

Peer review encourages practitioners to be more reflective and articulate in their practice, applying social pressures of shame and honor to foster good performance.³⁶ Simon says that “[p]eer review is strikingly underdeveloped in law.”³⁷ In medicine, for example, colleagues engage in case analysis, reviewing the past treatment of a patient or group of patients.³⁸ Practicing lawyers rarely engage in such reviews.³⁹

Simon identifies exceptions, such as “‘After Action Reviews’ of completed matters” in the FMC Technologies corporate legal department.⁴⁰ The rise of project management in the legal industry has led to greater emphasis on after-action reviews. For example, after completing a deliverable, the team assembles to assess what worked, what did not work, and what new things they ought to do to improve in the future.

4 Performance measurement

Performance measurement has become more common in legal organizations, particularly in corporate legal departments. Many legal departments analyze billing data in connection with assessing the performance of their outside law firms. An increasing number of legal departments use scorecards to assess law firms’ delivery of services. Many other legal-services organizations and their overseers have begun to measure legal-services performance with an eye toward establishing a baseline from which they can improve.⁴¹

Even in the best organizations, however, metrics are far from robust. For example, measurements often lack diagnostic value, which is necessary to improve quality.⁴² A law firm may know something is wrong because of declining profits and low client retention, but the metrics do not tell it why.⁴³ Improving the diagnostic value of performance metrics requires a deeper

understanding of the client's problems, what the client values, and the processes undertaken to solve those problems and deliver value.⁴⁴

B A Quality Movement is Necessary, but Insufficient to Lead to Standard Quality and Value Metrics

Rick J. Carlson has identified four levels of analysis when measuring the quality of legal services:

1. individual practitioner competence;
2. the product of legal services produced by an organization, which might fail because of the interrelated and compounded errors of many;
3. the product of the entire system—the law that is made and practiced; and
4. wider implications for the social structure generally.⁴⁵

The quality movement Simon describes aims to improve quality at the individual and organizational level (levels 1 and 2). This work offers a pathway to change the culture of legal-services organizations, creating a learning organization in which everyone is empowered to contribute to continuous improvement and innovation activities. While this work is necessary, it will not generate standards and metrics for quality and value for the legal industry and society generally (levels 3 and 4).

To understand why, consider the automotive industry. Automotive manufacturers follow quality disciplines and aim to produce value and quality for their customers, while considering their employees, shareholders, and society. Beyond this quality movement led by organizations, numerous other actors, including universities, nonprofits, and regulators, have engaged in research and setting standards to improve automobile quality and safety. Likewise, in the legal industry we will need research and action by numerous actors to develop generally applicable legal-services delivery standards.

C The Need to Evolve from Normative to Empirical Development of Standards

Today, virtually all lawyer performance standards are normative—"that is, the consensual judgment and opinions of peers and others specifies what good lawyering is in contrast to bad lawyering[.]"⁴⁶ "Virtually all of the performance standards used by lawyers, the lawyer behaviors derogated by peers, the tactics and strategy textbooks, and the substance of courses in clinical legal education, are normative."⁴⁷

There is a tremendous need for empirical research to assess the quality and value of legal-services delivery. Lawyer standards could be empirical—"that is, the desirability of a given procedure is determined by its actual impact upon outcome variables."⁴⁸ Empiricism relies on observations and experiments. Instead, lawyers, judges, and others in legal systems who make life-changing decisions today "overwhelmingly rely on gut intuition and instinct, not on rigorous evidence."⁴⁹

Law must learn from medicine, where practices once regarded as good medical practice (i.e., normative performance standards) "were later found through empirical testing against outcomes to be ineffective or even harmful compared to alternative treatments that had previously been held in low regard."⁵⁰ "Practitioners of medicine chose to transform their profession into a science. Practitioners of law did not."⁵¹ As noted above, while some may

claim that the nature of legal practice is “too complex” to be studied empirically, numerous examples demonstrate that legal services can be analyzed with the same research methods as used in medical studies.⁵²

James Greiner has called for a “new legal empiricism,” with a focus on randomized controlled trials (RCTs).⁵³ When Greiner and his co-author Andrea Matthews attempted to catalog all RCTs in law, they found approximately 50.⁵⁴ They called this number “pathetic” in comparison “to the number of RCTs produced in medicine, or even in social science areas related to law, such as criminology.”⁵⁵ They contend “the United States would be a better place if the legal profession were less hostile to objective, rigorous, scientific evidence about causation and the effectiveness of interventions.”⁵⁶ In a 2016 paper, they said “[t]here are no recognized papers in this domain, no canonical studies, no contours of debate or contesting schools of thought, no internally defined best practices, and few publications proposing agendas for the future. At present, there is no domain to review.”⁵⁷

Shockingly, Greiner and Matthews produced several anecdotes that, even when researchers were able to field RCTs, lawyers and judges sometimes undermined them.⁵⁸ They concluded that the lawyers and judges who did so appeared to share a motive: “certainty as to the ‘right’ answer.”⁵⁹

Greiner and Matthews suggest that the need for empiricism is particularly great in the areas of (i) interventions for individuals unable to hire attorneys and (ii) the construction and administration of adjudicatory systems.⁶⁰ They point out that in other areas “legal professionals and judges compete for business” and thus are subject to markets.⁶¹ One could argue, however, that they underestimate the extent to which markets for legal services and adjudication have failed. Private practice also needs a heavy dose of the new legal empiricism.⁶²

IV TYPES OF DATA AND METRICS FOR EVALUATING LEGAL SERVICES: OUTPUT, PROCESS, AND INPUT

It is important to consider multiple potential sources of data about lawyer quality, including clients, regulators, professional peers, and adjudicators.⁶³ When measuring quality and value, we can place data and metrics into three basic categories: output, process, and input.⁶⁴

A Output Metrics

Output metrics assess quality based on the actual outcome achieved.⁶⁵ Output metrics include both outcome metrics (e.g., “winning” or “losing” a case) and work product metrics (e.g., a document’s readability score).⁶⁶

The pursuit of a specific outcome requires the subjective input of a client. The lawyer must work with the client to determine which objectives to pursue. To create generalizable quality metrics, outcome metrics must focus on things that all clients value.⁶⁷ Nevertheless, one challenge with outcome metrics is that they can be subject to factors genuinely outside of a lawyer’s control.⁶⁸

A lot of today’s evaluation of legal services focuses on capturing feedback from clients, including via client surveys. Client satisfaction is a crucial element of measuring legal-services value.⁶⁹ Clients are well positioned to rate their lawyers on communications skills, attitude, timeliness of communications, and collaboration with clients.⁷⁰ But clients may be biased in

their assessments,⁷¹ including by how a service provider manages expectations.⁷² Moreover, clients who infrequently purchase legal services will not be good sources of data about a service provider's effectiveness, price, or third-party effects.⁷³ Even in the case of repeat purchasers, we must account for subjectivity, bias, and noise in assessments. These concerns highlight the benefits of developing industry-standard objective, quantitative⁷⁴ metrics.

Work product metrics present excellent opportunities for objective measures. For example, we can assess contracts, wills, and pleadings for errors and readability.⁷⁵ Likewise, clients can measure their lawyers' response times and assess communications for clarity and readability.⁷⁶

We can also create meaningful metrics for specific work product. For example, Ron Dolin proposes a metric for assessing a lawyer's preparation of a witness for a deposition: the extent to which the lawyer prepares the witness with documents that opposing counsel actually uses during the deposition.⁷⁷ Standard information retrieval (IR) metrics (precision, recall, F-Measure) provide a quality metric for this work product.⁷⁸

IR metrics provide a powerful framework for discussing quality and value in many contexts. In an ideal world, precision and recall, and their harmonic mean (the F-Statistic), would be close to 1.0. But the realities of practice will often require a discussion about tradeoffs. For example, in certain circumstances it may make sense to prefer precision over recall (i.e., preferring true positives at the risk of false negatives). In other circumstances, it may make sense to prefer recall over precision (i.e., accepting false positives to reduce the risk of false negatives). For a \$100,000 nuisance lawsuit, perhaps the lawyer and client decide to aim for higher precision (the documents reviewed during the prep session are also shown at the deposition) with lower recall (some documents that are not reviewed during the prep session are shown at the deposition). In a \$1 billion lawsuit, the lawyer and client will be more likely to agree that high recall (i.e., of the documents shown at the deposition, the witness saw a high proportion during the prep session) and low precision (i.e., the witness also sees a high number of documents during the prep session that are not actually shown at the deposition) provides the right balance to reduce the risk of being surprised by a document at the deposition.

Carlson argues that "outcome assessment, though much more difficult than process assessment, is vastly preferable because, among other things, effective outcomes assessment allows us to improve our process criteria."⁷⁹ Semple agrees that output metrics, when feasible, are excellent for measuring legal-services value, but asserts that validity⁸⁰ and reliability⁸¹ issues often make them infeasible.⁸² The importance of methodological rigor cannot be overstated. At the same time, it is also important to recognize that there are methodology challenges with each type of metric, which require careful consideration of the specific context and tradeoffs.

B Process Metrics

Process metrics assess quality based on adherence to certain steps that demonstrably result in the delivery of high-quality services.⁸³ For examples, both Carlson and Semple refer to healthcare. Semple mentions Atul Gawande's book, *The Checklist Manifesto*, which extols the value of using checklists to improve patient health care.⁸⁴ Checklists produce value not only by explicitly and transparently committing to client-service standards, but also by creating a culture in which each employee is empowered to interject when a team does not adhere to the standards.

Semple refers to the "process metrics" category as "internal metrics," distinguishing between internal process and internal structure metrics. Internal process metrics focus on

what lawyers and others involved in legal-services delivery actually do.⁸⁵ This includes having systems in place to ensure high-quality services.⁸⁶ On the other hand, internal structure metrics assess the legal-services delivery environment and how it facilitates the provision of high-quality services.⁸⁷

Carlson and Semple both assert that internal metrics are more useful for uncontested matters.⁸⁸ Semple says that “complying with rote best practices” may be of limited use for civil litigation, if intangible skills play a greater role.⁸⁹ This perspective, however, requires closer scrutiny. First, not all types of civil litigation are complex. Second, we can disaggregate even the most complex litigation into discrete tasks, many of which are repetitive and subject to improvement by establishing and following best practices and standards.⁹⁰ The rigorous analysis of all processes, from simple to complex, helps us discover how to produce high-quality work product and results.⁹¹

Itai Gurari, the CEO of Judicata, has demonstrated how we can create objective metrics for even complex litigation. Judicata developed Clerk, a tool that analyzes and grades briefs.⁹² Clerk measures seven dimensions, including how well the brief is argued and drafted. Clerk analyzes whether the brief cites the right precedent and evaluates the strengths of the arguments made. When Judicata reviewed briefs filed by the 20 largest law firms in California, even simpler measures of quality were revealing. For example, Clerk found rudimentary errors in nearly every brief, such as misspelling case names, incorrectly citing pages, and misquoting cases. Eight of the 20 law firms filed a brief that misspelled the judge’s name.

The Judicata study provides an excellent example of assessing the objective quality of legal artifacts, such as motions and briefs. While we might debate the proper methods for evaluating the strength of an argument in a brief, misspelling and misquoting is undeniably incorrect. The study also illustrates the role of both internal processes and internal structures. For example, a firm could improve its internal processes, such as by requiring a quality audit based on a checklist before filing a brief, to reduce or (nearly) eliminate basic errors like these. A firm could also improve its internal structures, such as by implementing technology to reduce errors. For example, if the firm’s case management system imported basic information directly from the court docket or other trusted resources, it could eliminate errors like misspelling a judge’s name in a brief.

Internal structures affect the value produced by legal services in numerous ways. For example, does a firm have appropriate technology for conducting legal research, creating and managing documents, communicating with clients, meeting deadlines, and avoiding conflicts of interest?⁹³ (Even in the largest law firms, lawyers perform an extraordinary amount of their work in their email inbox, without collaboration portals or workflow tools. These habits hinder efficiency and quality.) Does a firm foster a harmonious, respectful workplace that values diversity and aims to increase worker satisfaction and decrease turnover?⁹⁴ Does a firm have high billable hour expectations, or has it established incentives to align better with producing superior quality, results, and client satisfaction?⁹⁵

C Input Metrics

Input metrics assess quality based on the resources entering a system,⁹⁶ which in law is primarily people.⁹⁷ Typical input metrics include the school a professional attended, grades earned, and bar exam scores.⁹⁸ Quality systems that use input metrics include attorney licensing, accreditation standards, bar exams, and educational standards.⁹⁹ Input metrics are attractive

because they are relatively easy to assemble and compare.¹⁰⁰ Many express skepticism, however, about the relationship between input metrics and legal-services delivery value.¹⁰¹ For example, how much weight do law school and law firm pedigree deserve when evaluating a lawyer? A number of studies suggest the declining use of pedigree as a proxy for quality.¹⁰²

There may be value in enriching input metrics to include not only standard credentials, but other tailored forms of education. For example, a number of law schools have begun to include instruction in legal-services technology and innovation.¹⁰³ Clients and employers may assign value to students taking these courses, particularly if they find that this instruction leads to improved processes and outcomes.

V FRAMEWORKS FOR MEASURING LEGAL-SERVICES VALUE

A few scholars have proposed models for evaluating legal-services delivery value. In this section, I provide brief overviews of (1) Noel Semple's model for measuring legal-services value and (2) Rebecca Sandefur and Thomas Clarke's framework for evaluating programs for "roles beyond lawyers." I also discuss Paul Lippe's framework for assessing the quality and total value of contracts.

A Distinguishing between Measuring Quality and Measuring Value

Some discussions about evaluating legal services conflate notions of quality and value. Models for the measurement of value help clarify that quality (sometimes evaluated as a component of "effectiveness") is only one component of total value. The measurement of total value considers the customer's problem and all costs and benefits.

Evaluating the value of legal services begins with a deep understanding of "users" (clients, customers, stakeholders, institutions, society) and the problems that we aim to solve. To evaluate the quality and value of something, we must understand the purpose.¹⁰⁴ Even then, at a micro level, we could establish objective quality metrics for legal artifacts and actions. For example, we could assess a contract or brief based on various metrics and conclude that it is a high-quality document based on what it purports to do on the face of the document.¹⁰⁵ But if we were to determine that this contract or brief addresses the wrong problem, then this high-quality solution is ineffective and produces zero value for the client.¹⁰⁶

Likewise, what is the value of a high-quality solution to the right problem if it is unaffordable for a majority of the public?¹⁰⁷ Our current effort-based approach to legal services mostly fails to consider the possibility that reductions in effort might be possible without reducing quality and effectiveness, while at the same time increasing affordability and thus value.¹⁰⁸ Indeed, the purpose of a quality movement is to improve quality and value while reducing effort.

Despite the importance of measuring quality and value, some raise concerns that high-stakes measurement systems carry the risk of omitting important aspects of value.¹⁰⁹ When this happens, stakeholders may focus on certain metrics while ignoring important values that are not measured.¹¹⁰ Often lost in this discussion is the harm of failing to pursue rigorous measures of quality and value, which is essentially the status quo in law. There is no basis to argue that suboptimal metrics will always be worse than not having (explicit) metrics. In any event, the

best course is to develop frameworks for value that consider all stakeholders and all benefits and costs. So long as we proceed responsibly, the potential benefits of establishing objective, quantitative measures of legal-services quality and value far outweigh the risks.

B Sample Model for Measuring Legal-Services Value¹¹¹

Sample proposes a comprehensive model for measuring legal-services value consisting of four basic categories: effectiveness, affordability, client experience, and third-party effects.¹¹²

1 Effectiveness

Sample defines effectiveness as “[e]ffectiveness in accomplishing clients’ legal goals and protecting clients’ legal interests....”¹¹³ Examples of effectiveness metrics include greater recoveries for injured plaintiffs, fewer criminal convictions, lighter sentences, successful mergers, and the effective distribution of assets upon one’s death.¹¹⁴

Sample says that prior research has found large differences in practitioner performance (e.g., rates of successful refugee applications), while some legal services may be routine and exhibit little variation in effectiveness. It is also important to recognize that goals differ between practice areas and between clients.¹¹⁵

2 Affordability

Sample defines affordability as not only the absolute price, but also prices structured in an affordable way.¹¹⁶ For example, a fixed fee guaranteed at the beginning of a matter is more valuable than the same amount charged at the end of a matter when the client bore the risk that the accumulation of hourly fees could have been more.¹¹⁷ Depending on a client’s specific needs, legal-services providers can structure an engagement in innumerable ways to be more affordable.

3 Client experience

In defining client experience, Sample looks to the manner in which the service is delivered and how interacting with the service provider affects the client’s time and psychological resources.¹¹⁸ Sample asserts that timeliness matters to most clients, including the demands on clients’ time.¹¹⁹ Sample also mentions the value of time to resolution, but this seems more like a measure of effectiveness.¹²⁰ Sample also discusses the many ways in which communication is essential to client-experience value, and highlights differences for individual versus corporate clients.¹²¹

4 Third-party effects

Sample’s model accounts for the effects that legal services can have on various people other than the client and service provider.¹²² For example, clients may value diversity as a social goal, in addition to valuing workforce diversity as contributing to effectiveness, affordability, or client experience.¹²³ Clients may also value a service provider sharing its knowledge in publications, making charitable contributions, or engaging in pro bono work.¹²⁴

When considering publicly funded legal services, some of the value produced might benefit society generally, not necessarily the client.¹²⁵ For example, high-quality, criminal-defense representation might contribute to increased legitimacy for the legal system by increasing perceptions of fairness, reducing workloads for courts, and lowering expenses for the state by

reducing unnecessary pretrial incarceration.¹²⁶ Funders may also value systematic advocacy that aims to create change in legal systems and society.¹²⁷

C Sandefur and Clarke Framework for Evaluating “Roles beyond Lawyers” for Increasing Access to Justice

Rebecca Sandefur and Thomas Clarke propose a framework for evaluating the functioning and impacts of “roles beyond lawyers” (RBL) programs aimed at improving access to legal services. In RBL programs, jurisdictions authorize individuals to provide assistance within the traditional domain of attorneys.¹²⁸

While the authors do not explicitly make the connection, their framework could also be used to evaluate the use of technology to deliver legal services. Additionally, most aspects of Sandefur and Clarke’s model apply equally to all law practice, so it is informative for anyone who wants to assess the value of legal services.

To achieve the twin aims of ensuring access to justice and protecting consumers, Sandefur and Clarke state that program evaluation must first examine the program *goals*, describe the *roles* to be designed, and map the *context* within which each program operates.¹²⁹ After this step, RBL programs can be evaluated based on the *appropriateness* of the tasks for non-attorneys and *efficacy* of the RBL-completed tasks for the participants in the legal matters.¹³⁰ Finally, program evaluation includes an assessment of the *sustainability* of the service model.¹³¹

1 Stage 1: goals, roles, and context

The evaluation of any program must “begin with a clear understanding of the goals that program designers seek to achieve.”¹³² While most programs have aspirational motives, such as increasing court access or decreasing court costs, a program must have concrete, tangible goals. Certain programs might seek to help people commence a formal legal process, while others may seek to help more participants who have begun the process actually complete it (such as divorce).

The role itself must be clearly defined, with the relevant RBL tasks and powers clearly enumerated, distinguishing between the attorney’s and RBL’s role in the process, and clarifying what the RBL is, and is not, responsible for performing.¹³³

To understand the program’s context, Sandefur and Clarke say that evaluation must look beyond the concrete legal process and take into account both the participants in the legal process and the work environment.¹³⁴ Participants include not just those who receive services, but those who work alongside and across from the RBLs. For instance, RBLs who work in eviction matters may not be viewed as legitimate advocates or practitioners if the landlord attorneys across the table feel their normal operating practices are threatened.¹³⁵ Finally, understanding work environment norms is critical to understanding potential broader impacts of the program.¹³⁶ For example, what will be the effect of a program that circumvents informal but established norms of settling cases in the hallways outside of the court proceedings?¹³⁷

2 Stage 2: appropriateness and efficacy

Sandefur and Clarke describe appropriateness as whether the program has identified discrete tasks that make a material difference and which individuals who are not fully trained attorneys can competently perform.¹³⁸ This requires an assessment of the specialized knowledge necessary to complete the task.¹³⁹

To evaluate program efficacy, Sandefur and Clarke suggest two components: (1) competent performance of the work and (2) the impact of the work.¹⁴⁰ They acknowledge that different stakeholders often have different goals, which will lead to different metrics.¹⁴¹

Work product of satisfactory quality, such as documents, advice, and information, reflects competent performance.¹⁴² The authors suggest “blind” audits, such as by attorneys who practice before that court, to assess document quality, including accuracy and correctness.¹⁴³ The authors suggest comparing documents prepared by RBLs to documents prepared by unassisted litigants and attorneys.¹⁴⁴

Measuring competence also includes observing the interpersonal work of RBLs. The authors suggest establishing clear protocols describing what RBLs may do, may not do, and should do.¹⁴⁵ Data-gathering can include interviews of other parties and experts’ observations of RBLs’ work.¹⁴⁶

Another element of efficacy identified by the authors is “use,” as reflected by the rate of users receiving assistance through the program.¹⁴⁷ Depending on the specific goals, “use” can be measured by the volume of documents produced with RBL assistance, for example.¹⁴⁸

Sandefur and Clark note that specific programs may have other efficacy goals, including:

1. Reducing the burdens on courts. Metrics could include the number of appearances required and time elapsed from filing to decision.¹⁴⁹
2. Procedural justice. This is of interest not only as a reflection of customer satisfaction, but also because it has been linked to legal-system legitimacy and compliance with the result of court processes.¹⁵⁰
3. Improving litigant understanding.¹⁵¹
4. Participation. Metrics could include default rates for litigants failing to appear in court proceedings.¹⁵²
5. Changing litigant outcomes.¹⁵³

Sandefur and Clarke also consider the correct baseline standard for assessing RBLs: Is it an absolute standard, such as correctness; a comparison to fully qualified lawyers; or a comparison to a litigant who receives no assistance?¹⁵⁴

These questions require considerations of quality, effectiveness, and value. The quality of legal services, whether delivered by lawyers, RBLs, or technology, ought to be determined first based on an objective standard, such as correctness. Then, we can consider other benefits and costs with a model that considers total value, such as Semple’s. Legal services that are less than absolutely, completely correct may still be highly effective, and thus add value. If litigants run the risk of receiving no assistance, a model ought to account for the value of less than perfect, yet effective assistance.

3 Stage 3: sustainability

Sandefur and Clarke say that the sustainability of an RBL program depends on the perceived value of the program, and whether it is viewed as a legitimate avenue for legal services.¹⁵⁵ Value is often determined from the perspective of legal aid funders, but Sandefur and Clarke also say that the service recipients must see value in the RBL program versus representation through other potential providers, such as attorneys.¹⁵⁶ And within the program, RBL practitioners themselves must see value in the roles and the work itself.¹⁵⁷ Demonstrating the value of RBL programs relates to the broader issue of legitimizing alternative, but equally effective and viable, methods of legal-services delivery.

D An Example Value Model for Contracts

How can an organization measure the total value of a particular legal service? Contracts provide an interesting example. Lawyers tend to focus on drafting and negotiating specific legal terms in contracts. But what about other costs and benefits to the organization, such as the value of quickly closing the deal and recognizing revenue, and the cost of possibly losing the deal by prolonging negotiations?

Paul Lippe has proposed a “Contract Quality Model” to assess the total value of a contract to a client.¹⁵⁸ His model provides flexibility for an organization to assign weights to reflect the importance of each item to the organization.

1. Speed and cost of contracting:
 - a. direct cost;
 - b. time to complete;
 - c. sales (or procurement) time and effort;
 - d. relationship impact; partner and customer satisfaction;
 - e. deal uncertainty to close.
2. Risk:
 - a. size and probability of future contingent liability;
 - b. reputational risk;
 - c. risk of legal sanction;
 - d. risk of revenue recognition problem;
 - e. risk of loss of relevant asset or rights;
 - f. risk of non-payment.
3. Commercial impact:
 - a. payment timing;
 - b. margin and pricing;
 - c. future business;
 - d. optionality.
4. Overall alignment:
 - a. commonality of interest and understanding between parties—probability of successful execution;
 - b. commonality of interest and understanding within parties—probability of successful execution;
 - c. consistency of business terms;
 - d. consistency of non-business terms.

This model establishes a framework for measuring the value produced by a contract for the organization. With these targets in mind, legal-services organizations can evaluate the quality of approaches, clauses, technology tools, etc., in terms of maximizing the value produced, and learn and make adjustments over time to improve quality and value.

VI INITIATIVES TO DEVELOP METRICS FOR LEGAL-SERVICES DELIVERY

Various organizations have initiated efforts to measure aspects of legal-services quality or value. Many rely on surveys and other client-feedback mechanisms to gather data about outside counsel. Most also focus on broad notions of value, not the substantive quality of the underlying legal work or artifacts produced. Nevertheless, this work is useful to inform our understanding of value as defined by clients.

A Association for Corporate Counsel (ACC) Value Challenge

The ACC Value Challenge endorses the concept that outside law firms can greatly improve the value they deliver, reduce their costs, and still maintain strong profitability.¹⁵⁹ The ACC published a comprehensive guide on the topic: *Managing Value-based Relationships with Outside Counsel*.¹⁶⁰ The guide includes significant information on establishing metrics, including metrics for outside counsel performance.¹⁶¹ ACC Legal Operations also offers *Unless You Ask: A Guide for Law Departments to Get More from External Relationships*, which provides significant advice on value production and metrics.¹⁶²

B Corporate Legal Operations Consortium (CLOC)

CLOC provides numerous resources on metrics, including a dictionary and glossary of metrics.¹⁶³ CLOC also provides a law firm performance sample survey, scorecards,¹⁶⁴ and a qualitative evaluation form.¹⁶⁵ According to CLOC's *2019 State of the Industry Survey*, more than half of corporate legal departments surveyed conducted performance reviews of at least some of their law firms.¹⁶⁶ More than half of those conduct performance reviews using the following categories to evaluate overall law firm performance and value:

1. quality of work;
2. Cost-effectiveness;
3. responsiveness and timeliness;
4. results/outcomes;
5. understands and aligns with our business;
6. service delivery;
7. diversity and inclusion.

C AdvanceLaw

AdvanceLaw acts as a central organization on behalf of more than 250 general counsel, collecting performance data from their GC members on matters awarded to law firms. AdvanceLaw pools performance information and acts as a "quality control" intermediary in vetting, identifying, and facilitating appropriate law firms to perform work for their GC members.

AdvanceLaw's "GC Thought Leaders Experiment" found, based on evaluations by its members, that top-20 Am Law firms lagged behind the rest of the Am Law 200 in delivering high-quality client service.¹⁶⁷ This finding was based on in-house evaluations of work performed by outside counsel on more than 1,400 legal matters. Performance scores assessed (1)

quality of work, (2) responsiveness, (3) legal expertise, (4) solutions focus, (5) likelihood to recommend, (6) outcome (vs. expectation), and (7) cost/efficiency.¹⁶⁸

D Contracting Standards by the International Association for Contract & Commercial Management (IACCM)

The IACCM has partnered with Contract Standards (which uses technology to analyze and extract data from large contract repositories) to develop (1) standard contract clauses based on the analysis of standard agreements, (2) the IACCM Contracting Principles, and (3) the IACCM Contract Design Pattern Library.¹⁶⁹ The IACCM aims to reduce resources expended on negotiating standard terms and increase the speed of parties reaching agreement.¹⁷⁰

E Clio Data Collection about the Legal Industry

Clio, a law practice management software provider, began collecting aggregated and anonymized data from thousands of legal professionals and clients in 2016. Now in its fourth year, Clio's *Legal Trends Report* provides a legal-industry snapshot. Some of the data has surprised industry followers, such as figures indicating that lawyers in the study spend only 2.3 hours a day on billable tasks and that 60% of law firms did not respond to inquiry emails.¹⁷¹

F Standards Advancement for Legal Assessments Alliance (SALI Alliance)

Established in 2017, the SALI Alliance is a legal industry nonprofit dedicated to creating openly available, objective terminology and standards for legal work.¹⁷² The backbone of SALI's current work is the Legal Matter Specification Standards, a framework for classifying and describing legal matters. In August 2019, Microsoft signed up to be its first official user.¹⁷³

G Measuring Legal-Services Innovation: the Legal Services Innovation Index

I launched the Legal Services Innovation Index in August 2017, an effort that includes a catalog of innovations implemented by specific law firms and an index of law schools that others have identified as innovative.¹⁷⁴ As of January 2020 the law firm catalog includes over 700 entries broken down by substantive legal practice area and the tool or discipline driving the innovation.

VII STAKEHOLDER BENEFITS OF A QUALITY MOVEMENT AND STANDARD LEGAL-SERVICES DELIVERY METRICS

A quality movement would produce many benefits for legal-industry stakeholders. To inspire future work, below I provide a brief, high-level sketch of stakeholder groups and benefits.

A Practitioners: Opportunities to Differentiate Their Practices and Work at the Top of Their License

Pressure continues to increase on lawyers to innovate and improve efficiency, quality, and outcomes. Competitors today include not only other lawyers, but also “do it yourself” clients, alternative legal-services providers, legal-process outsourcers, other professionals, and legal technology providers.¹⁷⁵ At the same time, California, Utah, Arizona, and other states are taking significant steps toward eliminating lawyers’ monopoly and creating even more opportunities for new providers to satisfy consumers’ unmet needs.¹⁷⁶ To be competitive in the future, lawyers must differentiate themselves from new service providers and demonstrate the value that they can provide to customers.

Greiner and Matthews observe that, according to one scholar, “medicine’s adoption of the RCT stemmed in part from a desire among elite physicians to establish an irrefutable methodology to distinguish effective therapies from commercially promoted snake oil.”¹⁷⁷ In law, gradations in legal-services delivery quality are likely to be much more nuanced. Nevertheless, standard metrics for quality and value will help superior lawyers and legal-services organizations differentiate themselves from others.

Finally, applying process improvement, project management, data analytics, and technology will allow lawyers to augment and automate various aspects of their work. The best lawyers and legal-services organizations will figure out how to make the most of automation to provide humans the opportunity to focus on tasks where they can add the greatest value. This transition will require lawyers to find new ways to add value, going well beyond just doing the same things better, faster, and cheaper. For example, legal-services professionals can shift to proactive law¹⁷⁸ approaches that focus on problem prevention and preventive maintenance for clients. Additionally, lawyers should seek out opportunities to contribute to multi-disciplinary teams tackling society’s wicked problems, such as developing governance for artificial intelligence and reimagining the rule of law in our rapidly emerging digital society.

B Regulators: Fostering Improved Quality and Access to Legal Services

Regulators need quality standards to evaluate the provision of legal services by lawyers, by other professionals, and with technology. Frameworks for assessing quality and value will help guide regulators as jurisdictions open up the market for legal services. Regulators, judges, and other lawyers frequently ask how we know that a legal technology tool will help people. At the same time, we do not have robust data showing how legal services provided by humans help people or whether we maximize the value for individuals and society of the resources currently deployed. While we undeniably need quality and value standards to evaluate data analytics and technologies used for legal-services delivery, we need to develop these standards so that they apply to legal-services delivery across the board, no matter how the services are delivered.

Regulators will also contribute to developing frameworks and standards, including guiding and regulating the development of technology that will undertake increasingly sophisticated legal-services tasks and matters. Law schools must also contribute to these initiatives, including by introducing students to the need for evidence-based practice and empiricism.¹⁷⁹ As Jim Greiner has advocated, “[t]he new legal empiricism, which exists in pockets in the academy

but only rarely outside of it, could transform the U.S. legal profession into an evidence-based field.”¹⁸⁰

C Legal Profession: Getting to the Root of Overwork, Discrimination, and Other Pernicious Problems

Lawyers worry that applying process improvement, project management, data analytics, and technology to their work will reduce them to cogs in machines. The reality is that current law practice has become more stressful and regimented, as economic pressures have increased.¹⁸¹ Our current ways of doing things lead to overwork and a chaotic work environment, in which attorneys feel the need to perform heroically to meet opaque, ill-defined standards and norms for performance. In this chaotic environment, it should be no surprise that lawyer depression, alcoholism, and work–life balance are serious problems.¹⁸² While this environment is challenging for all lawyers, it has a disproportionately negative effect on women and underrepresented groups.

Discrimination, bias, and a lack of diversity are significant problems across the legal industry.¹⁸³ Traditionally, pedigree drove hiring and promotion decisions, not objective metrics that demonstrably correlate with legal-services quality and value. It is also troubling that law firms, when assessing performance, give undue weight to effort metrics—primarily billable hours. A commitment to quality will lead to the development of metrics better aligned with quality and value and force us to get to the root causes of the pernicious problems that continue to plague the legal profession.

D Customers and Society: Providing 100% Access to Law and Legal Services for Everyone and Expanding the Rule of Law

Standard metrics for quality and value would make it easier for customers to evaluate legal services and make informed choices. Introducing greater transparency ought to improve the functioning of the legal-services marketplace, which would contribute to improving access to legal services for everyone.

Thinking about the role of law in society, as we proceed with a quality movement and begin to measure legal-services value and quality, we will quickly realize that we lack concrete goals. Measuring quality and value cannot occur in a vacuum. As mentioned earlier, organizations and institutions must establish clear outcomes that they wish to achieve (e.g., a mission and vision). If we do not know what outcomes we aim to achieve or what metrics will tell us when we have achieved these outcomes, we are destined to fail.¹⁸⁴ It is time to move past platitudes and hold ourselves accountable for meeting the needs of society.

We must hold ourselves accountable for providing everyone access to law, legal information, and avenues to meet basic legal needs. If we cannot accomplish this in a digital age, how can the legal industry expect to preserve and expand the rule of law and contribute to solving much more challenging problems in society? Embracing a quality movement and establishing standard metrics for quality and value are necessary to ensure that legal services, systems, and institutions serve society, today and in the future.

VIII CONCLUSION

As stated in the introduction, the goal of this chapter is to catalyze debate, rigorous research, and sustained action to undertake a quality movement in the legal industry and develop standard metrics for legal-services quality and value. This work is necessary before we can make substantial progress with innovation, data analytics, and artificial intelligence in law. As the pace of technological advancement increases, the stakes grow even higher. This work is also critical for improving the legal profession, access to legal services, justice, and the law itself. Many fret about the future and expend considerable energy debating what it holds. We have wasted too much time worrying about what will happen to us. It is up to us to imagine the future we want to have, identify the obstacles in our path, and do the work to overcome those obstacles and create our better future.

NOTES

1. See MODEL RULES OF PROF'L CONDUCT (1983).
2. Daniel W. Linna Jr., *Law Practice: From Art to Science*, VIMEO (Apr. 4, 2014), <https://vimeo.com/90956657>.
3. Ron Dolin, *Measuring Legal Quality* 1 (Jun. 20, 2017) (unpublished manuscript), <https://ssrn.com/abstract=2988647>.
4. In his call for a "New Legal Empiricism," James Greiner identifies numerous critical research questions in law, including: "Can algorithms and scoring systems, administered by human beings or computers implementing artificial intelligence programs, improve the functioning of courts, legal-services offices, court administrators, and other key actors within the justice system, as is already occurring in the medical profession?" See James Greiner, *The New Legal Empiricism & Its Application to Access-to-Justice Inquiries*, 148 DAEDALUS, J. AM. ACAD. ARTS & SCI. 64, 72 (2019).
5. Dana Remus & Frank S. Levy, *Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law*, 30 GEO. J. LEGAL ETHICS 501, 502 (2017).
6. *Id.* at 556.
7. Maura R. Grossman & Gordon V. Cormack, *Technology-Assisted Review in E-Discovery Can be More Effective and More Efficient than Exhaustive Manual Review*, XVII RICH. J.L. & TECH. 11, 12 (2011).
8. Daniel W. Linna Jr., *What We Know and Need to Know about Legal Startups*, 67 S.C. L. REV. 389, 396–99 (2016).
9. RICHARD SUSSKIND, *TOMORROW'S LAWYERS: AN INTRODUCTION TO YOUR FUTURE* 25–31 (2d ed. 2013).
10. See Jeanne Charn, *Celebrating the "Null" Finding: Evidence-Based Strategies for Improving Access to Legal Services*, 122 YALE L.J. 2206, 2206–34 (2013) (identifying studies in which litigants with lawyers fared no better than litigants without lawyers).
11. See Daniel W. Linna Jr., *The Future of Law and Computational Technologies: Two Sides of the Same Coin*, MIT COMPUTATIONAL L. REP. (Dec. 06, 2019), <https://law.mit.edu/pub/thefutureoflawandcomputationaltechnologies>.
12. See Marc Lauritsen & Quinten Steenhuis, *Substantive Legal Software Quality: A Gathering Storm?* PROC. 17TH INT'L CONF. ON ARTIFICIAL INTELLIGENCE AND L.52 (2019), <https://doi.org/10.1145/3322640.3326706>; see also Jack G. Conrad and John Zeleznikow, *The Role of Evaluation in AI and Law: An Examination of Its Different Forms in the AI and Law Journal*, PROC. 15TH INT'L CONF. ON ARTIFICIAL INTELLIGENCE AND L.181 (2015), <https://doi.org/10.1145/2746090.2746116>; see also Daniel W. Linna Jr., *Training Lawyers to Assess Artificial Intelligence and Computational Technologies*, LEGALTECH LEVER (Sept. 21, 2018), <https://www.legaltechlever.com/2018/09/training-lawyers-assess-artificial-intelligence-computational-technologies>.

13. Thomas H. Davenport & Rajeev Ronanki, *Artificial Intelligence for the Real World*, HARV. BUS. REV. 108 (2018).
14. See PAUL R. DAUGHERTY & H. JAMES WILSON, *HUMAN + MACHINE: REIMAGINING WORK IN THE AGE OF AI* (2018).
15. See Davenport & Ronanki, *supra* note 13, at 116 (“But with the right planning and development, cognitive technology could usher in a golden age of productivity, work satisfaction, and prosperity.”).
16. William H. Simon, *Where is the “Quality Movement” in Law Practice?*, 2012 WIS. L. REV. 387 (2012).
17. LISA ROHRER AND NICOLE DEHORATIUS, SEYFARTH LEAN: TRANSFORMING LEGAL SERVICE DELIVERY AT SEYFARTH SHAW (Harvard Law School 2015); *7-Eleven Awarded for Lean Six Sigma Efforts in Legal Department*, SIX SIGMA DAILY (June 26, 2018), <https://www.sixsigmadaily.com/seven-eleven-awarded-lean-six-sigma-legal-department/>; *Lean Lawyering: A Florida Legal Aid Office Test Drives the Toyota Way*, THE FLA. B. FOUND. (Aug. 2, 2017), <https://thefloridabarfoundation.org/lean-lawyering-florida-legal-aid-office-test-drives-toyota-way/>; David Cunningham, *Optimizing Legal Ops in Law Firms*, LEGAL EVOLUTION (Sept. 15, 2019), <https://www.legalevolution.org/2019/09/optimizing-legal-operations-in-law-firms-116/>.
18. See DANIEL W. LINNA JR. & DAVID CURLE, THOMSON REUTERS LEGAL EXECUTIVE INST., *LARGE LAW FIRM TECHNOLOGY SURVEY: LAW FIRM LEADER PERCEPTIONS OF THE VALUE OF TECHNOLOGY* (2020), <http://www.legalexecutiveinstitute.com/white-paper-law-firm-technology>. For an introduction to an innovation framework for leveraging technology for legal services based on “lean thinking,” see Daniel W. Linna Jr., *Legal-Services Innovation: A Framework and Roadmap for Leveraging Technology*, LEGALTECH LEVER (July 6, 2017), <https://www.legaltechlever.com/2017/07/legal-services-innovation-framework-roadmap-leveraging-technology/> (citing Daniel W. Linna Jr., *Leveraging Technology to Improve Legal Services: A Framework for Lawyers*, 96 MICH. B. J. 20 (2017)).
19. See Morton Mintz, *Burger Again Blasts Unqualified Lawyers*, WASH. POST (Feb. 13, 1978), <https://www.washingtonpost.com/archive/politics/1978/02/13/burger-again-blasts-unqualified-lawyers/9c980e8a-27d3-4cd7-9b36-9277b54c4fa4/>; David Margolick, *Burger Says Lawyers Make Legal Help Too Costly*, N.Y. TIMES, (Feb. 13, 1984), <https://www.nytimes.com/1984/02/13/us/burger-says-lawyers-make-legal-help-too-costly.html>.
20. Att’y Gen. Robert F. Kennedy’s Address to University of Chicago Law School (May 1, 1964), <https://www.justice.gov/sites/default/files/ag/legacy/2011/01/20/05-01-1964.pdf>.
21. Bob Ambrogi, *Jim Sandman’s Five Requirements for Tech to Improve Access to Justice*, LAWSITES (Jan. 20, 2020) <https://www.lawsitesblog.com/2020/01/jim-sandmans-five-requirements-for-tech-to-improve-access-to-justice.html>.
22. Daniel James Greiner & Andrea Matthews, *Randomized Control Trials in the United States Legal Profession*, 12 ANN. REV. L. AND SOC. SCIENCE 295 (2016).
23. Simon, *supra* note 16, at 389.
24. “[M]ost practitioners (and, undoubtedly, clerks of court) know how very uneven legal services are.... [E]ven respected practitioners and firms have their off days when they scatter about random blunders.” Rick J. Carlson, *Measuring the Quality of Legal Services: An Idea Whose Time has not Come*, 11 LAW & SOC’Y REV. 287, 297 (1976); see also Simon, *supra* note 16, at 390.
25. “The evaluation and improvement of any human-services delivery system requires attention to its distribution, cost, accessibility, impact, and quality.” Michael Saks & Alice R. Benedict, *Evaluation and Quality Assurance of Legal Services: Concepts and Research*, 1 LAW & HUM. BEHAV. 373 (1977).
26. Simon, *supra* note 16, at 402–403.
27. For discussion about why lawyers have not embraced the quality movement and evidence-based practice see Simon, *supra* note 16, at 404–5, and Greiner & Matthews, *supra* note 22, at 10–12.
28. Simon, *supra* note 16, at 391.
29. See Robert Anderson & Jeffrey Manns, *The Inefficient Evolution of Merger Agreements*, 85 GEO. WASH. L. REV. 57 (2017); see also Kingsley Martin, *Contract Maturity Model (Part 3): Evolution of Content from One-Offs to Modular Components*, THOMSON REUTERS LEGAL EXECUTIVE INST. (July 20, 2016), <https://www.legalexecutiveinstitute.com/contract-maturity-modular-components/>.

30. Simon, *supra* note 16, at 394.
31. “[W]ithout sensitive measures of quality, there is no way of knowing what the state of the legal art is....” CARLSON, *supra* note 24, at 296.
32. Saks, *supra* note 25, at 375.
33. *Id.* at 375.
34. *Id.*
35. Simon, *supra* note 16, at 396.
36. *Id.* at 397.
37. *Id.* at 398.
38. *Id.* at 397.
39. *Id.* at 398 (citing VALUE PRACTICE: FOCUS ON AFTER ACTION REVIEW AS A WAY OF ADDING VALUE, ASS’N CORP. COUNS., (2012).
40. Simon, *supra* note 16, at 398.
41. *Id.* at 399–401.
42. *Id.* at 400.
43. *Id.*
44. Carlson, *supra* note 24, at 307–8.
45. *Id.* at 289.
46. Saks, *supra* note 25, at 378.
47. *Id.* at 378–9.
48. *Id.* at 378.
49. Greiner, *supra* note 4, at 65.
50. Saks, *supra* note 25, at 379.
51. Greiner & Matthews, *supra* note 22, at 1.
52. *Id.* at 7.
53. See Greiner, *supra* note 4, at 65.
54. See Greiner & Matthews, *supra* note 22, at 7.
55. *Id.*
56. *Id.* at 2.
57. *Id.*
58. *Id.* at 8.
59. *Id.*
60. *Id.* at 2.
61. *Id.*
62. In legal academia, the empirical legal studies movement began in the early 1980s. See CORNELL L. SCH., *Empirical Legal Studies*, <https://www.lawschool.cornell.edu/empirical-legal-studies/default.cfm> (last visited Feb. 16, 2020). Empirical legal studies, however, tends to focus more narrowly on pure legal questions in comparison to the broader nature of empirical studies in other fields; see also *Empirical Legal Studies*, WIKIPEDIA, https://en.wikipedia.org/wiki/Empirical_legal_studies (last visited Feb. 16, 2020).
63. Noel Semple, *Measuring Legal Service Value*, 52 U.B.C. L. REV. 943, 963 (2019).
64. Carlson, *supra* note 24, at 295.
65. *Id.* at 296.
66. Semple, *supra* note 63, at 971.
67. *Id.* at 974.
68. Dolin, *supra* note 3, at 2.
69. Low response rates, poor research design, and biases introduced by failing to adhere to rigorous methods ought to make us skeptical of some of the survey work done in the legal industry today.
70. Semple, *supra* note 63, at 964–65.
71. “Studies of client satisfaction ... are of problematic value (since clients frequently praise services that are shoddy by most other measures).” Saks, *supra* note 25, at 378.
72. Semple, *supra* note 63, at 967.
73. *Id.*
74. Rigorous qualitative techniques can supplement these efforts, of course. Greiner identifies structured interviews, focus groups, structured observation of relevant events, and reviewing relevant

- documents as possible qualitative techniques. In addition to his emphasis on RCTs, Greiner identifies surveys of randomly selected respondents and predictive models as examples of quantitative techniques. See Greiner, *supra* note 4, at 67.
75. Semple, *supra* note 63, at 976.
 76. *Id.* at 977.
 77. Dolin, *supra* note 3, at 5.
 78. *Id.*
 79. Carlson, *supra* note 24, at 303.
 80. “Validity is the degree to which ‘a particular indicator measures what it is supposed to measure rather than reflecting some other phenomenon.’” Semple, *supra* note 63, at 979 (quoting EDWARD G. CARMINES & RICHARD A. ZELLER, *QUANTITATIVE APPLICATIONS IN THE SOCIAL SCIENCES: RELIABILITY AND VALIDITY ASSESSMENT* 16 (1979)).
 81. “Reliability is the extent to which a measurement will consistently produce the same results.” Semple, *supra* note 63, at 981 (quoting CARMINES & ZELLER, *supra* note 81).
 82. See Semple, *supra* note 63, at 978–84 (discussing methodological problems with output metrics).
 83. Carlson, *supra* note 24, at 295–96; Semple, *supra* note 63, at 984.
 84. *Id.* (citing ATUL GAWANDE, *THE CHECKLIST MANIFESTO* (2009)).
 85. *Id.* at 986.
 86. *Id.*; “Quality can provisionally be defined as ‘adherence to a standard.’” Carlson, *supra* note 24, at 306.
 87. Semple, *supra* note 63, at 988.
 88. Carlson, *supra* note 24, at 310–311; Semple, *supra* note 63, at 985.
 89. *Id.*
 90. Linna, *supra* note 8, at 399.
 91. Dolin, *supra* note 3, at 2 (citing the “DuPont legal model” developed by the DuPont corporate legal department).
 92. Itai Gurari, *Judging Lawyers: Objectively Evaluating Big Law Litigation Departments*, JUDICATA (Jan. 16, 2018), <https://blog.judicata.com/judging-lawyers-objectively-evaluating-big-law-litigation-departments-dec7084d86ab>.
 93. Semple, *supra* note 63, at 988.
 94. *Id.* at 988–89.
 95. *Id.* at 989.
 96. Carlson, *supra* note 24, at 295.
 97. Semple, *supra* note 63, at 991.
 98. *Id.*
 99. Carlson, *supra* note 24, at 295.
 100. Semple, *supra* note 63, at 991.
 101. *Id.* (citing several sources).
 102. See, e.g., William D. Henderson, *The Bursting of the Pedigree Bubble*, 21 NALP BULLETIN 12 (2009); Firoz Dattu & Aaron Kotok, *Largest, Most Pedigreed Firms Underperform on Service Quality*, THE AMERICAN LAWYER (Dec. 12, 2018), <https://www.law.com/americanlawyer/2018/06/12/large-pedigreed-firms-underperform-on-service-quality-compared-to-other-firms>.
 103. See Daniel W. Linna Jr., *Law School Innovation Index*, <https://www.legaltechinnovation.com/law-school-index/> (last visited Jan. 19, 2020); see also INST. FOR THE FUTURE L. PRAC., <https://www.futurelawpractice.org/> (last visited Jan. 19, 2020).
 104. See Tim Cummins, *Contracts: Developing a Quality Index*, COMMITMENT MATTERS BLOG (May 9, 2018), <https://blog.iaccm.com/commitment-matters-tim-cummins-blog/contracts-developing-a-quality-index>.
 105. For example, we could evaluate a choice of New York law and exclusive jurisdiction in New York.
 106. If the contract provides exclusive jurisdiction in New York but the client wanted an arbitration clause, this provision is of little, if any, value to the client.
 107. See Semple, *supra* note 63, at 998. Semple points out that a singular focus on quality without considering price “encourages an ‘all-Cadillac’ legal service marketplace and exacerbates the access to justice problem.”
 108. In another example of considering tradeoffs more carefully, Greiner points out that legal aid organizations may be incentivized to take on “strong” cases while turning away “weak” cases. But what

if empirical research were to reveal that people with strong cases would have been fine without representation? Perhaps greater value could be generated by taking on weak or middling cases. See Greiner, *supra* note 4, at 65.

109. Semple argues that we must not allow “mathematical measurements devised by outsiders” to crowd out qualitative human judgment. Semple, *supra* note 63, at 963.
110. In most law firms, the measurement of billable hours overshadows quality and important values, including work satisfaction, work–life balance, equality, and diversity. The thoughtful implementation of frameworks to measure total value and quality will force us to account for shortcomings and negative externalities.
111. Semple, *supra* note 63.
112. *Id.* at 951.
113. *Id.* at 952.
114. *Id.*
115. *Id.*
116. *Id.* at 953.
117. *Id.* at 953–54.
118. *Id.* at 955.
119. *Id.*
120. *Id.*
121. *Id.* at 955–58.
122. *Id.* at 958.
123. *Id.* at 958–59.
124. *Id.* at 959.
125. *Id.*
126. *Id.*
127. *Id.* at 960.
128. Rebecca L. Sandefur & Thomas M. Clarke, *Designing the Competition: A Future of Roles Beyond Lawyers? The Case of the USA*, 67 HASTINGS L.J. 1467, 1469 (2016).
129. *Id.* at 1474–75.
130. *Id.* at 1472.
131. *Id.*
132. *Id.* at 1474.
133. *Id.*
134. *Id.* at 1474–75.
135. *Id.* at 1475.
136. *Id.*
137. *Id.*
138. *Id.* at 1476.
139. *Id.*
140. *Id.*
141. *Id.* at 1477.
142. *Id.*
143. *Id.*
144. *Id.*
145. *Id.*
146. *Id.*
147. *Id.* at 1478.
148. *Id.*
149. *Id.*
150. *Id.* at 1478–79.
151. *Id.* at 1479.
152. *Id.*
153. *Id.* at 1479–80.
154. *Id.* at 1480.
155. *Id.* at 1480–81.

156. *Id.* at 1482.
157. *Id.* at 1481–82.
158. Paul Lippe, *Contract Quality Model* (Nov. 19, 2019) (unpublished manuscript) (on file with author).
159. FREDERICK PAULMANN, ASS'N OF CORP. COUNS., GUIDE TO ACC VALUE CHALLENGE: MANAGING OUTSIDE COUNSEL (2011), <https://www.accvaluechallenge-digital.com/accvaluechallenge/acc-guide-to-managing-outside-counsel>.
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161. PAULMANN, *supra* note 159, at 8–10, 35–36.
162. CASEY FLAHERTY, ASS'N OF CORP. COUNS., UNLESS YOU ASK: A GUIDE FOR LAW DEPARTMENTS TO GET MORE FROM EXTERNAL RELATIONSHIPS (2016), <https://uplevelops.com/wp-content/uploads/2017/12/Unless-You-Ask-A-Guide-For-Law-Departments-to-Get-More-From-External-Relationships.pdf>.
163. *Metrics*, CORP. LEGAL OPERATIONS CONSORTIUM, <https://cloc.org/metrics/> (last visited Dec. 30, 2019).
164. *Law Firm Performance Evaluation Survey*, CORP. LEGAL OPERATIONS CONSORTIUM, <https://cloc.org/law-firm-performance-evaluation-survey> (last visited Dec. 30, 2019) (membership required); for another example of scorecards, see Bill Henderson, *My Long History with Law Firm Scorecards*, LEGAL EVOLUTION (Apr. 29, 2018), <https://www.legalevolution.org/2018/04/long-history-law-firm-scorecards-047>.
165. *See* CORP. LEGAL OPERATIONS CONSORTIUM (2019), *supra* note 163.
166. CORP. LEGAL OPERATIONS CONSORTIUM, 2019 STATE OF THE INDUSTRY SURVEY: RESULTS AND ANALYSIS 22 (2019) <https://cloc.org/wp-content/uploads/2019/07/2019-State-of-the-Industry-FINAL.pdf>.
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168. *Id.*
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179. Greiner, *supra* note 4, at 73.
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