

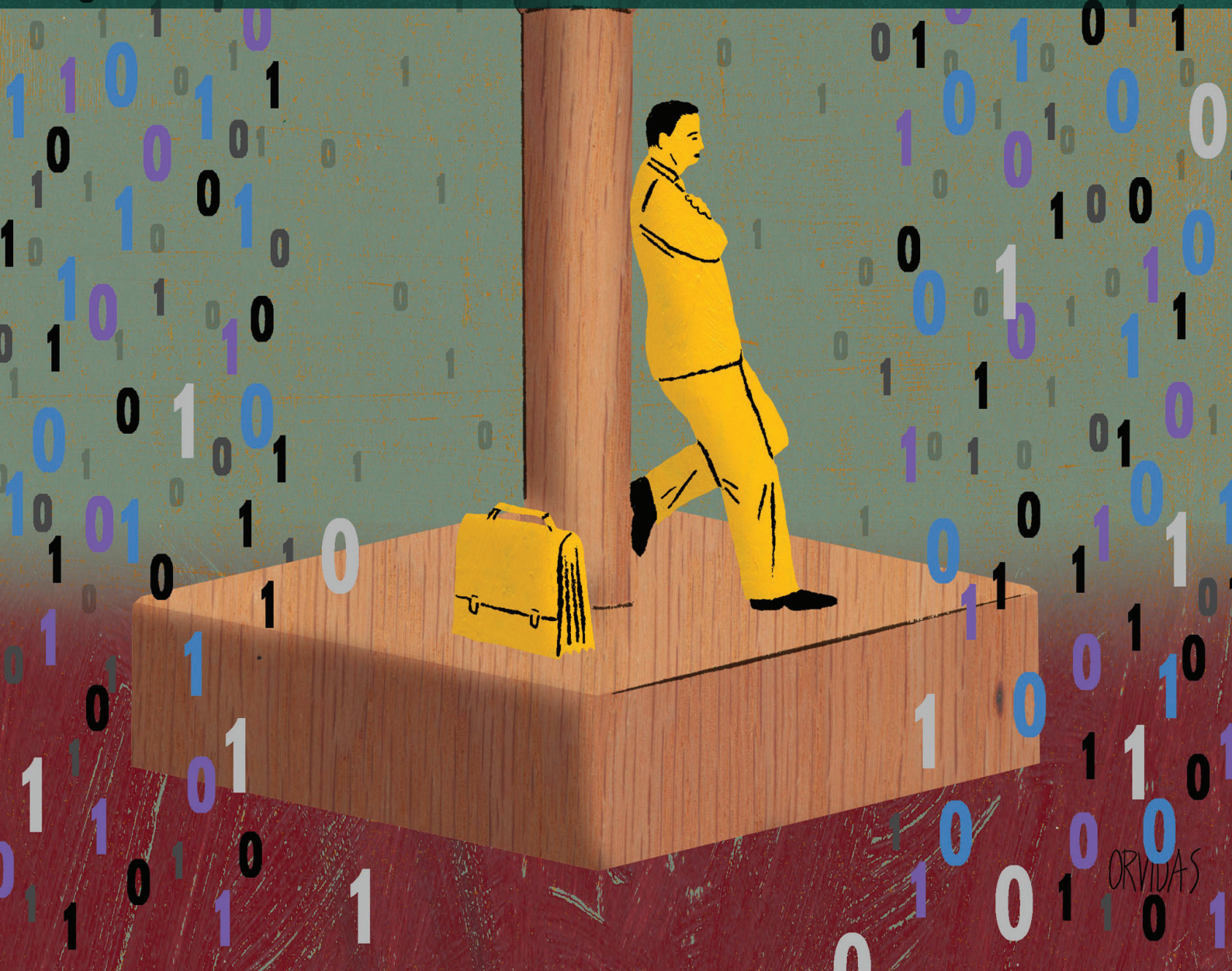
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How Legal Technology Will Change the Business of Law



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How Legal Technology Will Change the Business of Law

**Christian Veith, Michael Bandlow, Michael Harnisch,
Hariolf Wenzler, Markus Hartung, and Dirk Hartung**

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AT A GLANCE

Powerful forces are reshaping the corporate legal-advice market, including price pressure from clients and the digitization of legal data. Legal-technology solutions can help law firms succeed in this new era, but only if they understand the tech landscape and redefine key elements of their business model.

MAPPING THE LEGAL-TECH LANDSCAPE

The legal-tech landscape comprises three solution categories: enabler technologies facilitating the digitization of legal data, support-process solutions infusing new efficiencies into case-management and back-office work, and substantive law solutions supporting or replacing lawyers in executing core legal tasks in transactions and litigation cases.

LEGAL TECH'S IMPACT—TODAY AND TOMORROW

While legal tech began with the automation of standard legal tasks, it's moving toward supporting more bespoke, specialized activities performed by lawyers. It's also capitalizing on opportunities presented by big data analytics, helping lawyers capture valuable insights from large data sets.

NEXT STEPS FOR LAW FIRMS

To safeguard their market share and profitability in a market transformed by legal tech, law firms must rethink two elements of their business model: their value proposition (including their service offerings and revenue model) and their operating model (including their cost structure and organizational structure). The right decision for each element will differ for “big law” and “small law” firms that focus on standardized cases.

LEGAL TECH'S IMPACT ON INDIVIDUAL ROLES AND LEGAL EDUCATION

In the future, the business of law will require fewer general support staff members, junior lawyers, and generalists—and more legal technicians and project managers. Accordingly, law schools may need to offer courses on legal tech and case-management processes. Law firms can offer on-the-job training to help lawyers leverage legal-tech solutions and executive-education programs focused on legal-tech literacy.

IN RECENT YEARS, POWERFUL forces have reshaped the market for legal advice delivered to corporations. The “new normal” is characterized by higher price pressure (clients demanding more for less), the deconstruction of formerly homogeneous legal services into different activities, and the rise of legal-process outsourcing. On the client side, legal departments have grown bigger (evidence of increased insourcing), and general counsels are accompanied by professional procurement specialists during pitches. The presence of such specialists has led to intense negotiations over fees and clear clauses stipulating components of work that clients can no longer be billed for (such as first-year associates’ time).

The digitization of legal data constitutes another megatrend transforming workflows and business models. The volume of data used in legal advice has increased exponentially—a pattern seen in many other industries as well. For instance, in the Enron, Lehman Brothers, and (more recently) Volkswagen cases, lawyers have had to review and interpret hundreds of thousands of e-mails and other documents to establish the facts. In the future, the ability to screen, analyze, and interpret unprecedented volumes of data will become just as critical to law firms’ success as the “art” of delivering legal advice is now.

A variety of legal technologies has emerged, enabling the digitization and automation of these and other legal-work activities. In fact, findings from a survey of law-firm partners and legal-technology providers by The Boston Consulting Group suggest that legal-technology solutions could perform as much as 30–50 percent of tasks carried out by junior lawyers today.

Nevertheless, fewer law firms than one might expect have adopted these solutions. Currently, many lawyers tackle legal-data analysis using a traditional approach: screening documents one by one, manually. Why? For one thing, the current revenue model—based on billable hours—and the profit-sharing agreements governing partnerships provide little incentive to invest in new technologies. In addition, many law firms are wary of implementing solutions that are still in development and that require significant changes to workflows and hefty training investments.

Regardless of the reasons behind the low adoption rates, law firms that fail to take advantage of legal technology, or that don’t adapt to the new realities it presents, risk losing corporate clients to more forward-thinking law practices, at best. At

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worst, they may go out of business entirely, replaced by the very vendors supplying legal-tech products and services.

In this report, we assess the different solutions making up the legal-tech landscape and offer ideas for how big law and small law can exploit the opportunities as well as surmount the challenges presented by legal tech. Throughout, we draw on findings from a recent study that BCG conducted in partnership with Bucerius Law School in Hamburg, Germany, and the school’s Bucerius Center on the Legal Profession. The study involved 50 in-depth interviews with partners from large law firms, owners and representatives of legal-tech companies, and researchers exploring the legal-tech market and its impact on law firms’ business models. As part of this study, we also conducted an online survey, which was sent to 1,000 Bucerius alumni. The results of this survey confirmed the themes we heard in our interviews.

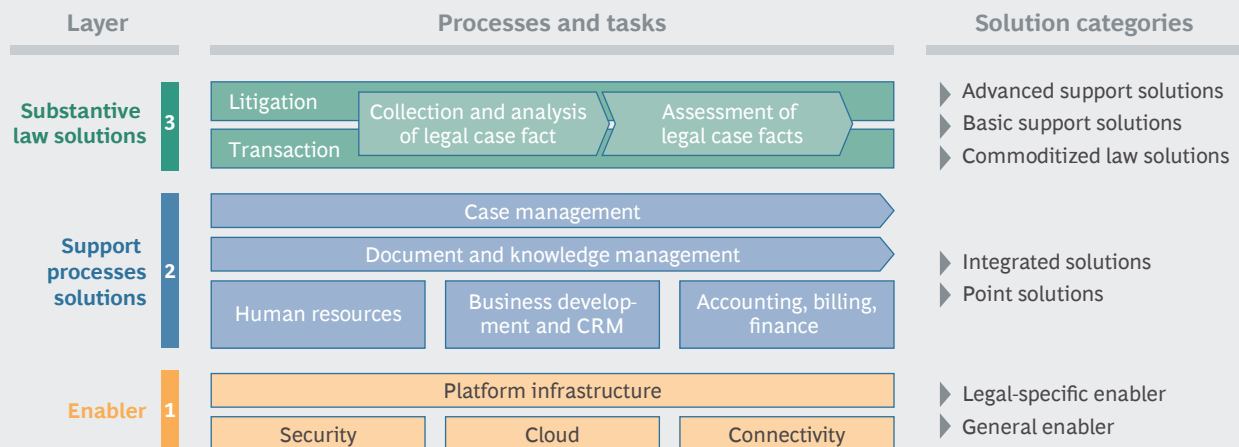
Our findings send a clear message: Law firms can no longer afford to ignore legal tech. In the changing legal-advice landscape, there will be winners and losers. To secure their future competitiveness, law firms must be ready to reconExhibit core parts of their business model to capture the opportunities presented by legal technologies.

Mapping the Legal-Tech Landscape

The legal-tech landscape can be divided into three broad categories of technology solutions. (See exhibit 1.) The first category is at the more general end of the spectrum and consists of **enabler technologies** focused on facilitating digitization. Some of these offerings, such as cloud storage tools and cybersecurity solutions,

EXHIBIT 1 | Overview: Legal technology framework

Legal tasks, support processes, and technological infrastructure impacted by legal technology



Source: BCG analysis

have been developed by general tech vendors and are relevant for a variety of industries. Others, such as legal collaboration platforms, have been created to manage processes specific to the legal profession. Enabler technologies are quickly becoming “table stakes” for law firms serving blue-chip corporate clients that have begun auditing their suppliers for data security.

The second category of legal technologies comprises **support-process solutions**. They infuse new efficiencies into law firms’ case-management and back-office work, in processes ranging from human resources management and business development to customer relationship management and accounting, billing, and finance. Most law firms use such solutions, but the degree of sophistication and level of integration into daily work vary. Overall, the legal profession still lags behind other professional services in deploying the software used in these solutions.

The third category includes **substantive law solutions**, which support or even replace lawyers in the execution of core legal tasks in transactions and litigation cases. This category contains numerous subcategories. For example, one subcategory focuses on commoditized law solutions that offer online services for highly standardized legal cases, mainly in consumer law. Another subcategory, basic support solutions, facilitates the execution of low-skilled legal tasks, such as the drafting of standard letters or deadline control, or helps automate repetitive tasks, including simple contract drafting and contract analysis. Once problematic provisions are found in a contract, analyzing them is neither a commoditized nor low-skilled task. However, the process of screening documents to determine which of them merit a closer look clearly requires far less skill. Yet another subcategory contains advanced support solutions that help lawyers manage more complex aspects of their legal work, such as analyzing data from previous court and judge decisions to assess the odds of a client’s winning a case. Although some law firms are already using some of these substantive law solutions, their adoption is still below the rates for enabler technologies and support-process solutions.

The future of legal technology will likely see the emergence of applications powered by artificial intelligence (AI) that lawyers can use to manage activities such as setting up self-enforcing contracts. Although extensive research effort is currently being put into AI applications for the legal sector, such offerings probably won’t become commercially relevant in the next five years.

The future of legal technology will likely see the emergence of applications powered by artificial intelligence (AI).

Legal Tech’s Impact—Today and Tomorrow

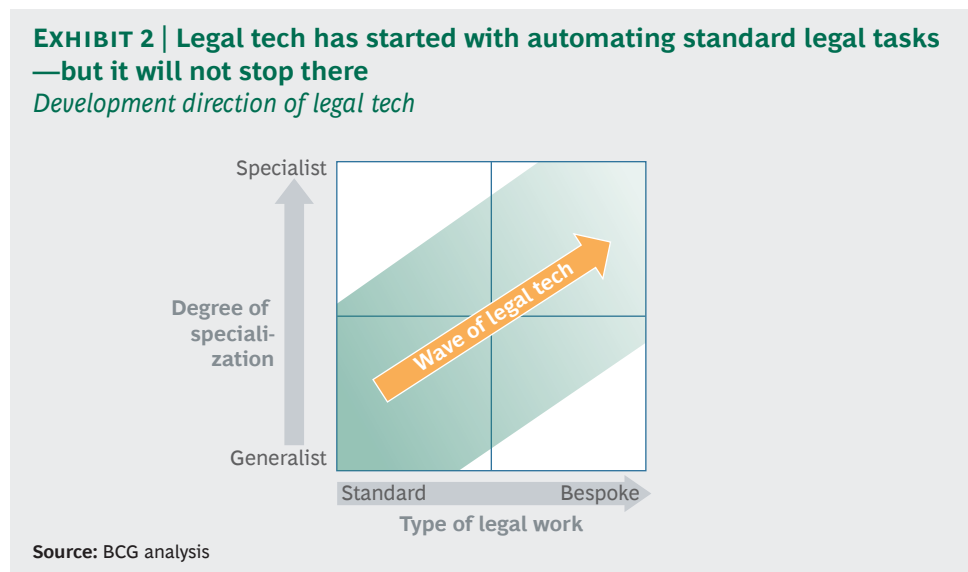
Currently, developments in the legal-tech industry and patterns differ across countries. For example, the United States is home to several hundred legal-tech start-ups and established software providers. According to *TechCrunch*, such start-ups attracted more than \$150 million in total venture capital investment during 2013. The considerable investment has led to the development of more solution offerings available for adoption. By contrast, Germany has far fewer legal-tech providers (only about 10), and adoption rates among law firms and corporate legal departments are lower than in the United States.

Such differences seem to be driven by characteristics other than distinctions in legal systems (common law in the United States; civil law in Germany). For instance, in the United States, the relatively high degree of adoption is driven by guidelines for document disclosure in discovery, the larger and more homogeneous legal-tech market, access to venture capital, and the widespread prevalence of the English language as the lingua franca in global business, as well as its convenience for natural language recognition.

But even within one country, adoption rates vary considerably across different stakeholders in the legal system. To illustrate, big law firms—those with more than 100 lawyers focusing on nonstandard, bespoke cases—adopt legal tech faster than small law firms (generalists with fewer than 10 lawyers concentrating on standardized cases). Indeed, the most innovative large law practices even develop their own tech solutions, set up incubators, or invest in legal-tech start-ups. Yet most law firms are not adopting legal tech on their own initiative; rather, their decision to adopt is driven by corporate legal departments that are pushing for less costly legal advice and that are willing to bypass law firms and use legal-tech solutions directly.

Expanding our view beyond the corporate law profession, we see that ordinary consumers are the real leaders in the adoption of legal tech. They are availing themselves of online services (such as preparing wills, standard contracts, and small claims) provided directly to them by vendors. According to *Der Spiegel*, as many as 2 million people used *LegalZoom*, a provider of such services, in the United States during 2013. Law students are also interested in legal technology. Having started the first lecture on legal technology at Bucerius in the fall of 2015, we have seen the lecture attract a significant number of students in class and online.

Up to now, legal tech has cut its teeth on automating a range of standard legal tasks, but it is moving toward supporting more bespoke, specialized activities done by lawyers. (*See exhibit 2.*)



In this scenario, progressive big law firms and boutique practices, as well as legal-tech vendors, stand the best chance of emerging as winners. Meanwhile, small, generalist practices face a serious risk of disruption, being edged out of the market by technology vendors or law firms that leverage technology.

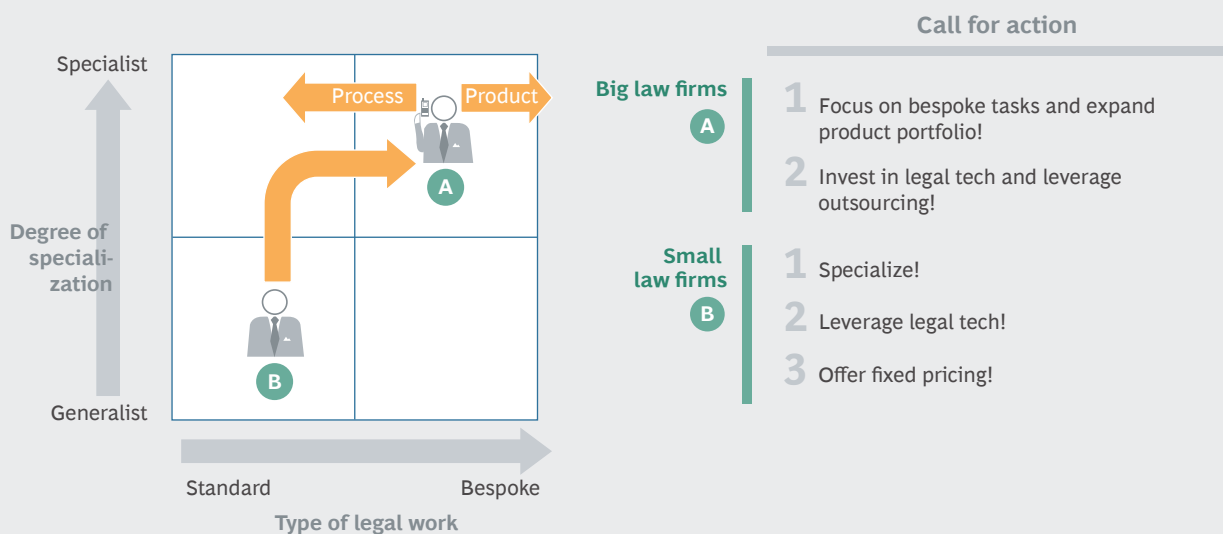
Specifically, advances in legal tech will accelerate current trends in the decomposition and outsourcing of legal work. Some tech solutions are already targeting increasingly complex work in the legal value chain by breaking it down into standardized, repetitive tasks that can then be automated or outsourced. Furthermore, tech solutions that foster more effective communication and online collaboration are a further driver for outsourcing legal tasks, since documents can easily be shared, edited, and reviewed by law firms' outsourcing partners.

Simultaneously, legal tech is increasingly capitalizing on the opportunities presented by big data analytics for substantive law solutions. Legal analytics tools will help lawyers capture even more valuable insights from large data sets and use them to make smarter decisions, faster.

Next Steps for Law Firms

Thanks to legal tech, law as a profession will look markedly different 5 or 10 years from now. To safeguard their market share and profitability in this new reality, big and small law firms alike will need to rethink key elements of their business models to capture the advantages presented by legal tech. (See exhibit 3.) In the sections that follow, we take a closer look at how such changes may play out for each type of firm.

EXHIBIT 3 | Call for action: Big law needs to invest in tech readiness and small law firms need to specialize



Source: BCG analysis

BIG LAW'S NEW IMPERATIVES

A number of forces will soon present big law firms with new imperatives, which legal tech can help them meet. One such force will take the form of stronger competition coming from boutique firms expanding their share in bespoke legal areas. Additional pressure will come from legal-process outsourcing providers and legal-tech vendors seeking to claim a share of standardized work packages associated with cases.

But shifting client needs and expectations will likely present the most daunting challenges. The harsh fact is that large corporations—who constitute the bulk of big law practices' clients—will demand from their external lawyers exactly what they require of all their other suppliers these days: more and better service for less money. And if the big law firms don't achieve the enhanced efficiency that results in fewer hours billed to clients, those clients may replace them, partially or entirely. Even on supposedly bespoke legal cases, partners of big law firms concede that 30–50 percent of the tasks involved may be automated through tech-based tools.

Big law's clients have also begun demanding greater transparency on fees and more seamless collaboration between their in-house staff and external lawyers. And they want their law firms to analyze facts ever more quickly and deliver more informed, better advice tailored to their unique circumstances—regardless of the quality and availability of data at hand.

To satisfy their clients' escalating needs, big law firms may have to reconExhibit their value proposition (which defines whom they serve with which offerings and how they get paid) and their operating model (which determines how they serve clients). (See exhibit 4.)

EXHIBIT 4 | Big law firms need to rethink their business model



Source: BCG analysis

Revisiting the value proposition To more sharply differentiate their service offering, big law practices will have to offer more than just advice on litigation and transaction cases. They may also have to offer legal project management. For example, one law firm created a department dedicated to such project management that leveraged legal technologies. The firm won a pitch solely due to this differentiating criterion. Others may act as an outsourcing manager while keeping only bespoke legal tasks in-house. A prime example is a real estate transaction case where outsourcing partners or legal-tech solutions conduct the due diligence work. To differentiate their offerings in these ways, such firms can use enhanced support solutions to deliver superior legal project management capabilities on highly bespoke, complex cases involving numerous partners in ambiguous legal environments.

They can also provide advanced legal analytics and decision-support solutions as a service. The aim would be to help their clients make smarter choices regarding their legal concerns by drawing on insights from unstructured but available data, such as determining the amount of accrued liabilities for legal proceedings in financial statements.

Finally, some big law practices may decide to become the “master legal-tech vendor.” In this role, they can guide clients to the right legal outsourcing partners for handling standardized, low-skill tasks and help clients manage partnerships forged to work on top-end, complex mandates. Through such means, law firms can retain control over entire mandates and thus strengthen their business ties.

In the role of master legal-tech vendor, a large law practice would constitute the only contact in a complex legal case for a client, taking charge of managing all tech providers and the case. In contrast, some firms may take on the role of legal-tech consultant. As such, they would occupy an intermediary position between the client and tech providers and would not have any liability. Rather, they would guide clients to the right legal-outsourcing partnerships. Legal-tech consulting might also include explaining to clients how bespoke, complex cases can be broken down into standardized workstreams.

As a consequence of these new offerings and the decomposition of legal work, law firms also need to reconsider their current revenue model. They may have to augment the billable-hour element of their model with fixed prices and fees based on quantifiable success against clearly defined deliverables, even on bespoke services. These alternative pricing models have already become common in other professional service industries, including management consulting and accounting.

Changing the revenue model from billable hours to (partial) fixed pricing will have significant implications for law firms’ incentive structure. In particular, it will motivate lawyers to be more efficient. Thus the shift will affect all aspects of these firms’ operating model.

Overhauling the operating model To support changes in their value proposition, big law firms will also have to modify elements of their operating model—particu-

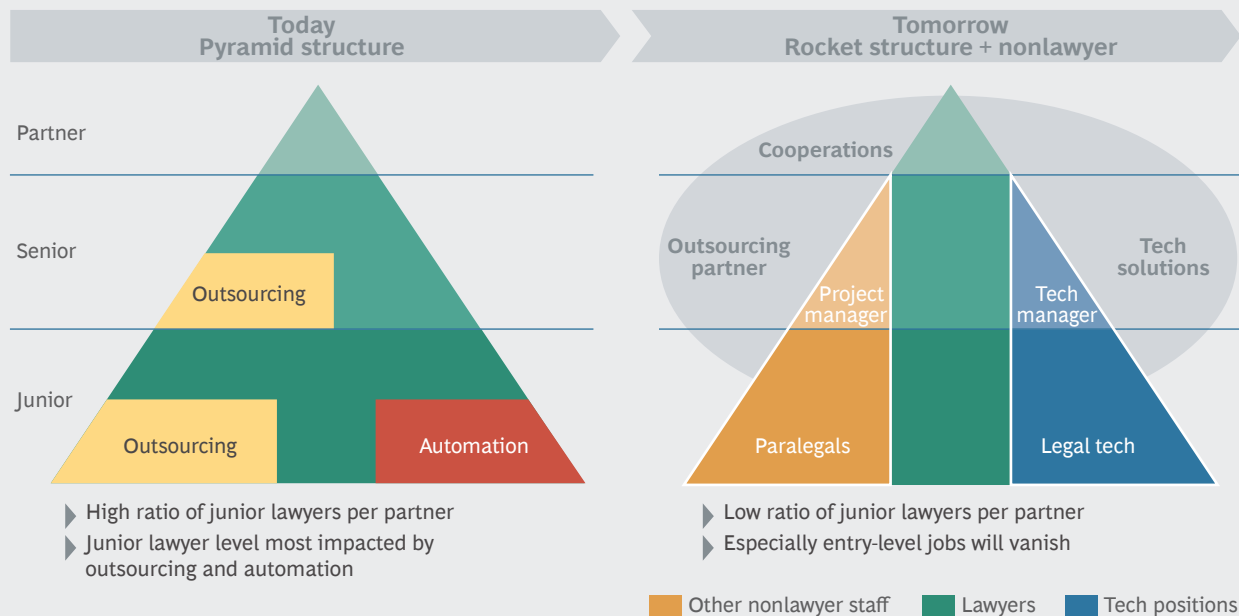
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larly the tasks in the legal-case value chain they decide to take on, their cost structure, and their organizational model. Regarding value chain, they may move from handling all tasks in-house to outsourcing low-skilled legal work and automating high-volume standardized tasks. They might also benefit by focusing their work on complex, nonstandard legal tasks and using legal tech and legal process outsourcing (LPO) for all standard tasks. The increased interconnectedness of lawyers and rising number of legal-tech players, especially in common-law nations, has led to a proliferation of automated solutions and professional networks that can solve legal issues flexibly and at a relatively low cost. All of this has made outsourcing even more attractive for law practices.

As for cost structure, firms may move from a structure based on lawyers' wages to one based on both wages and technology. Investments in legal tech can help firms achieve important economies of scale, given that the marginal cost of using an existing tech solution for cases subsequent to the original case is near zero. Legal tech could also give firms the cost-saving efficiencies they need to safeguard their profitability in the face of fixed prices and mounting cost pressure. Examples include improvements in basic processes such as legal accounting and time tracking. Furthermore, big law practices should preempt "blue penciling" from their clients on standard tasks that technology can handle more quickly and at top quality for a fraction of the costs incurred by young lawyers (who typically have only been with a firm for one to three years).

Finally, there's the question of how big law firms might alter their organizational model. The traditional pyramid model (few partners at the top and many junior

EXHIBIT 5 | Adapting big law's business model also includes the traditional pyramid structure



Source: BCG analysis

lawyers and associates at the bottom) will likely give way to an organization shaped more like a rocket. That new configuration will be characterized by fewer junior lawyers and associates per partner. Indeed, the use of technology solutions to handle standard, low-skill legal tasks could reduce the ratio of junior lawyers to partners by up to three quarters of the ratio seen in the current pyramid model. (See exhibit 5.) However, the law-firm rocket would be supplemented with other employees who are not lawyers, such as project managers and legal technicians. Consequently, the number of employees per law firm would remain similar to today, while the ratios of high-skilled, specialized legal professionals would decline. (See the sidebar “Legal Tech’s Impact on Individual Roles and Legal Education.”)

LEGAL TECH’S IMPACT ON INDIVIDUAL ROLES AND LEGAL EDUCATION

How roles in law firms may change

In the future, the business of law will require fewer general support staff members, junior lawyers, and generalists—and more legal technicians and project managers. Indeed, tech skills in the areas of digital communication and collaboration, computer and data science, and statistics will become the coin of the realm in this profession. In some law firms, new roles including legal process managers and general legal technicians will emerge.

One multinational law firm that participated in our study had already set up a legal project management department near its headquarters. The department is staffed with lawyers who focus solely on performing management activities in large, complex legal cases. Additionally, the firm is supported by a legal service center in a low-cost country that performs low-skill, standardized tasks—freeing up time for lawyers to focus on bespoke legal tasks.

Particularly in large law firms, lawyers will need holistic legal project management skills as well as a

knowledge of software. Those who gain experience outside the legal profession can also bring a valuable breadth of knowledge and skills to their roles. Meanwhile, individuals performing low-skilled, standardized legal work are the likeliest to be made obsolete by technical tools that leverage law-related decision trees and intelligent search algorithms. And many nonlegal positions (such as general support staff) will be transitioned to roles that don’t require specialized legal education but only some degree of legal experience and knowledge of legal technologies.

What it all means for legal education—in law schools and firms

To supply the legal market with lawyers who have the knowledge and skills essential for success in a landscape reshaped by legal tech, law schools, and law firms will have to invest in developing students’ and lawyers’ technical and business acumen. While law firms hire based on grades and school rankings and need lawyers trained in critical thinking and substantive law, law schools can further serve the profes-

LEGAL TECH'S IMPACT ON INDIVIDUAL ROLES AND LEGAL EDUCATION (continuation)

sion by teaching students business, project management, and general tech skills. To do so, schools may need to expand the mandatory curriculum beyond fields of substantive law by offering an additional course introducing case-management processes and legal technology. More specific legal-tech skills (such as database management, statistics, analytics, and digital communications) can be taught in electives and clinics throughout the course of the law degree. As a rule of thumb, the closer a law student gets to his or her job entry, the higher the need for

these nonlegal skills. This suggests considerable opportunity for law schools that offer executive education to alumni and the greater legal community.

Law firms, on the other hand, will have to offer on-the-job training aimed at helping lawyers get maximum value from available technologies, including specific applications used by their firm. Executive-education programs can further foster ongoing learning by focusing on holistic legal project management as well as legal-tech literacy.

To summarize, big law firms must not only focus on bespoke law but also expand their service portfolio and invest in tech readiness and willingness to outsource.

SMALL LAW'S NEW IMPERATIVES

Small law firms handling standard cases face the highest risk of being edged out of the market by legal technology. After all, tech solutions target simple, standardized tasks first and help automate or replace activities that such firms typically have handled themselves. Yet because of their size and their relatively slim profit margins, most of these firms lack the scale and capabilities needed to combat legal-tech players or leverage legal-tech solutions themselves.

To be sure, there are low-cost technology solutions available, such as software-as-a-service (SaaS) with licenses for small practices. But many small law firms do not employ tech-savvy support staff who can help them select and implement these and other legal-tech solutions.

Still, we maintain that small firms can fight the disruption posed by legal-tech companies by tackling the problem from a different angle. Namely, they need to find their niche and use technology to differentiate themselves. Under these circumstances, legal tech may even present an opportunity for small firms, if it can help them boost their productivity without increasing their costs. But to capitalize on this opportunity, small firms (like big law) will need to reexamine key elements of their business model.

Revisiting the value proposition Small law firms can best modify their value proposition by delivering more specialized service offerings. For instance, instead of taking a generalist approach and handling standard types of cases, they can specialize in one field of law or even a small set of cases. By combining specialization with a competitive fixed-price offering, they can gain scale and streamline processes critical to their chosen niche, thereby achieving cost-saving efficiencies.

Indeed, the most innovative small law firms have begun crafting legal products and selling them for a fixed price. Big law practices comfortable with their hourly-billing revenue model are lagging behind in this approach.

Overhauling the operating model In terms of small firms' operating models, specialization should be supported by legal technology that helps these practices handle increased caseloads without adding cost proportionately. Substantive law solutions can enable a small firm to provide cost-efficient legal advice in niche areas of expertise. Meanwhile, enabling technologies such as SaaS (including cloud computing services that provide document storage or server capacity) can help such firms reduce capital expenditures compared to maintaining their own IT infrastructure.

CORPORATE LEGAL ADVICE has always been a demanding job. Now the business of law is becoming more challenging as well with ever more data to analyze, and with corporate clients demanding lower-cost, high-quality legal advice and more accountability from external law firms. Increasingly sophisticated legal-technology solutions can help law firms achieve the cost efficiencies and enhanced decision-making effectiveness required to satisfy clients' demands. But to capitalize on these advantages, law practices—big and small alike—will have to rethink key components of their business models, including what services they offer, how they structure their fees, and which tasks they perform in-house versus outsourcing.

Although implementing such changes isn't easy, law practices cannot afford to spare the effort. Those that do will face the risk of being sidelined by more forward-thinking rivals—not only firms in their own industry but also legal-tech vendors themselves.

About the Authors

Christian Veith is a Senior Partner and Managing Director at BCG. He is the Regional Chair for BCG's CEMA region. You may contact him by e-mail at veith.christian@bcg.com.

Michael Bandlow is a Principal at BCG and a member of the strategy and industrial goods practice area. You may contact him by e-mail at bandlow.michael@bcg.com.

Michael Harnisch is a Consultant at BCG and specializes in topics related to digital transformation. You may contact him by e-mail at harnisch.michael@bcg.com.

Hariolf Wenzler is CEO of Bucerius Law School. You may contact him by e-mail at hariolf.wenzler@law-school.de

Markus Hartung is Director of the Bucerius Center on the Legal Profession. You may contact him by e-mail at markus.hartung@law-school.de.

Dirk Hartung is Executive Assistant and Tech Advisor to the CEO at Bucerius Law School and is a Bucerius alumnus. You may contact him by e-mail at dirk.hartung@law-school.de.

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For Further Contact

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