Changes to legal ethics codes could push lawyers to embrace legal technology, but will the technology make lawyers less ethical? In the last five years, over fifty percent of states have added language to their ethics codes that calls for lawyers to familiarize themselves with the technological tools of the profession.

Technologists have declared this addition a victory against Luddite lawyers which will hasten the adoption of legal technology and ultimately benefit clients. There is some evidence that the change could make a difference. In *James v. National Finance, LLC*, the Delaware Chancery Court invoked the technological competency provision when it rejected the argument that a lawyer should be excused from sanction for filing inaccurate spreadsheets because he could not turn on a computer without help.

Still, this ethical “sea change” is a moderate one for now. States have not generally altered their ethical rules regarding competency. Instead, they have opted to alter the advisory commentary to the rules. These changes mirror the equivocal wording suggested by the American Bar Association: lawyers must maintain knowledge of “the benefits and risks associated with relevant technology” (emphasis mine).

It is possible, however, that technological competency could someday become a basis for discipline. If so, should we consider how difficult it will be for lawyers to assess the benefits and risks of relevant technology? If history is any guide, it will be easy to assess future technology. Many innovations—from typewriters, to photocopiers, to personal computers—have been straightforward performance enhancements. There was little need for a lawyer to understand precisely how these devices worked, because operating them did not remove anything of legal significance from the lawyer’s view. This made it simple for the lawyer to assess reliably whether the technology was producing better outputs. For example, the
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By Toby Brown
The expansion of legal operations roles within client legal departments has opened the door to real change. These roles represent clients’ awareness of the need to do things differently.

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Skill fade becomes problematic when an automated system fails. If we conceive of system failure as an inability to access or otherwise use automated programs, then system failure in legal practice would be incredibly rare. It might happen during a long-term power outage, internet failure, or something similarly dramatic. While these developments are not impossible—Puerto Rico stands as a continuing example—they are highly improbable. I have been doing legal research since the turn of the millennium, and I haven’t looked at pocket parts since my first year of law school.

However, the inability to access technology is not the only type of system failure. Clients could also be harmed when automation evolves to a point that it ceases to perform as well as lawyers. As with the skill fade from widespread use of autopilot, unnoticed degradation is a bigger risk than the system breaking outright. As legal skills fade, we might be unable to gauge whether the outputs of the system are as good as the outputs that we would have created in the pre-automation period.

One way that this could occur is if we become less connected to the legal resources that inform our work. In a sense, we fall out of the loop. Out-of-the-loop problems are real. Following psychologists like Christopher Wickens, scholars have long been identifying contexts in which automation decreases worker vigilance. The worker grows confident that the system is doing its job. Eventually, the worker becomes unmotivated to keep up with changes in its operation. So-called “OOTL” problems can even impair the ability to know when one lacks the ability to evaluate the quality of system outputs.

One can draw a familiar, non-technological parallel to law firm practice. Many junior litigators have toiled for days or weeks on a brief or motion, only to have an out-of-the-loop partner swoop in at the eleventh hour, read the fruits of their labor, and make a mediocre but successful oral argument. The partner, of course, thinks he or she knocked it out of the park, blissfully unaware of the near failure. Now imagine that automation is the junior litigator and the user is the senior partner.

Skeptics might doubt that algorithms create a risk of system degradation. They might believe that any risk would disappear or become insignificant as technology progresses. They might be right; it is difficult to predict the future, of course. However, the algorithmic programs that are adopted by lawyers will likely learn from lawyer conduct. Consequently, skill fade or out-of-the-loop problems could actually hasten the reduction of system quality without raising any alarms. Machine learning can adopt the worst behaviors of those who interact with it. The Microsoft Twitter bot that began to spew racist bile after less than one day is a cautionary example (albeit one that is rather easy to spot).
Of course, many software companies will give domain experts such as experienced lawyers access to the inner workings of a company’s algorithms in an effort to prevent the program from going off the rails, but even today’s domain experts struggle to understand what is happening with algorithmic technology. Moreover, there is little reason to believe that they will be immune to degradation problems that other lawyers face.

It could nevertheless be argued that a drop in the quality is not necessarily problematic, so long as the drop is more or less uniform across the profession and is paired with a fair drop in prices. If lawyers on both sides of a dispute in 2024 are relying on the same popular software, their clients are not necessarily victimized by the fact that the software fails to meet, say, 2018 performance expectations. Moreover, some scholars believe that lawyers now overshoot client needs by a significant margin. On this thinking, skill fade would have to be severe to fall below client demand. Clients may also accept the drop in quality if matched by a corresponding drop in price. Proponents of technology argue that lawyers will be able to produce client work faster. Then competition will lead lawyers to lower costs. While the profit margins on individual cases or projects might shrink, lawyers will be able to take on more clients to maintain their lifestyles.

This reasoning assumes that clients will be satisfied when the results of legal representation meet their price and performance expectations. Ethical discipline cases for lack of competence are uncommon, and they are rarer still when lawyers’ clients are satisfied with the outputs of representation. Maybe the ethical problem is illusory.

We should resist the urge to adopt such an anemic view of ethical responsibility, though. If we understand lawyers less as hired hands and more as custodians of the integrity of the system of laws, then ethical risks might increase in a system of automation. This is not simply waxing poetic. The preamble to the ABA’s Model Rules of Professional Ethics states in its first sentence that a lawyer is “an officer of the legal system and a public citizen having special responsibility for the quality of justice” and later describes that this involves “cultivat[ing] knowledge of the law beyond its use for clients.” While preambles to ethics codes are seldom used as bases for discipline, the same could be said of the commentary to the rules, including the comment regarding technological competency.

As we begin to rely on algorithms, we should be mindful that our ability to assess it could be threatened, unless we also adopt approaches that preserve our ability and motivation to monitor and assess the justice system itself.
In today’s hyper-competitive environment, the best way to win the race is to ride the right horse. We may pride ourselves on being superb jockeys, but how do we identify the best option? In this article, I summarize the technique of calculating the expected monetary loss or gain from a given alternative. I also review some psychological hardwiring that may thwart our decision-making process.

As professionals, we seek to maximize the wealth of our clients, our companies, and our communities. We succeed by preventing and resolving problems, and by enabling people to achieve their dreams. In a basic sense, our driving purpose is to produce the most value for our clients at the lowest cost. There are patterns and tools that can propel us towards realizing this ambition; however, there are also patterns that can derail us. The ability to make effective decisions is an essential competency. There are techniques that aid us in selecting the best course of action out of a crowd of alternatives. There are also insights into human behavior that can help us steer clear of decision-making pitfalls.

We all want to devote our energies and talents to the most valuable endeavors. The challenge becomes: how can we rank alternatives so that we can identify options with the greatest expected potential? We could assess options by looking solely at their absolute values. However, that strategy overlooks the critical dimension of probability, which is intertwined with the concept of relevancy. The process of finding an alternative can be improved by looking at probability in combination with absolute impact. The technique of expected monetary value (EMV) takes into account both of these dimensions. To calculate EMV, multiply the probability (percentage chance of occurrence) by the impact associated with an event. The outcome is a ballpark estimate of the expected value in terms of dollars. Ascribing probabilities to a given alternative may seem tricky, but fortunately the probabilities can often be sourced from big data analysis, the internet, or expert opinion.

This concept can be readily applied to real-life scenarios. For instance, say we need to decide whether a client should settle a patent litigation suit. In this example, the cost to settle would be $900K. On the other hand, the exposure from an unfavorable judgment is estimated to be $1.2M. Based on an analysis of these data points, litigating the case would be out of the question—$1.2M is clearly greater than $900K. However, that reasoning does not factor in the likelihood that an unfavorable judgment would result. Using decision science and big data, we can gain a sharper economic understanding of whether to settle or not.

There are many data services that provide statistics on judicial outcomes. Big data enables us to harness the experience from many outcomes rather than relying on the memory of a few individuals. This strategy inherently
leads to greater objectivity. But the data by itself is not sufficient to produce insights. We need a framework, such as EMV, to analyze and reason about the data. In the scenario above, the data may ascribe a 50% chance of an unfavorable outcome with a potential judgment of $1M. Applying the EMV formula, we would find an expected monetary loss of $500K (i.e. multiply $1M by 0.50). In this case, the path of least expected cost would be to litigate. Alternatively, the analysis (with backing data) could be used to negotiate a less costly settlement.

Applying the concept of EMV may seem simple, but there is evolutionary hardwiring that may get in the way. In his book *The Art of Thinking Clearly*, Rolf Dobelli describes how human beings are naturally biased to focus on overall impact while neglecting probability. Take air travel, for instance. It is common for people to fear flying, likely because they focus on the potential of a fiery death while overlooking the probability associated with such an event. Everyone knows that flying is much safer than driving. Nevertheless, I know many people who willingly get in a car and drive around town on a Saturday night but refuse to board an aircraft.

Another example is the penchant for some to play lotteries. People who play lotteries focus on the riches they may win, overlooking the scant chance that a payday may be realized. The reality is that the expected monetary gain from a $1 lottery ticket is roughly 60 cents. Logically, that proposition does not make sense, but many people still buy lottery tickets because they maintain a one-dimensional view of the game. We should remain mindful that we may have a predisposition towards emotional and illogical reasoning, which may obscure our objectivity. To counter these predispositions, we can use tools such as EMV to reason about choices or risks objectively.

The concept of focusing on impact while neglecting probability is particularly relevant to the legal industry. Lawyers are trained to spot issues. Research also indicates that they tend to be pessimistic by nature. Because of this, lawyers tend to focus on the worst case. In doing so, they focus on the magnitude of negative outcomes. This behavioral bias can sometimes be referred to as the "dead tree syndrome," where legal professionals will proclaim an entire tree to be dead after spotting just one dead branch. I have seen deals sour because people cannot negotiate past a sticking point even when the sticking point is unlikely to materialize. When I come across these situations, I instinctively ask how much it would cost to insure against the risk rather than continuing to argue about a carve-out in a contract or settlement. I take this path, because insurance industries are expert in making expected monetary loss calculations. In a sense, we can leverage insurance quotes to objectively reason about a negotiating point.

In addition to behavioral biases, there are social biases that impair data-driven decisions. For example, a common trap is defaulting to the highest paid person’s opinion to drive decisions. This decision-making pathology occurs so frequently that it is referred to as the HiPPO (or Highest Paid Person’s Opinion) Syndrome. I am not saying to dismiss the highest paid person’s opinion. However, it is always prudent to triangulate opinions with data and analyses where possible and warranted.

Another barrier to using EMV is the perception that probabilities are difficult to source. That may have been the case a decade ago, but in the age of big data and the Internet of Things, data is plentiful. There are many free and paid services that provide statistics to inform the business, practice, and administration of law. Moreover, new services are brought to market each day. These data services cover a spectrum of use cases. Some services provide comparative analysis between firms. Others provide insights into how judges are likely to rule on a specific motion. Still others provide estimated judgment amounts and win/loss statistics. There are also many services that provide benchmarks on law firm operations.

In addition to data services, there is also software that can help firms mine their internal data and convert their proprietary information into actionable insights. In a recent example, DLA Piper announced a program at ILTACON 2017 that will identify the key variables that affect client retention. In their study, they found the key variables to be team size, team composition, and the existence of a client-focused marketing program.

I use the technique of EMV to weigh alternatives almost on a daily basis. It has enabled me to get the most from the resources allocated to me. For example, my team was responsible for upgrading a major system at my firm. During a meeting, a senior engineer implored me to move the system that was being replaced to a new set of servers as soon as possible. He believed a hardware failure was “very likely” to occur within the next two months. He based his belief on the need to replace a failed hard drive in the server and assumed that other hard drive failures were soon to follow. The project to replace the system was on a tight timeline. Moving the legacy system to new hardware would have delayed the upgrade, but moving the system would avoid the prospect of a system failure. I decided
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to test the assumption that a failure was “very likely.” I calculated the probability of server failure using the annualized drive failure rates that I sourced from the manufacturer. I found the risk of failure to be less than 1 chance in 10,000, which is hardly in the realm of “very likely.” After discussing the analysis and data with the engineer, he concluded the same. Fast forward, the server did not fail, and the project stayed on track.

The concept of EMV is one of several techniques used in data-driven decision-making, but I chose to spotlight it because of its simplicity and practicality. Within the domain of decision science, there are other techniques that are worth exploring, including Maximax, Maximin, Minimax Regret, and decision trees. When selecting a particular model to use, consider their affinities, strengths, and weaknesses. Some are better fits for a specific circumstance than others. For instance, if the client is a high-roller, Maximax may be the best choice. But, if the client is risk averse, Minimax Regret may be the better choice. The models can be used in combination. Personally, I start with EMV and may add other models to tease out nuances and angles to a given decision. Details on these tools and examples of how to use them are readily available online.

If our goal is to maximize wealth and produce value, we should seek to identify the best course of action from a crowd of alternatives. We may pride ourselves on being superb jockeys, but in order to win the race, we need to ride the right horse. There is little hope for someone to win the Kentucky Derby while riding a plow horse, even if that person is the best jockey of all time. The concept of expected monetary value in combination with big data is one method to objectively identify the right horse and to avoid the pitfalls concomitant with emotional reasoning.
Five years ago, I published a blog post entitled “Snacking on Big Law’s Crumbs.” In it, I pointed out how the Big Four accounting firms were making incursions into work that had typically been the domain of law firms. For example, the accounting firms were offering advice and assistance in the following areas:

- Compliance and Regulatory Risk Management
- Financial Services Regulation
- Privacy and Data Protection
- Governance

A troubling element of these incursions was that the Big Four were not limiting themselves to conversations with COOs or CFOs. Rather, they also seemed to be engaged in fairly extensive efforts targeted at the general counsel of their clients. In recent years, many of the Big Four’s client communications have shifted to focus on similar issues as law firm client communications. For example, some of their communications in 2013 included:

- Deloitte, “The Risk Intelligent General Counsel”
- EY, “Top Four Governance Trends of Proxy Season 2012”
- KPMG, “Dodd-Frank and the Conflict Minerals Rule”
- KPMG, “Global Anti-Bribery and Corruption Survey 2011”
- PwC, “SEC Adopts Final Rule for Investment Adviser Registration”

At the time, I assumed this growth in the ambitions of the Big Four would trigger a focused conversation within law firms about how to respond to this threat to their business. Should law firms engage in pitched battles with the accounting profession? Could they assume that there was more than enough client work for everyone? Should they retaliate by offering additional services in any areas that span accounting and law? Or should they simply cede the field?

While there was some commentary at the time of my post, there was not enough frank conversation about the likely outcome of these initial incursions. And then it became
obvious that the Big Four had something much bigger in mind.

In July 2014, *The American Lawyer* picked up the trail in their article, "Accounting Firms Make New Foray into Legal Services." They then followed this up in a May 2015 story in which they reported that EY Legal was launching in London with the help of “12 lawyers from Baker & McKenzie and Weil, Gotshal & Manges.” Admittedly, this was possible because British regulators granted EY an alternative business structure license, something that is not available in any US jurisdiction except Washington, D.C., and Washington State.

In June 2015, *Lawyers Weekly* published an article in Australia entitled, "Big Four player poses new threat to law firms." The subtitle of that article was telling: “KPMG is growing its legal arm beyond tax, threatening to become a major player in the legal services market.” The article then quoted the head of KPMG’s tax controversy team, Jeremy Geale: “The firm is very focused on growth… KPMG today is not an accounting firm, we are a professional services firm.”

A key part of their growth strategy involved expanding the range of legal services they offered: “KPMG Legal initially will focus on developing its corporate, employment and property practices. It also plans to pick up offshore work via referrals from its European practices and from foreign corporates looking to enter the Australian market.” Further, they hired David Morris, the joint head of corporate (Asia Pacific) at DLA Piper, to lead their legal services team.

While this was a stunning escalation, it was not the first. *Lawyers Weekly* reported a previous expansion push by PwC in the Australian market in that same article: “In August 2014, former King & Wood Mallesons managing partners Tony O’Malley and Tim Blue joined PwC to build what it termed as a “premium multi-competency legal practice globally”, targeting annual legal services revenue in Australia of more than $100 million.”

These events were harbingers of a significant market change. In jurisdiction after jurisdiction, regulatory authorities and even some professional organizations started dismantling the high walls that previously protected the legal profession from outside competition. With the spread of alternative business structures, non-lawyers have proven happy to take advantage of client pressure to create organizations that can deliver legal services in a more business-like manner than many law firms. Further, these new businesses have access to more diverse sources of financial support than traditional law firms.

It should not have surprised anyone to see the September 2017 stories in *The American Lawyer* ("PwC to Launch US Law Firm as Big Four Expand Legal Offerings") and in the *New York Times* ("PwC, the Accounting Giant, Will Open a Law Firm in the U.S.").

According to the *New York Times* report,

The [PwC] law firm, ILC Legal, will advise clients on international matters such as corporate restructuring. Its lawyers will act as special legal consultants, rather than fully licensed United States lawyers, allowing them to provide counsel on foreign law but not United States law.

ILC Legal, nonetheless, aims to vie with big law firms as a one-stop shop offering multinational companies access to other PwC services, including tax consulting and its network of 3,200 lawyers spread across 90 countries. The firms in that network operate separately but follow the same standards and practices under the PwC brand name…. ILC Legal hopes to attract multinational companies seeking counsel in areas like digital security and data protection, dispute resolution, international corporate structuring, and mergers and acquisitions…. It will operate like a traditional law firm, soliciting clients and billing them directly for services.

In its analysis of the situation, Accounting Today stated its conclusion in its headline: “Big Four increasingly competing with law firms.” That article opened by citing a report from ALM intelligence that found that “69 percent of the leaders of law firms who were surveyed reported the legal arms of the Big Four as a major threat. Big Four firms…average 2,200 lawyers in 72 countries, putting them on a level of the major law firms such as Jones Day, CMS, and Clifford Chance.” In other words, they have the ability to offer a wide range of legal services, and their ability likely exceeds that of most law firms in the United States.

Clearly, slamming the door shut on alternative business structures at the American Bar Association (ABA) meetings in 2000 and 2002 was a delaying tactic that could not stem the tide. Unfortunately, the ABA’s 2016 Report on the Future of Legal Services in the United States makes clear in its two following findings that the legal profession has not used the resulting extra time to meaningfully improve its services and market position:

1. The traditional law practice business model constrains innovations that would provide greater access to, and enhance the delivery of, legal services.
2. The legal profession’s resistance to change hinders additional innovations.

So how should law firms respond?

**Consolidate Client Relationships**

Law has always been a relationship business, especially on the higher end of legal services delivery. If you are not willing to compete on price, you better be competing on extraordinary levels of client satisfaction. However, you will not know what your clients really want unless you really know your clients. This means that lawyers at all levels within the firm must improve their abilities to establish and consolidate client relationships.

**Become More Proactive**

As law firms double down on client relationships, they also need to double down on their ability to learn. While this seems straightforward, the ABA Report noted that a 2016 study had found the following disturbing pattern of behavior: “At least since the onset of the recession in 2008, law firm clients have increasingly demanded more efficiency, predictability, and cost effectiveness in the delivery of the legal services they purchase. In the main, however, law firms have been slow to respond to these demands, often addressing specific problems when raised by their clients but failing to become proactive in implementing the changes needed to genuinely meet their clients’ overall concerns.”

**Embrace Discomfort**

If a firm is serious about fending off incursions from the Big Four, it will have to be equally serious about “implementing the changes needed to genuinely meet their clients’ overall concerns.” The obvious challenge here is that implementing change is rarely easy and almost always uncomfortable. That said, while change rarely goes unremarked, it also does not need to be gut-wrenching and excruciating every time. To avoid this, firms should take advantage of proven practices that help mitigate the discomfort and resistance associated with change. Change is not an amateur sport; it requires professional expertise. Firms should seek advisers with a solid track record to help them implement the necessary changes in the most humane way possible.

**Study the Big Four’s Playbook**

The Big Four have proven remarkably successful in their expansion into legal services. How did they do it? And what lessons can law firms learn from the experience of the Big Four? These are questions every law firm should examine (If you do not know where to begin, start with this overview by David B. Wilkins and Maria J. Esteban Ferrer, “The Rise, Transformation, and Potential Future of the Big 4 Accountancy Networks in the Global Legal Services Market.”). While I am not suggesting that lawyers make a reciprocal push into accounting and auditing, it would be worth considering if there are contiguous areas in which lawyers could add real value. For example, could external lawyers be present when business decisions are made? Or when legal problems are averted. Or when new business opportunities are uncovered. This is quite different from being on the other end of a request to answer a limited legal question. And in that difference law firms will find a wealth of market opportunities.

To be honest, we should have planned for this as soon as it became apparent that the Big Four had reached the natural limits of growth in their traditional domains and would need to enter new areas. We should have known that legal services would be a logical extension. There may be some forward-thinking firms with wise leadership that have been tackling these issues diligently and are, therefore, well positioned to meet the challenge of the Big Four. However, the ABA report suggests this is not the case—at least not on a basis widespread enough to help the entire industry. Consequently, when it comes to fending off incursions from the Big Four, at this point it is every law firm for itself.
What is RPA?
RPA is a specialized type of AI software used to create programs (i.e., “bots”) that emulate the way human beings interact with multiple systems in order to perform repetitive, rule-based tasks. RPA is especially valuable where processes involve intermediate manual calculations or are subject to high error rates.

A bot appears to both applications and users as if it were performing tasks they expect a human to do. A common example is web site chat bots that offer you an “online chat” for customer service. You may see a person’s photo displayed and the text messages may seem to come from a human. However, the messages may well be from a bot programmed to gather information from you and from back office systems, assess whether it can solve your problem using its programmed rules, and escalate you to a human representative if it is unable to do so.

What are the Benefits of RPA?
As with all software, industries adopt RPA to achieve benefits that justify the costs involved. The expected benefits vary widely.

Bots can reduce labor costs by performing tasks at a fraction of the cost of human labor. In “Automation versus labour arbitrage,” Martin Conboy estimates that...
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a bot can cost about a tenth of a full-time worker in the US and about a third of a full-time worker in India. In addition, costs are trivial to add or retire bots as workload changes. Thus, bots could transform traditional approaches to BPO offshoring by replacing labor arbitrage cost savings with more lucrative labor automation cost savings.

- Bots can improve speed by performing tasks faster and longer than their human counterparts.
- Bots can quickly and reliably extract, cleanse, standardize, and analyze data across the enterprise.
- Where compliance matters, RPA reduces risk by ensuring tasks are performed accurately and consistently, and are fully traceable.
- For businesses that rely on a complex array of interconnected software applications, as law firms do, RPA can forestall legacy software reengineering and/or infrastructure replacements.

Who is Doing RPA?

RPA, like AI, is still in the early adoption phase. A 2017 survey by PWC of RPA in financial services showed that “11% of respondents consider themselves ‘leading,’ meaning they have adopted RPA widely across the enterprise, and another 19% are heading in that direction” with most expecting positive ROI within 14 months.

Among the first adopters are organizations that have already completed business process optimization initiatives. They have done the tough work of standardizing their business processes, defining their business rules, and consolidating high volumes of transactions in specialist staff roles. They are ideally positioned to use RPA to further reduce labor costs while improving service levels.

Other examples of early adoption include the following.

- Highly-regulated industries that are implementing RPA to improve compliance.
- Companies that receive high volumes of customer inquiries through their websites.
- IT organizations that are embracing RPA to perform system and application testing, routine system administration tasks, and monitoring and alerting activities.

How Might Law Firms Use RPA?

Few law firms are using RPA today. Firms interested in RPA need to look at what other industries such as finance, accounting, and IT are doing for common back office functions. In addition, firms should pay special attention to what other professional service industries are doing.

For example, in its white paper "Rise of the Robots," KPMG describes its RPA application supporting client onboarding, a process that it clearly shares with law firms. KPMG reports that it built an RPA-enabled service in the UK to onboard clients in compliance with international regulations such as Anti-Money Laundering and Know The Client. The RPA software gathers information submitted by clients, mines electronic news and information sources, and extracts the information from all sources. The software then consolidates and assigns a risk rating to each client. Finally, the software keeps the information and ratings current by continuously searching for changes. It issues alerts if a client becomes non-compliant.

Thinking about law firms specifically, it is easy to imagine opportunities for RPA in back office functions that currently rely on people to perform repetitive, computer dependent tasks such as:

- onboarding new hires and managing departures
- managing conference room and event scheduling
- answering policy inquiries and delivering documents and forms that users find hard to locate
- performing simple research requests
- reviewing expense reports and processing AP and AR in Finance

What Impact Might RPA Have on Business Services Staff?

Like AI, RPA invokes the human fear of being replaced by a robot. For many workers, this fear is not unfounded. McKinsey and Company has forecast that by 2025, smart robots could replace more than 100 million knowledge workers, about one-third of the world’s jobs.

Law firm business services staff likely have less to worry about than employees of offshore BPO companies. Why? Already many law firms are finding it increasingly difficult to recruit and retain business services staff. This pressure will likely increase as Boomers retire and both the Millennials and Gen X resist doing the repetitive, routine work that bots could do. As a result, the more realistic outcome for law firms would be a smaller human business services staff augmented by bots that allow humans to focus on the higher value tasks that require more complex problem solving and real time human interactions.
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Conclusion
RPA is an important and currently under-recognized opportunity for law firms to apply specialized AI technology to back office functions to reduce operating costs, improve quality, and reduce risk. Early adopters will be among the first to reap the ROI benefits. To achieve success, they should look to other industries for lessons learned as they consider their early forays into this important, emerging AI toolset.

Sources


In response to the changing legal marketplace, Suffolk University Law School is one of the law schools actively transforming the way lawyers are educated. It is preparing its students for the emerging legal technology roles described by legal futurist Richard Susskind. In this interview by Jean O’Grady, Dean Andrew Perlman and Professor Gabriel Teninbaum discuss the changes they have made and what they expect to see more in the future.

JEAN: Dean, you have played an important role in ABA initiatives impacting the transformation of the legal profession. Do you have any special insights from your role as chief reporter of the American Bar Association’s Commission on Ethics 20/20 and vice chair of the ABA Commission on the Future of Legal Services?

ANDREW: The overarching lesson from both experiences is that technology, innovation, and globalization are driving tremendous changes to the way legal services are delivered. These changes hold the promise of helping the public gain better, faster, and cheaper access to legal information and services.

Does the ABA need to create more incentives for law schools to change so that students are ready to be 21st century lawyers?

ANDREW: Law schools already have all of the incentives they need to prepare students for success in the 21st century and a number of law schools are updating their curricula based on the rapidly changing marketplace.

As the Chair of the Governing Council of the ABA’s new Center for Innovation, what issues is the Center be looking at?

ANDREW: The American Bar Association Center for Innovation’s mission is to catalyze innovations through people, process and technology in order to improve the effectiveness, accessibility and affordability of legal information and services. Initiatives include pilot projects demonstrating how legal information and services can be delivered in new ways and a fellows program that gives junior and more experienced legal professionals the support they need to advance impactful innovations.

Some schools offer legal technology classes in order to demonstrate innovation, but Suffolk Law has gone much further. Why isn’t this transformation happening faster in all law schools?

GABRIEL: It’s hard for me to speak to the decision-making at other schools, but the mindset at Suffolk Law is focused...
on ensuring graduates are ready to be successful in the long run. That means helping them think meaningfully about incorporating new tools and approaches to their work. We also want to help them adopt a mindset that thrives in a changing world. We have a tradition at Suffolk Law of making our graduates practice-ready. Because of that, we have a faculty in place who are supportive of this worldview and are prepared to dig in and teach in cutting-edge areas.

**Suffolk’s Institute on Law Innovation and Technology and Legal Innovation Technology Concentration are regarded as leading initiatives in the transformation of legal education. Are there parts of the law school curriculum that haven’t yet been sufficiently transformed?**

GABRIEL: Law school curricula should change to meet the needs of the community the students will serve when they graduate. We’ve recognized that there’s a need to train a new type of graduate to meet these needs. Innovation is a process, and we plan to always be in that process.

**Are there any new programs or new tech-oriented classes on the horizon?**

GABRIEL: We’ve just launched the Suffolk Law Legal Innovation & Technology Certificate, which is an online program aimed at legal professionals who want to stand out in their organizations. One of the most common questions we’re asked when we speak to law firms and law departments about our work is, “how can we learn this too?” We think this program is the answer. Students are enrolling now, and classes will start May 2018.

ANDREW: We’ve also launched a Legal Innovation & Technology Lab (LIT Lab). The LIT Lab is essentially a new kind of clinical program. The “client” is an organization, such as a legal aid office, that wants to make more efficient use of limited resources. LIT Lab students review the organization’s processes and help it develop and implement cost-saving solutions.

**Is Suffolk Law trying to enroll a different kind of student than it was ten years ago?**

GABRIEL: We’re always interested in enrolling students who want to use their legal education to make an impact. What it requires to “make an impact” will look different in the future. As a result, we’ve drawn a slightly different crowd: people who are also interested in delivering terrific impactful solutions in a new way. Our interest in educating difference-makers remains intact.

**What experience prior to law school would help a student excel at Suffolk?**

GABRIEL: In terms of the legal innovation & technology program, the obvious answer probably would be a background in computer science, engineering, or the like but our program is really designed to help any law student with the desire to succeed in the legal innovation and technology space.

**Do you require all faculty to embrace innovation?**

ANDREW: We don’t require faculty to embrace any particular approach or method. We want our faculty to prepare our students for professional success, and there are many different ways to that end. A diversity of styles and approaches is actually the best way to find out what is effective and what’s not.

**Do you believe that Suffolk is changing the law school market?**

ANDREW: I don’t know if we are changing the market, but we are on the leading edge of it. A number of law schools have begun to offer legal innovation and technology courses and curricula since we started, and it is terrific to see.

**Have you begun to incorporate data science skills, critical analysis of algorithms, and AI in classes?**

GABRIEL: Absolutely. We offer several courses that cover these topics. One, Coding the Law, is being taught by former data scientist David Colarusso, who joined as a clinical fellow directing our new Legal Innovation & Technology Lab. We’ve even gone so far as introducing a hands-on exercise in expert system design, a branch of AI, as part of orientation, so that all of our students are exposed to it.

**Suffolk appears to have embraced Richard Susskind’s definition of new lawyer roles, such as legal knowledge engineers, legal technologists, legal process analysts, legal project managers, and legal risk managers. Are students beginning school expecting to be on the partnership track but later shift their interest to legal innovation? Or are they arriving with the intention of going into legal tech?**

GABRIEL: For years, we gave students Susskind’s book Tomorrow’s Lawyers right when they walked in the door. Reading it helped many shape their career plans in light of what we expect the future of legal work to look like. We’ve had graduates successfully get hired in the sorts of roles Susskind describes—jobs like Legal Solutions Architect, and SCRUM Master. We’ve also had graduates use their legal-tech training to enter traditional legal jobs with a skillset that will let them be more efficient and effective. The more people learn
about what we’re doing, the more students arrive with an interest in legal tech.

Do law firms bear part of the blame for lack of innovation in legal education because they are not changing their recruiting criteria? They are not demanding that law schools produce lawyers with both legal analysis and technical skills. Or are you already seeing a shift in the skills firms are looking for when firms recruit associates?

ANDREW: There is plenty of blame to go around in terms of the slow pace of change. That said, if more employers demand that graduates have new knowledge and skills, I am confident that more and more law schools will adapt to those demands. In general, recruiting is still fairly conventional but there are interesting new jobs within law firms that did not exist a few years ago, like legal project manager and legal solutions architect. Those professionals are being recruited in different ways.

Have ALM 200 firms started recruiting your students specifically for their legal tech expertise?

GABRIEL: Yes, and we welcome it. For example, we’ve had a long relationship with the De Novo Group at Davis Wright & Tremaine. They share our vision of legal work, which includes leveraging process improvement and new technologies. We also have relationships with major in-house law departments, including those at Liberty Mutual Insurance and General Electric, which have hired our students specifically to work on legal innovation.

How do you think law schools should address the ethics of relying on algorithms in practice?

GABRIEL: We teach our students about both the benefits and drawbacks of various technologies. Inappropriate reliance on algorithms is certainly a theme we weave into more than one course, and there’s a constant reminder that technology is there to serve people; and that when it can result in injustices, we have to be vigilant about how it’s used.

In early 2018, Judicata released a study where they used their Clerk product to “grade” law firm briefs. That appears to be a technology that could have some great teaching applications. Do you think lawyers are also going to be competing with machines?

GABRIEL: In a sense, that’s nothing new: anyone who worked in the era before online legal research or eDiscovery can attest to the changing balance of workload between people and machines. I’d predict that, over time, machines will become competitive in areas that were previously believed to be human-only tasks. We think that, with the right training, people can become skilled at harnessing this to do better work.

Have any students started projects which have become commercial products or adopted by Access to Justice Organizations?

GABRIEL: Our students have come up with dozens of projects that have become incorporated in the real world. For just a flavor, we keep a list of them on the course site for Coding the Law. Just this year, our students have created chatbots to determine if someone is eligible for appointed counsel or fee waivers; web-scraping bots that monitor legal information; and statistical/machine learning analyses. We expect more projects to come out of the LIT Lab mentioned earlier.

Dean, what technology that exists now do you most wish had been available when you were a law firm associate 20 years ago?

ANDREW: E-discovery and automated document assembly. I spent a lot of time as an associate reviewing documents page by page; e-discovery tools would have saved me a lot of time on tasks that were not “at the top of my license.” And there were certain kinds of documents that I had to create frequently, such as interrogatories and document requests (or the responses to them). I would have loved a tool that allowed me to generate those requests and responses in a more automated way rather than copying and pasting language from old documents.
Which Change?
It is well documented that clients are asking for more value. In many instances, they’re also asking for innovation. Yet most of these requests are general in nature and vague in outcomes. For example, most outside counsel guidelines ask firms to “be creative” when it comes to pricing, but provide very little guidance on what that means.

This is completely understandable on one level, since they are in fact our clients. The law firm, as provider, has an obligation and opportunity to drive change. However, from experience it is difficult to get clients to embrace that change. Too often when presented with a change, clients respond, “No—not that one.”

For example, at a former firm one client stated the need to reduce legal spend by 10%. An option was presented to the client that included utilizing contract lawyers alongside associates that would lower the cost of transactional matters by 10%. The client declined this option, but did not give much feedback as to why. This and many other examples demonstrates the disconnect between law firms and clients in driving real change.

What is real change?
The elephant in the room, in my humble opinion, is driving change in the way lawyers work. We need to develop methods that require fewer and cheaper hours, but that provide the same or better outcomes. The challenge is that lawyers are change-averse, and will leverage their deep subject matter expertise to fervently defend the status quo. This challenge exists both within law firms and legal departments.

Both sides of the market need to change. An obvious path to innovation is having both law firms and legal departments collaborate on change. In this way, firms can develop real change that clients will adopt. Some firms have begun moving this direction, often in conjunction with the client’s legal operations team.

And what will this collaboration look like?
For both sides, conversations have tended to focus on vague possibilities with minimal connection to specific work. For instance, someone might suggest document automation for a type of work. This leads to conversation on whether that type of work is best suited for such technology, followed by which documents should be automated. And finally, in a long, circular conversation about which language should be used in the documents. The result takes months to achieve, if it ever actually culminates. Similar conversations occur on the client side. Ultimately these efforts fail or produce minimal value,
as they inevitably hit the lawyer-change challenge noted above.

Change projects can take a variety of forms, well beyond simple document automation. I say simple, because document automation is a relatively simple approach that has been around for decades. However, it includes a measurable investment of non-billable lawyer time—and the more complex the documents are, the more time needed.

This raises another set of challenges. The first is the lack of available time from the lawyers in question. Law firms and clients are busy. On the law firm side, there is the additional pressure of billable time, which will always take precedence over a project like this. The billable work directly meets client needs—not to mention contributes to the lawyers’ bonuses. On the client side, legal departments (being cost centers) have very limited resources, and less support for their lawyers as compared to law firms. With aversion to change, a lack of urgency, and insufficient resources, we shouldn’t expect much change to happen. Lawyers will inevitably resort to their known ways to respond to immediate demands.

What is needed to overcome these challenges is to bring some practicality to the situation. By that, I mean tie a change project to a specific type of matter (or set of matters) with a specific outcome identified. Do so with the involvement of both law firm and client. For instance, they can sit down and mutually identify a type of matter that will benefit from some specific innovation. This means they also need to agree on what that innovation will be. Positive results for both sides need to be built in to the approach, including cost savings for the client and profitability for the law firm. Absent mutual benefits, the change will not be sustainable.

The value of using a specific matter type to drive successful change may sound obvious, but there are different aspects to consider. Having actual work product involved (versus potential) for instance, is a value position, as change efforts would have immediacy and practicality. This helps ensure everyone’s efforts are focused on real outcomes which in turn brings urgency to the project. And since real work commands attention, resources will be committed.

Finally, changing the way the matter is handled becomes part of the engagement. Aversion to change is put aside out of necessity. There is a presumption based on the project that things will be worked differently. To illustrate this idea in action, let’s walk through a scenario:

**Type of work: Acquisition deals**

**Goal: 10% cost savings**

The client and law firm meet to mutually identify methods for reducing the cost while improving the quality.

The first part of the conversation focuses on which segment of the deal is best suited for cost savings and innovations. Diligence is chosen, given the high volume of document review and the subsequent costs associated with that. Negotiation and documentation may be explored at a later date once the diligence aspect has been addressed.

With diligence selected, the conversation shifts to opportunities for innovation. Since diligence is similar to discovery, the teams look to innovations in that area. Technology Assisted Review is identified. This technology “predicts” the nature of documents (i.e. responsive) and is already being used for diligence in the market. Next up is the use of alternative staffing in discovery, where contract lawyers are utilized for first review. It is decided that in the first instance, the teams want to use higher-level lawyers. So non–partner track lawyers are identified as the best option. Finally, someone suggested the use of legal project management as a means for managing the matters to a budget. It was agreed that the idea made sense.

Here we should pause and reflect on each proposed innovation and its impact on the client and the law firm. For the client, all of these ideas can lead to cost savings or cost management at a minimum. However, the client must be comfortable employing all of these. It must: a) be comfortable with the accuracy of the predictive nature of the technology, b) be comfortable using a new category of lawyers, and c) be willing to pay for project management functions, be they from lawyers or project managers. Absent the client’s comfort with all of these changes, they will not be sustainable.

The law firm must be willing to invest in each of these ideas. It will need to purchase the technology, recruit non–partner track lawyers, and employ project management resources. All of this begs the question of how the firm will be profitable after making these investments. Traditional hourly billing will lead to less income, and lower margins. So part of the new arrangement will need to include non-hourly billing—most likely utilizing some type of fixed-fee arrangement that is perhaps based on the volume of data involved in diligence (or some other factor that can be clearly scoped).
This scenario illustrates that innovation is more than selecting options. It must include a conversation around 1) a willingness to try new approaches, and 2) a willingness to adjust the structure of the fee deal so that both parties benefit. It also demonstrates that real change in the way legal services are delivered will benefit greatly from client/law firm collaboration. Win-win outcomes will be significantly more difficult to reach absent this combined effort.

The emerging legal operations roles are excellent points of contact to begin these conversations. Their jobs are very well aligned with the outcomes of this approach and their skill-sets are often equally aligned (i.e. project management, pricing, etc.). All of the necessary conditions exist for such collaboration to be possible. We just need law firms and clients to come together to drive the functional changes that the legal market needs.