Introduction

Globally, the legal sector is poised for significant transformation. Increasing information complexity, client demands, economic forces, changing demographics and technology advancements continue to accelerate and demand a response. After a decade of debate about legal sector transformation – if, when and how it would happen – there’s no question that the global future of law is under way and that technology and the acceleration of technology offerings are key forces for change. Legal professionals are increasingly turning to accessible and impactful technologies that help them achieve better outcomes and offer higher value through data-driven analytics and insights and higher efficiency and productivity.

These are among the findings of the 2019 Future Ready Lawyer Survey from Wolters Kluwer Legal & Regulatory, an independently conducted survey of 700 professionals across Europe and the U.S. in law firms, corporate legal departments and business services firms. The Survey focused on three core areas and asked lawyers to assess their current state, future priorities and preparedness to identify what it will take to be future ready in the areas of:

- Tools & technology;
- Client needs & expectations; and
- Organization & talent.

A distinct and recurring theme emerged throughout the Future Ready Lawyer Survey. Across Europe and the U.S., and in organizations of all sizes, technology is a key enabler of the future.
The Survey found that as we enter the next-generation legal industry, some players already have a head start on the future, while others will need to catch up quickly to ensure continued relevance and resilience. The Survey shows that organizations that are already leveraging technology (“Technology Leaders”) have an early-adopter advantage, compared to other organizations, across their business, including profitability and readiness to take on change. They are also better suited to engage in the emerging legal ecosystem, which includes nontraditional, legal tech players. And, they plan to extend that advantage by increasing investments in emerging new technologies.

The firms and legal departments that are still in the planning phases of leveraging technology to a greater extent (“Transitioning” organizations) will need to accelerate their transformation to keep pace.

Key findings of the Future Ready Lawyer Survey include:

- Overall, only about one-third of lawyers (34%) believe their organization is very prepared to keep pace with changes in the legal market. Technology Leading organizations, however, fare much better, with 50% very prepared. Only 19% of Transitioning organizations feel very prepared.

The Future Ready Lawyer Survey provides insights from 700 lawyers across Europe and the U.S. in organizations that included law firms, corporate legal departments and business services firms, and across a range of issues relating to Tools & Technology, Client Needs & Expectations and Organization & Talent. Based on answers relating to Tools & Technology, respondents were identified as Technology Leading, Transitioning or Trailing organizations. Findings across the Survey show that Technology Leading organizations outperform across all categories those that are Transitioning or Trailing. These differences are explored throughout the report.

- **Leading**: Organization is leveraging technology effectively today, and will continue to invest in new technologies moving ahead (over the next 3 years).

- **Transitioning**: Organization is leveraging technology somewhat today, and plans to invest more in the future (over the next 3 years).

- **Trailing**: Organization is not leveraging technology today, and has no plans to leverage more.

The differences between Leading and Transitioning organizations is explored in the report, with 49% of organizations reporting that they are effectively using technology today, and 47% reporting they could improve their adoption of technology and plan to do so.

Findings for Trailing organizations are not emphasized in the report because so few organizations identified as Trailing (4%). As expected, the Survey found overall Trailing organizations report that their preparedness for the future is significantly lower than that for Leading and even Transitioning organizations. Of the three types of organizations surveyed, business services firms are most likely to identify as Technology Leading (56%), with legal departments at 49% and law firms at 46%.
• More than one-half (53%) of lawyers overall across Europe and the U.S. indicate their organization’s technology investment will increase over the next three years, with Technology Leaders most likely to report increased future investments in technology.

• Technology Leading firms (law and business services) report being more profitable.

• Legal professionals report that the Lack of Technology Knowledge, Understanding or Skills comprise the top category of reasons for resisting new technology (36%).

• Despite hurdles, adoption of new technologies will continue across most firms and departments over the next three years. Technology Leading organizations will continue to outpace others in technology adoption, particularly in emerging technologies, indicating a positive ROI from existing investments – and extending the lead between Technology Leaders and others.

• More than 7 in 10 lawyers across Europe and the U.S. say that both “Coping with increased volume and complexity of information” and an “Emphasis on improved productivity and efficiency” are top trends with impact; and across all trends Technology Leaders are far more prepared to respond.

• There are significant and concerning gaps between legal sector trends with expected impact and organizations’ readiness to address them. For example, 72% of respondents say “Coping with increased volume and complexity of information” is a top trend. Yet, only 31% feel very prepared to address it.

• More than one-half of lawyers expect to see some impact from transformational technologies already here today, such as artificial intelligence (AI), big data, predictive analytics and machine learning – but fewer than 24% say they understand them.

• Across both Europe and the U.S., lawyers in law firms and legal departments agree that the two greatest areas of change in how firms and law departments deliver service will be related to greater use of technology and greater specialization.

• The ability to understand and partner with clients to address their needs was among the top criteria for evaluating law firms across Europe and the U.S. Price was another top consideration.

• The top challenges for corporate legal departments today are: reducing and controlling outside legal costs; improving case and contract management; and automating routine tasks and leveraging technology in work processes.

The Survey indicates the future of law is truly global, with many similar findings overall across the U.S. and Europe and even types of organizations – law firms, corporate legal departments and business services firms. While differences were found in some areas based on specific geography or organization type, the most significant differences were reported between Technology Leaders and those Transitioning or Trailing organizations still not leveraging technology effectively.

“The best way to be future ready is to not wait until the future to prepare.”

– Bob Ambrogi
Market Trends & Preparing for Change

Only about one-third of lawyers (34%) overall believe their organization is very prepared to keep pace with changes in the legal market. However, the level of preparedness varies greatly between those organizations optimizing technology today and those that aren’t. Technology Leaders have significantly greater confidence in their organization’s ability to keep pace with change. In fact, 50% of Technology Leaders report they’re very prepared to keep pace with changes in the sector, compared to just 19% of lawyers in Transitioning organizations (Figure 1).

Lawyers are feeling pressure from a series of trends they expect to impact their organizations over the next three years. The top five trends expected to have at least some impact for two-thirds or more of organizations, according to the Future Ready Lawyer Survey are:

- Coping with increased volume and complexity of information;
- Emphasis on improved efficiency and productivity;
- Understanding legal technology of highest value;
- Meeting changing client and leadership expectations; and
- Financial issues, including greater price competition, new and alternative fee structures, and cost containment pressures.

Yet, there’s a concerning gap between these anticipated near-term forces and readiness as only one-third or fewer lawyers report their organizations are very prepared to address any of these looming trends.

In fact, while “Coping with increased volume and complexity of information” is a top concern for 72% of lawyers, only 31% indicate their organization is very prepared to address it. Similarly, 71% of lawyers indicate “Emphasis on improved efficiency and productivity” will impact their organization, but only 31% say their organizations are very prepared to address it. “Understanding legal technology of highest value” is expected to have at least some impact by 69% of organizations, but only 29% of lawyers say their organizations are very prepared to address it (Figure 2).
Closing the gap between expected impact and preparedness will be critical. In many cases, technology will play an important role in helping lawyers cope with the increased volume and complexity of information, improve efficiency and productivity and provide insights to meet changing client needs. Organizations gaining experience with these tools today will have a unique advantage over those that delay.

**Technology Strategy & Investment**

As technology becomes a key enabler to the successful legal organization – from how firms and departments are organized, staffed and led, to how lawyers work, advise and serve clients – understanding technology is essential for establishing a clear strategic vision and roadmap, preparing for change and prioritizing investments.

Technology investments are on the rise across the legal industry, with investment in legal tech platforms estimated to have reached a record-setting $1 billion in 2018. Legal organizations are increasingly interested in leveraging these platforms, looking to streamline and automate processes, more effectively manage their organizations and better serve clients and customers.

### Global Perspective on Top Trends

Borders aside … across the board, lawyers in Europe and the U.S. cite “Coping with increased volume and complexity of information” as among the most important trends over the next three years. The need for improved efficiency and productivity is also shared as a top trend for both Europe and the U.S. Rounding out the top trends for Europe is the expansion of business services firms (including the Big 4), along with financial considerations, while in the U.S. it’s understanding which technologies deliver the highest value.

<table>
<thead>
<tr>
<th>Europe</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Coping with increased volume and complexity of information</td>
<td>• Coping with increased volume and complexity of information</td>
</tr>
<tr>
<td>• Emphasis on improved efficiency and productivity</td>
<td>• Understanding legal technology of highest value</td>
</tr>
<tr>
<td>• Growth of business services firms, including the Big 4 in legal services; and financial considerations (greater price competition, alternative fee structures and cost containment needs)</td>
<td>• Emphasis on improved efficiency and productivity</td>
</tr>
</tbody>
</table>
In fact, 53% of lawyers overall indicate their organization’s technology investment will increase over the next three years. This planned increase is most evident for Technology Leaders – with 65% of these organizations saying they will increase their technology investments, compared to 45% of Transitioning organizations (Figure 3).

Technology Leaders aren’t only investing more aggressively in technology, they’re also realizing greater profitability (Figure 4). According to the Survey, 68% of Technology Leading law and business services firms report increased profitability from 2017 to 2018, compared to just 52% of Transitioning firms. The level of profitability also was markedly different, with Technology Leaders more likely to report double-digit growth rates compared to those Transitioning.

The importance of technology and investing in a technology strategy is clear to a majority of respondents overall. However, as with other factors, Technology Leaders tend to be more prepared to act. Technology Leaders have a better understanding of the benefits of technology, as 76% say they are prepared to make strategic investments in technology, compared to just 58% of those Transitioning.

This also is apparent when it comes to transformational technologies – those technologies such as AI and machine learning that will truly transform how organizations work. Seventy-three percent of Technology Leaders say they’re at least somewhat prepared to identify the potential benefits of transformational technologies. However, only 53% of Transitioning organizations report a similar

“The transformation we’re seeing in law practices and firms today spurred by technology is similar to the technology transformation that happened in financial departments 15 years ago. Legal tech delivery is now growing very fast.”

– Jeroen Zweers
level of preparedness to identify the benefits of transformational technologies (Figure 5a).

While lawyers overwhelmingly understand the benefits of technology, including as a tool to improve client focus (Figure 5b), they also recognize there is resistance to adopting new technologies. Reasons for resistance relating to Lack of Technology Knowledge, Understanding or Skills comprise the largest category (36%), followed by Organizational issues (34%) such as cultural, lack of strategy and leadership and change management issues. Financial issues (30%) including cost and ROI were third (Figure 6).

**Figure 5a: Preparedness – Technology Strategy**

Technology preparedness from strategy to implementation varies by organization type.

- **Understand benefit of technology to firm/department**
  - Leading: 31% Very Prepared, 45% Somewhat Prepared, 76% Total Prepared
  - Transitioning: 19% Very Prepared, 51% Somewhat Prepared, 70% Total Prepared

- **Able to quickly implement transformational technology**
  - Leading: 35% Very Prepared, 39% Somewhat Prepared, 74% Total Prepared
  - Transitioning: 16% Very Prepared, 46% Somewhat Prepared, 62% Total Prepared

- **Make strategic investments in technology**
  - Leading: 35% Very Prepared, 41% Somewhat Prepared, 76% Total Prepared
  - Transitioning: 15% Very Prepared, 43% Somewhat Prepared, 58% Total Prepared

- **Identify transformational technology potential (e.g., AI)**
  - Leading: 33% Very Prepared, 40% Somewhat Prepared, 73% Total Prepared
  - Transitioning: 18% Very Prepared, 35% Somewhat Prepared, 53% Total Prepared

**Figure 5b: Preparedness – Client Focus**

Technology preparedness to improve client services varies by organization type.

- **Use technology to improve client services**
  - Leading: 40% Very Prepared, 41% Somewhat Prepared, 81% Total Prepared
  - Transitioning: 25% Very Prepared, 46% Somewhat Prepared, 71% Total Prepared

- **Offer greater specialization**
  - Leading: 31% Very Prepared, 41% Somewhat Prepared, 72% Total Prepared
  - Transitioning: 18% Very Prepared, 46% Somewhat Prepared, 64% Total Prepared

**Figure 6: Reasons New Technology Is Resisted**

Lawyers identified numerous reasons technology is resisted within their organization. Those reasons related to Lack of Technology Knowledge, Understanding or Skills were most often cited as the top reason.

Lack of Technology Knowledge, Understanding or Skills: 36%

Organizational: 34%

Financial: 30%

- **Lack of Technology Knowledge, Understanding or Skills**
  - Lack of IT staff/skills
  - Lack of knowledge about particular technology benefits
  - Lack of understanding of what’s available
  - Training and learning curve
  - Lack awareness of the competitive need to adopt new technology

- **Organizational**
  - Lack of an overall technology strategy
  - Culture/business model doesn’t reward innovation
  - Culture that fears change; inadequate change management
  - Leadership resistance
  - Changes to workflows

- **Financial**
  - Costs
  - Lack of ability to show return on investment
Baseline Technology Plans

About one-half of Technology Leading organizations have already invested in most foundational technologies and the vast majority expect to do so by 2022. Transitioning organizations tend to be establishing a foothold with many of these technologies, but also expect to significantly increase their use of foundational technologies over the next three years (Figure 7).

Across the board, the Survey found that every technology that lawyers were asked about will see increased adoption over the next three years. Among foundational technologies, third-party e-billing systems are predicted to see the highest growth among Technology Leaders, while client portals will see the greatest growth among Transitioning organizations.

Adoption of foundational technologies delivers benefits today and sets the stage for integrating more advanced technologies ongoing. It’s essential that organizations examine how they want technology to support their objectives and establish a technology strategy that enables this.

Enabling technologies improve efficiency, productivity and work product. Technology Leaders are also more likely to have implemented key enabling technologies, with at least 8 in 10 expecting to have implemented all the technologies they were asked about by 2022, according to Survey findings. These technologies help organizations collaborate better (internally and with clients) and deliver greater value. Transitioning organizations will be slower to adopt these technologies and are expected to continue to lag behind Technology Leaders over the next three years (Figure 8).

Among the enabling tools expected to have the highest use within three years – across both Technology Leading and Transitioning organizations – are online legal research software and document management. Several other enabling technologies will be widely used among Technology Leaders including contract management software/contract analytics, customer relationship management, knowledge management, practice management and data analytics.

Figure 7: Foundational Technology

Most foundational legal technologies will be nearly ubiquitous across organizations within the next three years. Technology Leaders will continue to outpace others in implementation.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Currently Using</th>
<th>Plan to Use within 3 Years</th>
<th>Total Usage by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Client portals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading</td>
<td>49%</td>
<td>28%</td>
<td>77%</td>
</tr>
<tr>
<td>Transitioning</td>
<td>34%</td>
<td>40%</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Data security &amp; encryption tools</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading</td>
<td>56%</td>
<td>31%</td>
<td>87%</td>
</tr>
<tr>
<td>Transitioning</td>
<td>57%</td>
<td>29%</td>
<td>86%</td>
</tr>
<tr>
<td><strong>Electronic matter management system</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading</td>
<td>51%</td>
<td>29%</td>
<td>80%</td>
</tr>
<tr>
<td>Transitioning</td>
<td>42%</td>
<td>34%</td>
<td>76%</td>
</tr>
<tr>
<td><strong>Third-party e-billing system</strong> ^</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading</td>
<td>49%</td>
<td>40%</td>
<td>89%</td>
</tr>
<tr>
<td>Transitioning</td>
<td>43%</td>
<td>36%</td>
<td>79%</td>
</tr>
<tr>
<td><strong>Time &amp; billing system</strong> *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading</td>
<td>53%</td>
<td>29%</td>
<td>82%</td>
</tr>
<tr>
<td>Transitioning</td>
<td>62%</td>
<td>23%</td>
<td>85%</td>
</tr>
</tbody>
</table>

* Asked of law firm and business services firms only
^ Asked of legal departments only

“The greatest momentum now is around analytics. Analytics tools have immediate and practical application for lawyers today. ... The implication is that adoption of analytics tools will grow rapidly, to the point where any lawyer not using them will be at a severe disadvantage.”

– Bob Ambrogi
Figure 8: Enabling Technology

Enabling technologies also will be nearly ubiquitous in organizations within the next three years. Technology Leaders will continue to lead in implementation here as well.

Currently Using | Plan to Use within 3 Years | Total Usage by 2022
--- | --- | ---
**Business development*** | Leading | 48% | 33% | 81% | Transitioning | 44% | 34% | 78%

**Client collaboration tools**

Leading | 49% | 34% | 83% | Transitioning | 36% | 36% | 72%

**Contract management software/contract analytics**

Leading | 52% | 35% | 87% | Transitioning | 36% | 36% | 72%

**Cloud computing**

Leading | 49% | 35% | 84% | Transitioning | 39% | 38% | 77%

**Customer relationship management/centralized client information database**

Leading | 50% | 35% | 85% | Transitioning | 47% | 32% | 79%

**Data analytics**

Leading | 48% | 35% | 83% | Transitioning | 39% | 31% | 70%

**Document management**

Leading | 62% | 28% | 90% | Transitioning | 59% | 27% | 86%

**Integrated information & compliance tools**

Leading | 43% | 37% | 80% | Transitioning | 35% | 42% | 77%

**Knowledge management**

Leading | 52% | 33% | 85% | Transitioning | 40% | 36% | 76%

**Mobile apps**

Leading | 48% | 33% | 81% | Transitioning | 32% | 31% | 63%

**Online legal research software**

Leading | 56% | 32% | 88% | Transitioning | 53% | 30% | 83%

**Practice management***

Leading | 56% | 29% | 85% | Transitioning | 52% | 29% | 81%

**Vendor management***

Leading | 52% | 28% | 80% | Transitioning | 35% | 34% | 69%

* Asked of law firm and business services firms only
^ Asked of legal departments only
Technology Evolution

To help identify where legal organizations are in their technology adoption, three categories of technology are considered:

- **Foundational Technologies** – Basic technologies organizations rely on to conduct business. These include such technologies as client portals, electronic matter management, data security tools, and billing software. The majority of all organizations have most of these technologies in place today (Figure 7).

- **Enabling Technologies** – Technologies that improve productivity, efficiency and work product, and often require some level of change in work process to fully leverage. Technologies in this category include contract management/analytics software, customer relationship management software, data analytics, and knowledge and practice management solutions. Many organizations already have these technologies in place today or plan to within the next three years (Figure 8).

- **Transformational Technologies** – Technologies that deliver demonstrable new business results. Technologies in this category include AI, machine learning, predictive analytics and blockchain. Few organizations have embraced these technologies today but they will see exponential growth in the next three years (Figure 11).

Transformational Technology Plans

As the legal profession looks to more broadly adopt foundational and enabling technologies, they also recognize the impact that transformational technologies will have. Many also realize that they need to do more to understand how to best leverage these emerging technologies and capabilities.

Most lawyers acknowledge that transformational technologies will have some impact on their organizations over the next three years. However, lawyers are struggling to better understand these technologies. Overall, more than 50% of lawyers surveyed report at least some impact of transformational technologies, yet, fewer than 24% report they have a very good understanding of any of them (Figure 9).

There are demographic variances in impact and understanding of transformational technologies:

- Business services firms see the greatest impact of transformational technologies and have the best understanding of how most transformational technologies will apply to their work, followed by legal departments;

**Figure 9: Transformational Technology Impact & Understanding**

Most lawyers expect their organizations to see at least some impact from transformational technologies in the next three years. However, few lawyers believe they have a very good understanding of these technologies today.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Some/Significant Impact</th>
<th>Understand Very Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big data &amp; predictive analytics</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>Machine learning</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Robotic process automation</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Blockchain technologies</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

Most lawyers acknowledge that transformational technologies will have some impact on their organizations over the next three years. However, lawyers are struggling to better understand these technologies. Overall, more than 50% of lawyers surveyed report at least some impact of transformational technologies, yet, fewer than 24% report they have a very good understanding of any of them (Figure 9).

There are demographic variances in impact and understanding of transformational technologies:

- Business services firms see the greatest impact of transformational technologies and have the best understanding of how most transformational technologies will apply to their work, followed by legal departments;
• Lawyers in Europe anticipate transformational technologies will have a greater impact on their organizations in the next three years and generally report a better understanding of how the technologies will apply to their work, compared to U.S. lawyers; and
• As noted, there are also generational differences. Millennials also are more likely to say they have a very good understanding of these technologies, compared to Gen X or Baby Boomers (Figure 10).

Given the expected growth in adoption of these technologies, lawyers – and their organizations – will need to take every opportunity they can to accelerate their understanding. With more than one-third of organizations identifying Lack of Technology Knowledge, Understanding or Skills as top reasons for resisting new technologies (Figure 6), this is a gap for many organizations.

Generational Gap Emerges with Transformational Technologies

A driving force for change will be generational – for lawyers and their clients – as by 2025, 75% of the global workforce will be Millennials. And for them, technology is a given.

The Survey found that more than Gen X and Baby Boomers, Millennial lawyers see the impact transformational technologies will have, as well as better understand how these technologies will apply to their work over the next three years.

Figure 10: Transformational Technologies & Generation

Most lawyers expect their organizations to see at least some impact from transformational technologies in the next three years. However, few lawyers believe they have a very good understanding of these technologies today.

Expect Some/Significant Impact of Technology on Organization

<table>
<thead>
<tr>
<th>Technology</th>
<th>Millennials</th>
<th>Gen X &amp; Baby Boomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big data &amp; predictive analytics</td>
<td>65%</td>
<td>53%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td>Robotic process automation</td>
<td>63%</td>
<td>44%</td>
</tr>
<tr>
<td>Blockchain technologies</td>
<td>58%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Have a Very Good Understanding of How the Technology Impacts Their Work

<table>
<thead>
<tr>
<th>Technology</th>
<th>Millennials</th>
<th>Gen X &amp; Baby Boomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big data &amp; predictive analytics</td>
<td>27%</td>
<td>14%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>25%</td>
<td>16%</td>
</tr>
<tr>
<td>Robotic process automation</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>Blockchain technologies</td>
<td>23%</td>
<td>12%</td>
</tr>
</tbody>
</table>
When it comes to transformational technologies, adoption rates are still in the early stages. However, significant growth is expected in the next three years, with usage rates approximately doubling by 2022 (Figure 11).

By 2022, nearly 8 in 10 Technology Leading organizations will have adopted key transformational technologies:

- Decision support tools;
- Predictive analytics; and
- Smart contracts.

Additionally, within three years, more than two-thirds of Technology Leaders will be using:

- Artificial intelligence;
- Blockchain technologies; and

Of interest, it is estimated that of the $1 billion invested in legal platforms in 2018, over $360 million of that funding was invested in legal solutions incorporating AI – a larger amount than the investment across all legal technology in 2017.

Adoption of transformational technologies among Transitioning organizations, however, will lag, signaling a potential challenge to their ability to keep up with the increased pace of change across the legal marketplace.

Among lawyers who are using or plan to use AI and/or machine learning, applications include:

- Predictive capabilities, such as for case law or preparing a case (38%);
- Managing contracts (36%);
- Managing compliance tasks (31%);
- E-discovery (27%); and
- Decision support solutions (26%).

Among lawyers planning to use blockchain, expected applications include:

- Managing compliance tasks (55%); and
- Managing contracts (54%).

“**In the next three years, we’ll see substantial advances in the ability of AI tools to extract the intent and legal meaning of contract language and clauses.”**

– Dean Sonderegger

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**Figure 11: Transformational Technology Use**

*Lawyers expect their organizations’ adoption rate of transformational technologies will double or near-double in the next three years. Technology Leaders will outpace others in implementation.*

<table>
<thead>
<tr>
<th>Technology</th>
<th>Currently Using</th>
<th>Plan to Use within 3 Years</th>
<th>Total Usage by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Artificial intelligence</strong></td>
<td>Leading 33%</td>
<td>Transitioning 40%</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>Transitioning 18%</td>
<td>40%</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Blockchain</strong></td>
<td>Leading 0%</td>
<td>Transitioning 48%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td><strong>Decision support tools</strong></td>
<td>Leading 43%</td>
<td>Transitioning 33%</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>Transitioning 29%</td>
<td>33%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Machine learning</strong></td>
<td>Leading 38%</td>
<td>Transitioning 38%</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>Transitioning 20%</td>
<td>38%</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Predictive analytics</strong></td>
<td>Leading 38%</td>
<td>Transitioning 36%</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>Transitioning 26%</td>
<td>36%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Smart contracts</strong></td>
<td>Leading 39%</td>
<td>Transitioning 40%</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>Transitioning 23%</td>
<td>40%</td>
<td>63%</td>
</tr>
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</table>
Evolving Client Expectations

Changing and rising client expectations will play a defining role in the legal profession’s transformation. Clients expect more for less, they want to pay for value delivered instead of hours worked, and they expect ready access to service and expertise. More than ever, the future ready firm must differentiate itself from the others.

Law has always been about the client but now service will need to be much more data-driven, insight-based, collaborative, specialized and price-sensitive.

Overall, the top criteria lawyers say clients will use to evaluate law firms in the future are:

- Price (57% view it as among the top 3 concerns);
- Ability to understand client needs and partner with clients (48% view it as among the top 3 concerns); and
- Specialization (46% view it as among the top 3 concerns).

While respondents overall ranked price as a top factor, it is perceived as a higher consideration for lawyers at Transitioning organizations (22% see it as the top concern and 59% see it as among the top 3 concerns) compared to Technology Leaders (18% see it as the top concern and 54% as among the top 3 concerns). This is one area where the Survey found more significant differences based on geography as well, with lawyers in the U.S. more likely identifying price as a leading factor compared to lawyers in Europe (Figure 12). For all, however, the question will be how firms can differentiate themselves amid the pricing pressure.

“Tech adoption will be driven primarily by external forces. ... There is no single reason or trigger in driving legal tech transformation. Mainly, client expectations will be influential, along with pricing pressure and competition.”

– Markus Hartung

Figure 12: Most Important Law Firm Evaluation Factors – Europe and U.S.

Price, partnering with clients and specialization are the factors most often ranked #1 to evaluate law firms in the coming three years. In Europe, partnering with clients, specialization and cost are about equally the most important evaluation criteria, whereas price is expected to be the primary factor over the next three years in the U.S.
For firms trying to better serve their legal department clients, it’s also crucial to understand the challenges these in-house lawyers face, and how that could drive evaluation criteria among corporate clients.

For example, controlling outside legal costs is among their biggest challenges, making it no surprise that price is a leading evaluation factor for law department lawyers. Other key challenges include improving case and contract management, and automating routine tasks and leveraging technology in work processes, cited by 48% and 47% of law department lawyers, respectively (Figure 13).

Firms looking to offer greater value to their legal department lawyers have an opportunity to consider how they could help departments better address these challenges.

Lawyers also should consider what they could do to better understand clients. While most indicate they regularly communicate with clients or, in the case of legal departments – company leadership (53% overall do one of these), far fewer take other steps to better understand their clients. For example, monitoring industry trends and issues (37%) or participating in industry events (34%) (Figure 14).

As noted earlier, the ability to understand and partner with clients to address their needs was among the top criteria identified for evaluating firms (Figure 12). Organizations that aren’t actively integrating this into their practice may lose clients to those that do so.

“Client expectations will require firms to speed implementation of legal tech.”

– Jeroen Zweers
With the increasing digitalization of client data, technological capabilities can also be a differentiator here, as firms that can leverage data analytics to gain improved insights about their clients and client needs will have a competitive edge.

Another top factor in evaluating law firms is specialization. Most organizations report they’re somewhat prepared to offer greater specialization, but few say they’re very prepared. Specifically, the Survey found only 31% of Technology Leaders say their firms are very prepared to offer greater specialization and just 18% of Transitioning organizations indicate they’re very prepared to do so (Figure 5b).

Other top factors for evaluating law firms, such as 24/7 availability, offering legal technology consulting and using technology to optimize collaboration and work processes (Figure 12), all require a greater emphasis on implementing technology. As Figure 5b shows, Technology Leaders are better prepared to use technology to improve client services, with 40% saying they are very prepared, compared to just 25% of Transitioning organizations.

Similarly, most organizations recognize they could be doing more with technology to improve their client focus. The gap, however, is most evident when looking at Technology Leaders compared to those Transitioning. For example, 37% of Technology Leaders say they’re doing very well at using technology to expand the services they can offer to clients, compared to just 17% of those in Transitioning organizations.

**Organization & Leadership Preparedness**

Across the board, lawyers anticipate greater use of technology, specialization and collaboration, which has a significant impact on how firms and legal departments are organized and led.

Specifically, the Survey found that all lawyers anticipate changes in how they deliver service over the next three years. The specific amount of change expected varies slightly between firm and department lawyers; however, the top three areas of greatest change expected for both are:

- Greater use of technology;
- Greater specialization of legal services offered by firms; and
- Greater collaboration and transparency between law firms and clients (Figure 15).

However, lawyers overall also acknowledge there are barriers to implementing change in their organization, including:

- Leadership resistant to change and difficulty of change management (55%);
- Costs of change (49%); and
- Clients aren’t demanding change (31%).
Survey respondents overall give their organization’s leadership just fair ratings on their vision and ability to drive change. However, lawyers at Technology Leading organizations are more likely to view their leaders as stronger than do those at Transitioning organizations (Figure 16).

This is especially the case for organization leaders that:

- Understand the need for change in an evolving legal market: 57% of Technology Leaders vs. 47% of those Transitioning rated their leadership as doing an excellent or very good job;
- Take the right steps to prepare the organization for the future: 56% of Technology Leaders vs. 47% of those Transitioning rated their leadership as doing excellent or very good; and
- Lead change to new technology: 55% of Technology Leaders vs. 41% of those Transitioning rated their leadership as doing an excellent or very good job.

Managing Change to Become Future Ready

American humorist Will Rogers said, “Even if you’re on the right track, you’ll get run over if you sit there long enough.” That’s sage advice for legal professionals, who may be sustaining success today, but failing to innovate for the future.

The vast majority of lawyers expect significant change across their organizations over the next three years, which signals that the industry is at an inflection point. Technology is a clear factor in this expected transformation, with about 8 in 10 lawyers citing a greater use of technology playing a role in how they deliver service by 2022 (Figure 15).

However, lawyers indicate that change presents a challenge. Only about one-third believe their organization is generally very prepared to keep pace with change (Figure 1). Even among Technology Leaders, just over one-half report their leadership does a very good job understanding the need for change, taking the right steps to prepare the organization for the future or viewing IT as an enabler of change (Figure 16).

In fact, more than one-half of respondents identified leadership resistance to change and difficulty of change management as barriers to implementing change in their organization.

Yet, the need to move to transformational technologies – technologies that truly change how lawyers work and provide value – is clear: Technology Leaders expect an adoption rate of about 70-80% for most of these technologies in the next three years – up from less than 40% today. Fast adoption rate growth also is expected among Transitioning organizations (Figure 11).

To realize the true potential of these transformational technologies, it’s imperative that leadership act now to assess how these technologies will require broader organizational change. Then, they can help ensure the appropriate change management, training, IT skills and communications efforts are in place to successfully implement these new technologies.
Additionally, while lawyers anticipate changes to the service they deliver in the future, they also recognize their organizations aren’t as prepared as they may need to be (Figure 17a). Technology Leaders tend to be more prepared related to organizational factors compared to those Transitioning. For example:

- 32% of Technology Leading organizations are very prepared to use technology to be more efficient and productive, compared to just 16% of Transitioning organizations;
- 38% of Technology Leading organizations are very prepared to foster a culture open to change, compared to just 15% of firms Transitioning; and
- 31% of Technology Leading organizations are very prepared to automate routine processes, compared to just 14% of Transitioning organizations.

Similarly, Technology Leaders also have an advantage in the war for talent (Figure 17b). They report their organizations are better prepared when it comes to talent and staffing issues, including:

- 35% of Technology Leading organizations are very prepared when it comes to recruiting and retaining IT staff, compared to 19% of Transitioning organizations; and
- 28% of Technology Leading organizations are very prepared when it comes to having dedicated system implementation resources, compared to just 14% of Transitioning organizations.

It’s clear from the findings that it’s not just about technology, but the teams and the processes that organizations put together – and how they then use technology to help support people and operations.

Most organizations recognize they could be doing more with technology to better support their operations and staff. The gap, however, is most evident when looking

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“The most important piece of innovation is defining the problem. ... The future is all about asking the right questions and engaging key stakeholders in defining the problems and collaboratively designing responsive solutions.”

– Jean P. O’Grady
at responses from Technology Leading compared to Transitioning organizations. It’s clear: Technology Leaders are ahead. Again.

For example, according to Survey findings:

- 32% of Technology Leaders report they are doing very well at using technology to better understand their operations, compared to just 18% of Transitioning firms; and
- 35% of Technology Leaders are doing very well at using technology to better measure the value they offer, compared to just 16% of Transitioning firms.

While this is encouraging, the Survey findings show that there is much more that needs to be done.

### Advancing Innovation

Many organizations report taking at least some advanced innovation steps. Lawyers in legal departments and business services firms are more likely than those at law firms to have done so, with 96% of business services firms having taken at least one of these steps, compared to 88% of legal departments and 68% of law firms.

The most common single step taken overall is hiring technology specialists. Yet, only 32% of respondents overall report their organizations have done this (Figure 18). As previously noted, the Survey found Lack of Technology Knowledge, Understanding or Skills to be the leading category of reasons why new technology is resisted (Figure 6). As such, organizations that want to advance their technology capabilities should be considering this as among their first steps.

At least 1 in 4 lawyers also report their organizations have:

- Developed their own legal tech solutions in-house (27%); and
- Created a formal innovation initiative (25%).

Additionally, 25% of lawyers in legal departments say they have established a legal operations function.

### Figure 18: Technology Advancement Initiatives

Business services firms and legal departments are more likely to have undertaken at least one of these initiatives than law firms.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Overall</th>
<th>Law Firms</th>
<th>Legal Depts.</th>
<th>Bus. Services Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed own legal tech solutions in-house</td>
<td>27%</td>
<td>20%</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Created a formal innovation initiative</td>
<td>19%</td>
<td>22%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Partnered with a legal-tech start up</td>
<td>22%</td>
<td>23%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Set up a technology incubator</td>
<td>16%</td>
<td>10%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Established a legal operations function*</td>
<td>25%</td>
<td>21%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

* Asked only of legal departments
Bob Ambrogi

Robert Ambrogi is a Massachusetts lawyer and journalist who has been covering legal technology and the web for more than 20 years, primarily through his blog LawSitesBlog.com and now also his podcast LawNext.com.

What will the legal tech landscape look like three years from now?

- Tools driven by artificial intelligence will be pervasive, primarily for document review, diligence review and compliance, but also in legal research.
- Analytics will also be pervasive, extending beyond litigation-related analysis into an array of back-office tasks such as billing and productivity analysis.
- Tech-driven alternative legal services providers will command a significant share of the corporate market for routine legal work.

The legal field has often been tagged for being slow to adopt technology; where do you see momentum now? What are the implications for this?

The greatest momentum now is around analytics. Analytics tools have immediate and practical application for lawyers today. Analytics offer insights into how a judge rules, how motions fare, opponents’ success rates, and much more. Analytics provide critical insights that lawyers can use to develop case strategy or even to pitch their services. The implication is that adoption of analytics tools will grow rapidly, to the point where any lawyer not using them will be at a severe disadvantage.

Where do you see the near-term opportunities for firms or legal departments to embrace technology to gain quick wins?

This depends on the nature of the firm’s practice. For firms with heavy litigation practices, analytics provide the greatest near-term gain. The gain is in two areas:

- In crafting litigation strategy, analytics can give a firm an upper hand by exposing patterns, strengths, weaknesses and likely timelines.
- In marketing and business development, analytics can help a firm demonstrate through data its strengths across specific types of cases and specific courts, as well as show how it compares to other firms that may be pitching for the same work.

Another area where a firm can gain a quick win through technology is legal research. Legal research platforms are incorporating both AI and analytics to improve more targeted and relevant results than ever before and to deliver greater insights than ever before. In addition, legal research companies are redesigning their platforms to make it easier for users to get to the kind of information they need – whether a general overview or specific cases – more quickly and intuitively.

What does the future ready firm/department have that others don’t?

The future ready organization has the right mix of people, process and technology. Being future ready is not just about having or using technology. People remain the most valuable assets. Technology provides tools to help them do their jobs more effectively and efficiently. Process streamlines people’s use of technology and helps maximize its effectiveness. But it all revolves around the right team. Future ready firms prepare their professionals to be savvy about technology, but they also imbue in them a strong sense of mission and collegiality.

What advice or action items do you have for legal professionals preparing to be future ready?

The best way to be future ready is to not wait until the future to prepare. Read as much as you can about emerging technologies and evolving trends in legal services delivery. Talk to your colleagues and especially your clients about what they are seeing and what matters to them. Attend conferences and listen to what attendees are talking about. In many regards, the future is already here, it’s just slowly catching hold.
Markus Hartung is a lawyer, mediator and Director of the Bucerius Center of the Legal Profession at Bucerius Law School, Hamburg.

What external forces will be the most influential in driving legal tech transformation of the legal profession globally?

There is no single reason or trigger in driving legal tech transformation. Mainly, client expectations will be influential, along with pricing pressure and competition. Once in-house lawyers understand how the world has changed, they will forward this pressure to their advisors.

Will legal tech adoption in law firms globally be driven primarily by internal or external forces?

Tech adoption will be driven primarily by external forces. Traditional firms are risk and change averse and would not adopt changes if they didn't have to. There may be young mavericks in such firms, but they don't have any chances without external market pressure.

Where do you see legal tech delivering the most value globally?

- In B2C, legal tech greatly improves access to justice (A2J). This tends to be neglected by companies, but there is a high risk that more and more consumer claims will be brought against companies (and outside the U.S. in particular).
- In B2B, legal tech delivers value in document review/internal investigations and in providing “better” intelligence through AI/big data for risk-management decisions.
- For law firms, legal tech allows them to offer new types of services and products, to enter new markets and to win new clients.

Are law firms at risk of losing emerging talent to others in the legal marketplace that embrace legal tech?

Applicants prefer modern and successful law firms with a sustainable business model. The expectation of digital natives is that boring work is done through technology.
Jean P. O’Grady

Jean P. O’Grady has over 30 years of experience developing strategic information initiatives for Am Law 100 law firms. She is a member of the New York State Bar and has been a director in leading private practices as well as an adjunct faculty member at the graduate schools of Library and Information Science at St. John’s University and Long Island University.

Why is technology innovation fundamental to your department’s future?

Technology may be part of many innovations, but is not a prerequisite to innovation. Many important innovations can arise from simply asking “What business am I in?” and “What problem are we trying to solve?” Our department has moved from organizing tangible sources of information – books on a shelf – to delivering strategic insights and answers. Over the past decade our department has undergone a dramatic transformation. I am particularly excited about the promise of machine learning to optimize knowledge management initiatives.

Research specialists today no longer manage local collections of books, they are proactively engaging with practice groups and business units to deliver high value insights including client dossiers, personalized news alerts, custom analytics for litigation strategy, developing knowledge resources and driving AI-enabled resources into the practice of law to enhance lawyer efficiency.

What are examples of technology innovation you have already embraced?

Over the past year, we have taken steps to drive analytics insights into the business and practice of law. We have conducted analytics boot camps for attorneys around the country. We are connecting external data with internal data and documents to drive customer insights.

Looking out three years from now, where do you see technology playing a significant role in how firm lawyers practice law?

Analytics will continue to play an increasing role in business planning and client advisory. Advances in algorithms and machine learning will continue to reduce repetitive work.

What advice can you give to others as they look to embrace innovation within their own firms and become ready for the future?

The most important piece of innovation is defining the problem. Sometimes the solution will not involve any technology. Working smarter with checklists and workflow tools can deliver important efficiencies. Once these workflows are streamlined and optimized, they can more easily be automated.

The future is all about asking the right questions and engaging key stakeholders in defining the problems and collaboratively designing responsive solutions. Avoid the shiny objects!
Artificial intelligence can be intimidating and many people aren’t aware of how it’s already a part of our lives. What are some examples in the consumer market?

AI, simply put, is a set of technologies that allow a device to perform some type of higher reasoning that would otherwise have to be done by a person. From a consumer perspective there are many examples:

- The Roomba vacuum cleaning robot leverages AI technology to make decisions on the path to take, how to avoid obstacles, etc.
- When Amazon sends someone advertisements in their email, an AI algorithm has looked at that person’s search history and demographic information to pick items they might be interested in.

How is AI being applied in law today?

When we talk about the application of AI in law, usually we’re talking about the ability for the machine to either understand or extract key information from documents (such as case law records or contracts) that would otherwise have to be manually examined or the ability to identify patterns that are so complex it would be difficult for a human to identify. For example:

- As part of M&A due diligence, AI can be used to identify the supplier contracts (out of thousands of contracts) that are not assignable.
- Based on a large body of case law, AI can help identify the best case to cite (based on previous outcomes) for a given fact pattern and judge.

What is an example of how AI will evolve in the legal industry within the next three years?

One of the most interesting remains the contract. Right now, AI applications have the ability to identify contract types and clauses, and can extract certain terms, for instance, names of the parties, or understand if a contract is assignable. While the advances have been remarkable, we still lack the ability of a program to understand (and extract) the underlying concepts in contract language. This is a key shortcoming of existing comparison capabilities which rely mostly on text comparisons.

In the next three years, we’ll see substantial advances in the ability of AI tools to extract the intent and legal meaning of contract language and clauses. Upon receiving a new draft from opposing counsel, an attorney will upload the contract and the machine will be able to diagnose exactly what changed and, most importantly, the legal and business implications.
Jeroen Zweers is Innovation Director for Kennedy Van der Laan | LegalTech, Amsterdam, co-founder of Dutch Legal Tech, and a board member of the European Legal Technology Association (ELTA). He has been named among the top 10 European legal innovators by Financial Times.

What are top hurdles to legal tech adoption in law firms and the legal profession and why do they persist?

A few hurdles include:

- Technology isn’t an integral part of most lawyers’ education, which creates a hurdle. Most law schools still do not teach students the technology skills they’ll need in their practice.
- The hourly rate also is a hurdle. It’s still very easy to sell by the hourly rate; as a result, partners aren’t feeling the pain (yet) to innovate.
- Bar rules in some countries in Europe can make innovation very difficult, for example in setting up a separate legal tech consultancy entity. It may not be allowed by the bar association in a specific country.

Where do you see legal tech delivering the most value today, and what’s next? What do you think will be of highest value in 3-5 years?

The transformation we’re seeing in law practices and firms today spurred by technology is similar to the technology transformation that happened in financial departments 15 years ago. Legal tech delivery is now growing very fast. Today, legal professionals are using technology to create greater process efficiency across the business, for example. In the future, they will use more AI-focused tools.

Will legal tech adoption in law firms globally be driven primarily by internal or external forces?

External forces will drive legal tech innovation. An esteemed Chicago-based law school professor and colleague once told me that legal innovation will not come from law firms – it will come from their customers because they demand that. This is exactly what we see at this moment. Client expectations will require firms to speed implementation of legal tech.

Competition also will be influential in driving transformation. Firms will need to respond to new players in the market, such as alternative legal service providers.

Are traditional firms at risk of losing talent to others in the legal marketplace that embraces legal tech?

Yes, very clearly there already is a war for legal talent going on, and it’s challenging to get talent. You see that the new players, like legal tech startups and alternative service providers and even some in-house teams, are putting an emphasis on appealing for talent that could end up costing very traditional law firms.
Conclusion

Leveraging technology as a strategic advantage is characteristic of high-performing businesses and professionals around the world. The same is true for the legal sector. Technology is a differentiator, and will become even more important as legal professionals recognize and leverage the unprecedented insights, capabilities and efficiencies that technology delivers. In addition, the emerging legal ecosystem will demand it, as tech-empowered players outside of the traditional legal profession continue to enter and disrupt the market.

A clear theme emerged from the 2019 Future Ready Lawyer Survey. Technology Leaders today are already realizing a competitive advantage by having embraced technology across their organizations, as they also prepare to invest and leverage tech more to accelerate that advantage. They recognize their legal expertise and ability can be significantly strengthened through technology agility as they increasingly turn to accessible and impactful technologies that help them achieve better outcomes and offer higher value through data-driven analytics and insights and higher efficiency and productivity.