Legal technology innovation – opportunities and risks

Presented by:
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Today’s speakers

Speakers:

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Ernst & Young LLP, US
Introduction

The legal industry is going through digital transformation that creates both opportunities and risks. On one hand, the adoption of emerging technologies such as artificial intelligence, robotic process automation and advanced data analytics are enabling litigants to access and process data from just about any sources and in large volumes. On the other hand, new technologies are also creating information at a rapid pace that can trigger data protection and data privacy risks more easily than ever. In this session, we will discuss the legal technology trends, how to capitalize on the opportunities brought by technology advancement while mitigating the new risks at the same time.
Survey approach

- Longitude Research conducted the survey for EY in October and November 2017.
- The survey includes 745 interviews with large global companies across 19 countries.
- All interviews were conducted by telephone in the local language.
- Respondents had to be the decision-maker who have risk management responsibilities, particularly in legal, compliance and fraud functions.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/COO/CIO</td>
<td>27</td>
</tr>
<tr>
<td>Head of internal audit/CRO</td>
<td>232</td>
</tr>
<tr>
<td>Other audit/risk</td>
<td>94</td>
</tr>
<tr>
<td>Head of compliance</td>
<td>57</td>
</tr>
<tr>
<td>Head of legal</td>
<td>25</td>
</tr>
<tr>
<td>Head of investigations</td>
<td>8</td>
</tr>
<tr>
<td>Head of business unit/division</td>
<td>15</td>
</tr>
<tr>
<td>Head of security</td>
<td>4</td>
</tr>
<tr>
<td>CFO/finance director</td>
<td>78</td>
</tr>
<tr>
<td>Financial controller</td>
<td>63</td>
</tr>
<tr>
<td>Other finance</td>
<td>80</td>
</tr>
<tr>
<td>Company secretary</td>
<td>7</td>
</tr>
<tr>
<td>Other management staff</td>
<td>55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer products, retail and wholesale</td>
<td>144</td>
</tr>
<tr>
<td>Financial services</td>
<td>151</td>
</tr>
<tr>
<td>Life sciences and health care</td>
<td>67</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>127</td>
</tr>
<tr>
<td>Mining</td>
<td>31</td>
</tr>
<tr>
<td>Oil and gas</td>
<td>39</td>
</tr>
<tr>
<td>Power and utilities</td>
<td>56</td>
</tr>
<tr>
<td>Technology, communications and entertainment</td>
<td>69</td>
</tr>
<tr>
<td>Transportation</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
</tr>
</tbody>
</table>
Key findings from our research

1. Digital transformation has brought better opportunities to manage risks; but it has also created new risks.

2. FDA advancements require the right mix of skill sets to deliver deep insights and to realize FDA’s full benefits.

3. Effective cross-functional collaboration is essential to the success of FDA and requires leadership support.

4. Data protection and data privacy has become one of the most challenging risk areas and further complicates cross-jurisdictional compliance.

5. As companies start to realize the full potential of FDA, they will be able to transform their risk functions in a way that was never previously possible.
Attendee polling question #1

Which of the following is the biggest risk concern for your organization? (Select one.)

1. Data protection and data privacy concern
2. Cybersecurity
3. Industry-specific regulations
4. Bribery and corruption
5. None of the above
Increased concern about data protection and data privacy compliance

<table>
<thead>
<tr>
<th>Category</th>
<th>Significantly Increased</th>
<th>Slightly Increased</th>
<th>Not Changed</th>
<th>Decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data protection and data privacy compliance</td>
<td>40%</td>
<td>38%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Cyber breach and insider threat</td>
<td>38%</td>
<td>37%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>Industry-specific regulations</td>
<td>19%</td>
<td>35%</td>
<td>39%</td>
<td>6%</td>
</tr>
<tr>
<td>Regulatory response</td>
<td>21%</td>
<td>31%</td>
<td>41%</td>
<td>4%</td>
</tr>
<tr>
<td>External fraud and financial crimes</td>
<td>17%</td>
<td>31%</td>
<td>44%</td>
<td>5%</td>
</tr>
<tr>
<td>Third-party due diligence</td>
<td>12%</td>
<td>32%</td>
<td>47%</td>
<td>6%</td>
</tr>
<tr>
<td>Bribery and corruption</td>
<td>14%</td>
<td>29%</td>
<td>48%</td>
<td>8%</td>
</tr>
<tr>
<td>Internal investigations</td>
<td>10%</td>
<td>29%</td>
<td>54%</td>
<td>6%</td>
</tr>
<tr>
<td>Capital projects</td>
<td>10%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mergers and acquisitions</td>
<td>11%</td>
<td>21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litigation</td>
<td>7%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money laundering</td>
<td>10%</td>
<td>21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial statement fraud</td>
<td>10%</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antitrust and anticompetitive behavior</td>
<td>8%</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

78% of respondents expressed increasing concern about data protection and data privacy compliance.

Legal technology innovation – opportunities and risks
Main benefits of FDA — broadly recognized

- **88%** Improved risk assessments
- **87%** Ability to detect risk in large data sets
- **81%** Faster response in investigations
- **80%** More timely or relevant corrective actions or training
- **79%** Meeting regulatory expectations
- **74%** Increased business transparency
- **55%** Reduced costs of risk management programs
Attendee polling question #2

If your organization is using robotic process automation, which areas are you using it for? (Select all that apply.)

1. Automation of office tasks
2. IT support
3. Assisted automation of customer support
4. Compliance monitoring and testing
5. We are not using it
6. Don’t know
More use of advanced technologies

- Spreadsheet and relational database
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 90%

- Data warehouse
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 63%

- Internally built tools
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 55%

- Visualization and reporting
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 54%

- Continuous monitoring
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 46%

- Security incident and event management
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 43%

- Statistical analysis and data mining
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 42%

- Social media and web monitoring
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 40%

- Forensic analytics
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 33%

- Robotic process automation
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 14%

- Voice searching and analysis
  - 2014: 12%
  - 2016: 25%
  - 2018: 54%
  - Total: 8%
Increasing adoption of emerging technologies

39% of respondents plan to adopt robotic process automation within the next year.
Better integration is needed to gain insights from data

46% of respondents consider “getting a consistent global view from multiple data sets remains a real challenge in using FDA.”

Challenges in combining or accessing data sources

2014: 15%
2018: 33%
The number of dedicated FDA resources remains low

- 39% no dedicated personnel
- 9% dedicated personnel of 6-10
- 36% dedicated personnel of 1-5
- 13% more than 10 dedicated personnel
Human resources and skills need to catch up

Percentages of respondents who rated the following areas immature

- **Integrating multiple data sources for better risk detection and mitigation**: 53%
- **Moving from ad hoc or periodic testing to continuous monitoring**: 50%

Bar chart showing:
- Technical skills: 13%
- Domain knowledge: 28%
- Data analytics or data science expertise: 12%
Attendee polling question #3

Which of the following functions are involved in defining your FDA strategy? (Select all that apply.)

1. Internal audit
2. Finance
3. Legal and compliance
4. Information technology
5. Enterprise risk management
6. Corporate management
7. None of the above
Many stakeholders are involved in defining the FDA strategy

Functions identified by over 40% of respondents as being responsible for defining and executing the FDA strategy

- Internal audit
- Finance
- Corporate management
- Information technology
- Enterprise risk management
- Legal
Cross-functional collaboration is a challenge

- We have siloed risk management functions that do not share consistent FDA efforts.
- We have well-coordinated FDA efforts across risk management functions.
- Some of our risk management functions collaborate with each other in their FDA efforts.

Legal technology innovation – opportunities and risks
Attendee polling question #4

Which of the following is false about the GDPR? (Select one.)

1. The GDPR requires “privacy by default”.
2. The GDPR requires “privacy by design”.
3. It requires notification within 72 hours in the event of a data breach.
4. The GDPR only applies when companies process personal data in EU.
5. Violators can be fined up to 4% of annual global turnover or £20, whichever is greater.
Data protection and data privacy compliance can create challenges for companies

- There has been unprecedented development of data protection and data privacy regulations around the world.
  - EU’s GDPR
  - China’s Cybersecurity Law
  - Australia’s Privacy Amendment
  - South Africa’s Electronic Communications and Transactions Act
Limited readiness toward GDPR compliance

We have a plan

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0%</td>
</tr>
<tr>
<td>Canada</td>
<td>10%</td>
</tr>
<tr>
<td>Mexico</td>
<td>10%</td>
</tr>
<tr>
<td>US</td>
<td>32%</td>
</tr>
<tr>
<td>Americas average</td>
<td>13%</td>
</tr>
<tr>
<td>France</td>
<td>50%</td>
</tr>
<tr>
<td>Germany</td>
<td>80%</td>
</tr>
<tr>
<td>Ireland</td>
<td>73%</td>
</tr>
<tr>
<td>Italy</td>
<td>48%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>63%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>40%</td>
</tr>
<tr>
<td>UK</td>
<td>68%</td>
</tr>
<tr>
<td>Europe average</td>
<td>60%</td>
</tr>
<tr>
<td>South Africa</td>
<td>35%</td>
</tr>
<tr>
<td>UAE and Saudi Arabia</td>
<td>18%</td>
</tr>
<tr>
<td>South Africa, UAE and Saudi Arabia average</td>
<td>27%</td>
</tr>
<tr>
<td>Australia</td>
<td>18%</td>
</tr>
<tr>
<td>China (including Hong Kong SAR)</td>
<td>10%</td>
</tr>
<tr>
<td>India</td>
<td>13%</td>
</tr>
<tr>
<td>Japan</td>
<td>8%</td>
</tr>
<tr>
<td>Singapore</td>
<td>10%</td>
</tr>
<tr>
<td>Asia-Pacific average</td>
<td>12%</td>
</tr>
</tbody>
</table>

Legal technology innovation – opportunities and risks
Data protection and data privacy regulations have a significant impact on FDA

- We are not currently using any FDA tools to support GDPR compliance.
- We are in the process of analyzing what FDA tools can assist us with achieving compliance.
- We have data monitoring and reporting tools in place that will allow us to be in compliance with the GDPR.

42% agree that data protection and data privacy regulations have a significant impact on the design and use of FDA.
Realizing the full potential of FDA and transforming the risk functions

**Aim for better integration**
Data sources and people should be fully integrated across all areas of the company.

- 73% Better access to centralized data repositories within the organization
- 76% Cross-functional collaboration and information sharing

**Leverage the right technologies, data and people**
Companies should use the right technologies and data sources, implemented by subject-matter experts who have the right skills.

- 74% Investment in the right technologies, and data analytics and data mining platforms
- 65% Investment in compliance and risk experts who are responsible for designing and reviewing the results of the analytics
- 59% Investment in data science and information technology professionals

**Secure strong leadership**
Companies should build an FDA program with strong governance and support from the board of directors and executive management.

- 69% Sponsorship from executive management
Near real-time compliance risk communication to employees

Overview
Transforming the compliance field using digital twins

Scope
Build analytics and communication strategy for business courtesies
- 7 months of historic data, 623 employees
- Identified 34 risk triggers
- Pulled data from multiple data sources to build analytics around risk triggers
- Communication approach defined based on risk trigger weight and frequency

Employee
- System interaction
- Prior trainings
- Preferences
- Monitoring

Digital Twin
- Training, communications, mobile app, website

Analytics

Training database
Corruption perceptions index
CRM data
Customer information
T&E employee data
Due diligence database

Automated, intriguing and relevant communications

EY/GE: Fraud Magazine, January 2018 issue:
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