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James A. Sherer

Taylor M. Hoffman

Kevin M. Wallace

Eugenio E. Ortiz

Trevor J. Satnick

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## MERGER AND ACQUISITION DUE DILIGENCE PART II—THE DEVIL IN THE DETAILS

James A. Sherer,<sup>·</sup> Taylor M. Hoffman,<sup>-</sup> Kevin M. Wallace,<sup>\*\*\*</sup> Eugenio E. Ortiz<sup>\*\*\*\*</sup> & Trevor J. Satnick<sup>\*\*\*\*\*</sup>

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### I. INTRODUCTION

[1] Our prior scholarship examined the legal and technical challenges involved in modern Merger & Acquisition (“M&A”) due diligence practices associated with transactions (“Deals”), given recent but steady advances in technology and related increases in sophistication seen in Deal participants—primarily the organizations or assets targeted (the “Targets”) as part of the Deal, and the organizations that pursued and/or resulted from the Deal (the “Acquirers”). We then proposed a framework addressing five particular verticals of interest and concern: data privacy (“DP”), information security (“IS”), e-Discovery, information governance (“IG”), and the due diligence and record keeping associated with the Deal itself (“Deal Information”) (collectively, the “Framework”). We also provided a pricing model (using existing, publicly-available information) and hypothesized that service providers might work with attorneys to address the Framework’s considerations. Finally, we proposed follow-up research

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<sup>·</sup> James A. Sherer is Counsel with Baker Hostetler LLP.

<sup>-</sup> Taylor M. Hoffman is a Senior Vice President and Global Head of eDiscovery at SwissRe.

<sup>\*\*\*</sup> Kevin M. Wallace is an Associate with Baker Hostetler LLP.

<sup>\*\*\*\*</sup> Eugenio E. Ortiz is a Researcher with Quantitative Management Associates.

<sup>\*\*\*\*\*</sup> Trevor J. Satnick is a Juris Doctorate Candidate at the Benjamin N. Cardozo School of Law - Yeshiva University.

which would solicit the participation of service providers within the IG and e-Discovery spaces, providing those service providers with the original research as well as the fact patterns contained within the paper.<sup>1</sup>

[2] Using our prior research and our proposal, we formulated a two-prong approach to this second step:

- (1) We would research and define the particulars of the services we wished to propose within the Framework to accommodate an analysis of the verticals.
- (2) We would craft a survey that we would present to service providers to garner their thoughts, and determine whether and how—even if not publicized as such—these services were already being performed.

[3] We believed meaningful feedback from approximately ten service providers to be sufficient. To that end, we sent out a total of two hundred fifty invitations to a variety of service providers primarily within the IG and e-Discovery spaces, promising anonymity if desired for the participants. We were pleased to receive answers from twenty-five of those firms, and evaluated both the raw data and the narrative portions of the service provider responses. We present both the results of our research and the responses to the survey in this paper, and provide a further explanation of those issues presented by common structured data sources within due diligence that we developed as part of our analysis. We subsequently conclude that, while the market for the application of the Framework is not yet mature, it is ripe to provide these services and, thus, add significant value in Deals.

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<sup>1</sup> See James A. Sherer et al., *Merger and Acquisition Due Diligence: A Proposed Framework to Incorporate Data Privacy, Information Security, e-Discovery, and Information Governance into Due Diligence Practices*, 21 RICH. J.L. & TECH. 5, ¶ 126 (2015), <http://jolt.richmond.edu/v21i2/article5.pdf>, archived at <https://perma.cc/Z4AH-VTAH>.

### A. Summarizing the Prior Research

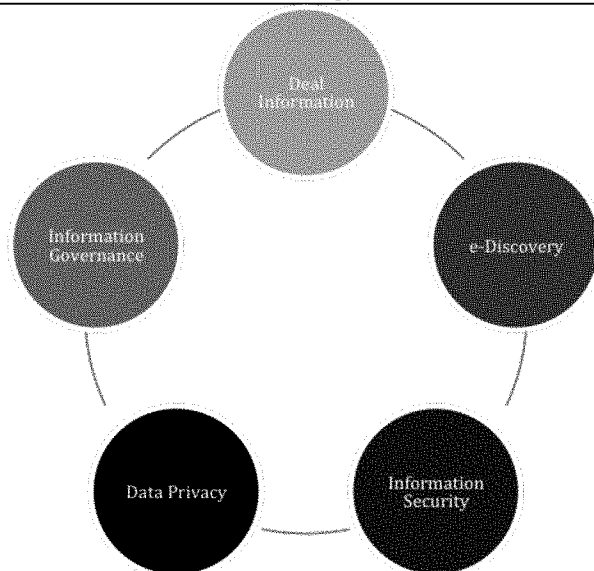
[4] When examining then-current M&A practices in the face of new technological trends, we determined that—while the literature and case law were sparse—we could draw conclusions from some definitive trends. The literature noted the issues associated with DP, IS, e-Discovery, and IG<sup>23</sup>—but more commonly described or mentioned them as exceptions to the rule. The theme that emerged, however, was that some combination of some (or all) of those topics might be exceedingly important—or even crucial—for the success of a particular deal. Conversely, treating the issues singly—or not at all—could lead to inefficiencies or non-compliance with court orders and regulatory guidance.

[5] We concluded that a preferable strategic framework would integrate all four verticals (plus the due diligence and record keeping associated with the Deal) into one plan and provide additional data points for what these types of transactions truly cost. We searched for one. We did not find one. So we proposed one:

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<sup>2</sup> IG may also encompass knowledge management, considered “one [of] the most strategically significant resource[s] in the organization” when evaluating Deal participants. Alen Sacek, *The Scope of Due Diligence in Cross-border Acquisitions—Empirical Evidence in the German Automotive Industry*, 4TH INT’L VIRTUAL SCI. CONFERENCE ON INFORMATICS AND MGMT. SCIS. 50, 51 (2015), <http://www.ictic.sk/archive/?vid=1&aid=3&kid=50401-262&q=f1>, archived at <https://perma.cc/2WYR-9VVM>.

<sup>3</sup> Sherer et al., *supra* note 1, at ¶ 10–11.



### *The Strategic Framework*

[6] Practitioners could then build out these inter-related parts with general and industry or practice-specific checklists that they would subsequently evaluate in the context of the Deal’s due diligence—understanding that many issues would not be present, but that the evaluation would still provide value in those instances. This evaluation led to an appreciation that a due diligence Framework addressing these verticals was anything but a one-size-fits-all approach. We concluded that both size and complexity mattered when determining how applicable certain aspects of the Framework would actually work. And with those caveats, we also outlined what we thought the next steps of our analysis would be.<sup>4</sup>

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<sup>4</sup> *Id.* at ¶ 126.

## **B. Researching the Current-Current State of Law and Practice**

### **1. Changes in Law and Regulatory Guidance**

[7] Overall, the current law is much the same as we observed in our previous article. However, there has been some additional focus on areas within Deal practice that touches on the Framework, one of its component parts, or some of the techniques proffered by IG and e-Discovery service partners. Towards the very end of 2014, the U.S. Department of Justice (“D.O.J.”) issued Foreign Corrupt Practices Act (“FCPA”) Release 14-02 which addressed an inquiry on behalf of a “multinational company headquartered in the United States.”<sup>5</sup> Of particular note to our proposed Framework, FCPA Release 14-02 addressed a specific part of the inquiry: the section that highlighted the multinational’s “pre-acquisition due diligence of the Target” which uncovered “weaknesses in accounting *and recordkeeping*” associated with the Target’s pre-Deal practices.<sup>6</sup> In this instance, the multinational had engaged an “experienced forensic accounting firm . . . to carry out the due diligence review” which included a focus on “identifying, among other things, potential legal and compliance concerns at the Target.”<sup>7</sup>

[8] FCPA Release 14-02 also underscored the enquiring multinational’s proposed strategy to take “several pre-closing steps to begin to remediate the Target Company’s weaknesses prior to the planned closing,” and the D.O.J. ultimately determined that it did not “intend to take any enforcement action with respect to pre-acquisition bribery Seller

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<sup>5</sup> U.S. DEP’T OF JUSTICE, OP. PROCEDURE RELEASE NO. 14-02: FOREIGN CORRUPT PRACTICES ACT REVIEW 1 (2014), <http://www.justice.gov/criminal/fraud/fcpa/opinion/2014/14-02.pdf>, *archived at* <https://perma.cc/NZ5Q-SXA6> [hereinafter DOJ RELEASE 14-02].

<sup>6</sup> *Id.* at 1 (emphasis added).

<sup>7</sup> *Id.* at 2.

or the Target Company may have committed.”<sup>8</sup> While the D.O.J.’s determination did not primarily rely on the due diligence performed regarding the recordkeeping practices, the D.O.J. did encourage “companies engaging in mergers and acquisitions to . . . conduct thorough risk-based FCPA and anti-corruption due diligence.”<sup>9</sup> In our view, FCPA Release 14-02 adds to the growing literature associated with recordkeeping and records management diligence generally. Interestingly, FCPA Release 14-02 also noted that, despite focusing the diligence in part on “legal” compliance, the use of an “experienced forensic accounting firm” seemed to pose no difficulty.<sup>10</sup>

[9] In August of 2015, the U.S. Federal Trade Commission’s (“FTC”) Bureau of Competition published its *Best Practices for Merger Investigations*.<sup>11</sup> Here, the FTC also discussed the Second Request context, and specifically highlighted “sophisticat[ion] in the use of electronic discovery and search techniques.”<sup>12</sup> At least one other practitioner noted this as supporting the use of e-Discovery and other disciplines’ advances within the M&A context.<sup>13</sup> This supports IG and e-Discovery service partner contentions about the services they provide, and

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<sup>8</sup> *Id.* at 2–3.

<sup>9</sup> *Id.* at 3.

<sup>10</sup> DOJ RELEASE 14-02, *supra* note 5 at 2.

<sup>11</sup> See *Best Practices for Merger Investigations*, FED. TRADE COMM’N. 1 (2015), [https://www.ftc.gov/system/files/attachments/merger-review/best\\_practices\\_for\\_merger\\_investigations\\_august\\_2015.pdf](https://www.ftc.gov/system/files/attachments/merger-review/best_practices_for_merger_investigations_august_2015.pdf), *archived at* <https://perma.cc/PR9G-NJRH>.

<sup>12</sup> *Id.* at 1.

<sup>13</sup> See Joseph G. Krauss, *Merger, They Wrote: FTC Issues Merger Investigation Survival Guide*, LEXOLOGY (Sept. 10, 2015), <http://www.lexology.com/library/detail.aspx?g=60cf6df5-0fd9-41cb-9793-4c1c4f67c491>, *archived at* <https://perma.cc/PBH7-E6XJ>.

how those service partners and other practitioners believe that the type of analytics and review methods they employ make sense in a variety of different contexts.<sup>14</sup>

[10] These considerations, in turn, present an additional issue associated with the uses of practicing attorneys when dealing with due diligence issues: privilege. The two-fold question as suggested in the prior article, and one that has attracted some attention in the literature, is: (1) whether attorneys are *required* to perform or supervise some parts of the due diligence Framework as presented (e.g., the legal hold component and perhaps some of the data privacy work); and (2) whether attorneys *should* perform or supervise some of that work, if only to impart privilege to certain segments of the due diligence process. FCPA Release 14-02 does not support the former and does not address the latter; the FTC's *Best Practices* addresses neither.

[11] But a few commentators have found that there is privilege associated with the diligence of the transaction depending on how information is shared.<sup>15</sup> One author explicitly focused on the concept of common interest as a protection against third-party litigation; without attorneys *practicing as attorneys* being involved at some level, any similar assertion of privilege would seem to be unavailing.<sup>16</sup> Related decisions also make note of another issue raised in the Framework: that of diligence

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<sup>14</sup> See generally Amie Taal et al., *A Consideration of eDiscovery Technologies for Internal Investigations*, in GLOBAL SECURITY, SAFETY AND SUSTAINABILITY: TOMORROW'S CHALLENGES OF CYBER SECURITY 59, 60 (H. Jahankhani et al. eds., 2015).

<sup>15</sup> See Phillip M. Slinkard, *The Many Facets of the Attorney-Client Privilege in Mergers and Acquisitions*, METRO. CORPORATE COUNSEL, Jul.–Aug. 2015, at 12, 34, <http://www.metrocorpcounsel.com/pdf/2015/July/12.pdf>, archived at; see also Anton Tchajkov, *IT Due Diligence: Don't Let IT Be Ignored*, DEAL L. WIRE (Apr. 13, 2015), <http://www.deallawwire.com/2015/04/23/it-due-diligence-dont-let-it-be-ignored>, archived at <https://perma.cc/WF8F-U5YM>.

<sup>16</sup> See Slinkard, *supra* note 15, at 12.



related to legal hold material and supporting information governance regarding the Deal itself, where one court emphasized a “seller’s failure to request that its premerger attorney-client privileged communications be segregated until after the buyer brought the suit—a year after the merger became effective.”<sup>17</sup> Finally, IT issues require an understanding “from a legal and technical perspective how the IT systems of the two companies will work together and factor these considerations into the M&A process early on.”<sup>18</sup>

## 2. Publicized Third-Party Practices and Advertising

[12] Some third-party service providers have already publicized listings of the services they would provide in the Deal context. For example, Kroll Ontrack’s team indicated that it would provide a variety of related services, which include using e-Discovery technology to “make short work of huge data sets both collecting, filtering and analysing data to get to the key information as quickly as possible” and providing an analysis of “potential risks or . . . a clean bill of health” which would lead to “informed decisions” about the Deal.<sup>19</sup> Less explicitly, Xerox states that it offers managed review services, staffed with “highly qualified [and] vetted attorneys” to “provide expertise in: . . . [m]erger and acquisition/divestiture due diligence support.”<sup>20</sup>

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<sup>17</sup> *Id.* (citing *Great Hill Equity IV, LP v. SIG Growth Equity Fund I, LLP*, 80 A.3d 155, 156 (Del. Ch. 2013)).

<sup>18</sup> Tchajkov, *supra* note 15.

<sup>19</sup> Rob Jones, *Mergers & Acquisitions: Ediscovery Takes Centre Stage*, EDISCLOSURE & DIGITAL FORENSICS BLOG (May 22, 2015), <http://www.ediscoveryblog.co.uk/mergers-acquisitions-ediscovery-takes-centre-stage/>, archived at <https://perma.cc/6G76-YJZ2>.

<sup>20</sup> *eDiscovery Solutions for Litigation and Investigations*, XEROX (last visited Jan. 19, 2016), <http://www.xerox-xls.com/solutions/e-discovery-for-litigation-investigations.html?PHPSESSID=c111f682566f0163b90d52b8a8ba3632>, archived at <https://perma.cc/53V6-P4GM>.

[13] Third-party service providers have already developed a mature M&A practice to assist attorneys and clients with responding to the Hart-Scott-Rodino Second Requests (“Second Requests”) discussed in FCPA Release 14-02 and the FTC’s *Best Practices* above, where the FTC or the D.O.J.’s Antitrust Division request additional information on a proposed merger or acquisition.<sup>21</sup> These inquiries are considered to be “some of the highest pressure, shortest turnaround, and deepest impact eDiscovery projects possible.”<sup>22</sup> In the context of these Second Requests, another vendor described its available “[d]edicated project managers experienced with intricate mergers and acquisitions that involve domestic and international collections, processing, consultation, hosting, and production.”<sup>23</sup> Still another service-provider administered the following activities in the context of requests for information when responding to a European Commission Phase II Investigation:

- (a) Assessing the likely complexity and cost of the data retrieval exercise, to support efforts to reduce the scope of an RFI.
- (b) Assisting internal IT teams in the collation and collection of the data requested
- (c) Ensuring this data is stored securely and processed quickly
- (d) Providing analytical tools to check documents are relevant to the request and do not fall under privilege

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<sup>21</sup> See *Merger Review*, FED. TRADE. COMM., <https://www.ftc.gov/news-events/media-resources/mergers-and-competition/merger-review>, archived at <https://perma.cc/N8CK-59GD> (last visited Jan. 5, 2016).

<sup>22</sup> Hal Marcus, *The Toughest eDiscovery Projects in the World*, RECOMMIND (May 26, 2015), <http://www.recommind.com/blog/toughest-ediscovery-projects-world>, archived at <https://perma.cc/3VP8-VCKV>.

<sup>23</sup> *Solutions: Second Requests*, COMPLETE DISCOVERY SOURCE, <http://cdslegal.com/secondrequests>, archived at <https://perma.cc/UD59-RA74> (last visited Feb. 18, 2016).

- (e) Working in a timely fashion to ensure the request for information deadline is met.<sup>24</sup>

These services could also be provided in the absence of a Second Request governmental inquiry.

### 3. Current Considerations Regarding the Practice of Law

[14] Following an examination of what considerations might be important for modern due diligence practices within these verticals—and given advertised services in these areas—questions remain as to who would perform what services and how attorney direction is best provided or incorporated. This leads to an evaluation of whether certain of the DP, IS, e-Discovery, and IG tasks should—or must—always be performed by or at the direction of attorneys.

[15] One question raised regarding the practice of e-Discovery managed document reviews was whether that third-party vendor's oversight and employment relationship of temporary, licensed attorneys constituted the practice of law for the third-party vendor.<sup>25</sup> The practice of law is governed by state law, and many states consider “the exercise of some legal judgment an essential element of the practice of law.”<sup>26</sup> There has

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<sup>24</sup> Jones, *supra* note 19.

<sup>25</sup> See *FAQ*, PERCIPIENT (last visited Jan. 31, 2016), <https://percipient.co/managed-document-review>, archived at <https://perma.cc/E7JW-GXRE> (“Managed Review Services” or “Managed Document Review” is the activity that “occurs when an outside firm or vendor manages a document review project on behalf of a party engaged in litigation or subject to a subpoena....”).

<sup>26</sup> *Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*, 620 Fed. App'x. 37, 44 (2d Cir. 2015).

been some consideration of this within the District of Columbia, where the D.C. Court of Appeals Committee on Unauthorized Practice of Law (the “Committee”) examined the practice of law in connection with the work done by legal staffing services,<sup>27</sup> “contract attorneys,”<sup>28</sup> and “discovery service committees.”<sup>29</sup> Through these decisions, the Committee first determined that legal staffing services could provide services as long as:

- (1) An attorney with “an attorney-client relationship with the prospective client . . . select[s] the temporary attorney;”
- (2) The temporary attorney is “directed or supervised by a lawyer . . . represent[ing] the client; and”
- (3) The staffing company “does not otherwise engage in the practice of law within the meaning of Rule 49 . . . or attempt . . . to supervise the practice of law by the attorneys it places.”<sup>30</sup>

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<sup>27</sup> D.C. Cir. Comm. on the Unauthorized Prac. Of Law, Op. 6-99 (1999) (discussing “Permissible Conduct of Commercial Firms that Place Attorneys on a Temporary Basis with Legal Service Organizations”), [http://www.dccourts.gov/internet/documents/rule49\\_opinion6.pdf](http://www.dccourts.gov/internet/documents/rule49_opinion6.pdf), *archived at* <https://perma.cc/AMH5-3SXD> [hereinafter Permissible Conduct].

<sup>28</sup> D.C. Cir. Comm. on the Unauthorized Prac. Of Law, Op. 16-05 (2005) (discussing “Compliance with Rule 49 by ‘Contract’ Lawyers in the District of Columbia”), [http://www.dccourts.gov/internet/documents/rule49\\_opinion16-05.pdf](http://www.dccourts.gov/internet/documents/rule49_opinion16-05.pdf), *archived at* <https://perma.cc/F5ZH-5BFG> [hereinafter Compliance].

<sup>29</sup> D.C. Cir. Comm. on the Unauthorized Prac. Of Law, Op. 21-12 (2012) (discussing “Applicability of Rule 49 to Discovery Services Companies”), <http://www.dccourts.gov/internet/documents/21-Opinion-21-12.pdf>, *archived at* <https://perma.cc/J9VD-RDV5> [hereinafter Applicability].

<sup>30</sup> Permissible Conduct, *supra* note 27.

[16] The Committee further determined that practitioners whose work is essentially the “review of documents for potential relevance or potential privilege, where the ultimate decision to assert the privilege and produce or not produce the document will be made by someone else,” while were performing “the same basic function as a paralegal;” however, if the person performing the work is billed out as and identified as an attorney, the person “must be a member of the D.C. Bar.”<sup>31</sup> Finally, service providers were prohibited from advertising and performing legal services under the auspices of the service providers’ corporate structures because that activity conflicted with the Committee’s prior analysis and opinions.<sup>32</sup>

[17] This strongly suggests that document review by an attorney should be considered the practice of law in either of the two following scenarios: (1) the review involves some legal judgment; or (2) if the reviewer is being advertised or billed as an attorney. However, in *Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*, a troubled contract attorney alleged in a complaint against a law firm that, because the document review he performed did not involve legal judgment, he was an employee and should have received overtime.<sup>33</sup> Perhaps cutting off his nose to spite his face, the plaintiff argued that he was under “such tight constraints” and “used criteria developed by others to simply sort documents into different categories” such that his work was effectively cookie-cutter and did not qualify as the practice of law.<sup>34</sup> The court, assuming those allegations were true for the purposes of a motion to dismiss, found that the contract attorney’s document review did not involve legal judgment and was thus

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<sup>31</sup> Compliance, *supra* note 28.

<sup>32</sup> See Applicability, *supra* note 29.

<sup>33</sup> See *Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*, 620 F. App’x 37, 39–40 (2d Cir. 2015).

<sup>34</sup> *Id.* at 45.

not the practice of law.<sup>35</sup> As a result, that question remains open, although one should not read too much into the ruling given the standard in ruling on motions to dismiss—that is, assuming the complaint’s allegations are true.

#### 4. Additional Directly-Related Commentary

[18] Since our prior scholarship, some additional commentary has developed on the importance of and practicality of addressing DP, IS, e-Discovery, and IG in the context of M&A. As we had also noted before, others have commented that the “time prior to a merger or acquisition deal being finalized is critical, and data from entities being merged or acquired must be assessed as part of due diligence duties.”<sup>36</sup> This holds true because “[r]ecords and information management (“RIM”) programs [and] information assets play a pivotal role in mergers and acquisitions,”<sup>37</sup> and in “the due diligence phase, the assessment of HR and knowledge potentials gives insight in quantifying the synergy potentials”<sup>38</sup> of the Deal.

[19] This activity further falls within standard M&A practice, where the Acquirer will always need “a thorough and accurate ‘snapshot’ of what the buyer is purchasing [including] the target’s operations, culture, [and]

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<sup>35</sup> *See id.*

<sup>36</sup> Jones, *supra* note 19.

<sup>37</sup> Julie Gable, *Leveraging the Principles in Mergers, Acquisitions, and Divestitures*, INFO. MGMT., May–June 2014, at 32, 32, <http://cdn.coverstand.com/23097/208412/81359e528a08a46dc3b6eb78912190bcf278a420.1.pdf>, archived at <https://perma.cc/2Y58-BSDF>.

<sup>38</sup> Sacek, *supra* note 2, at 51.

human resources . . . .”<sup>39</sup> and certainly a “more precise valuation of the target.”<sup>40</sup> The digital reigns supreme in this aspect, as commentators have noted “[i]t is critically important to the success of a due diligence investigation that the target company establish, maintain, and update as appropriate a well-organized online data room to enable the buyer to conduct due diligence in an orderly fashion.”<sup>41</sup> These services are explicitly focused on one or more of the Framework’s verticals, as seen in such examples as presentations on “Addressing Cybersecurity and Information Governance in the Merger & Acquisition Arena,”<sup>42</sup> articles that stress the “Importance of Cybersecurity in M&A Transactions”<sup>43</sup> or gave tips on “conducting effective cybersecurity due diligence in M&A

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<sup>39</sup> Scott J. Lochner, *Overview of the Due Diligence Process in a Merger and Acquisition Transaction*, MACRO STRATEGIC DESIGN, INC. (Dec. 1, 2014), <http://www.macrostrategicdesign.com/videos--articles/overview-of-the-due-diligence-process-in-a-merger-and-acquisition-transaction>, archived at <https://perma.cc/USF5-553K>.

<sup>40</sup> *Corporate Mergers and Acquisitions Services*, MARSH, <https://www.marsh.com/us/services/private-equity-mergers-acquisitions/corporate-mergers-and-acquisitions-services.html>, archived at <https://perma.cc/3M9V-WZZK> (last visited Jan. 1, 2016).

<sup>41</sup> Richard Harroch, *20 Key Due Diligence Activities in Merger And Acquisition Transaction*, FORBES (Dec. 19, 2014, 1:09 P.M.), <http://www.forbes.com/sites/allbusiness/2014/12/19/20-key-due-diligence-activities-in-a-merger-and-acquisition-transaction/print>, archived at <https://perma.cc/QL6N-A2GF>.

<sup>42</sup> Kim Peters, *Addressing Cybersecurity and Information Governance in the Merger & Acquisition Arena*, REED SMITH (May 6, 2015, 11:00 A.M.), <http://www.reedsmith.com/en-US/Addressing-Cybersecurity-and-Information-Governance-in-the-Merger--Acquisition-Arena-05-06-2015>, archived at <https://perma.cc/7J2G-HPM7>.

<sup>43</sup> Steven L. Caponi & Adam V. Orlacchio, *The Importance of Cybersecurity in M&A Transactions*, THE LEGAL INTELLIGENCER (Jun. 23, 2015), <http://www.thelegalintelligencer.com/id=1202729814043/The-Importance-of-Cybersecurity-in-MampA-Transactions?slreturn=20151001214823>, archived at <https://perma.cc/XRY3-VSBH>.

transactions;”<sup>44</sup> or scholarship focused in part on the need for specific expertise to address data privacy issues within Deal due diligence.<sup>45</sup>

[20] The advent of the importance of information as its own consideration (rather than informing another) is a recent development, as another commentator noted a “prediction for 2015: [where] Companies will reconsider how their data is handled in legal processes (litigation, mergers & acquisitions, etc.).”<sup>46</sup> He continued, noting that law firms “and their vendors will be a key area of concern for corporate clients in developing their information security strategies. These are precisely the types of solutions we are developing with our clients through the launch of our Cyber Compliance initiative in February 2015.”<sup>47</sup> Others noted that an “entirely new level of pre-acquisition investigation” was required given the ability of data security issues to “turn a great opportunity into an unmitigated failure.”<sup>48</sup> Perhaps this should not be surprising: not only is this a relatively new focus within M&A practices, but even within traditional M&A practice where it is still true that “in the majority of cases little due diligence is done beyond the financials to investigate the

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<sup>44</sup> Jennifer C. Archie, *7 Tips for Conducting Effective Cybersecurity Due Diligence in M&A Transactions*, LEXOLOGY (Oct. 29, 2015), <http://www.lexology.com/library/detail.aspx?g=8350220c-d3cf-48de-a551-9bbc80f626a8>, archived at <https://perma.cc/9L5Q-ZHUF>.

<sup>45</sup> See, e.g., Holly K. Towle, *Merger & Acquisition Due Diligence in an E-Information Age*, CCH GUIDE TO COMPUTER LAW NO. 287 (Sept. 26, 2005), [http://www.klgates.com/files/Publication/22680b08-1386-4a97-9634-2179a4b5293a/Presentation/PublicationAttachment/5b673fb7-7383-4a5a-88fc-2871bb865e08/287\\_HKT\\_CCH.pdf](http://www.klgates.com/files/Publication/22680b08-1386-4a97-9634-2179a4b5293a/Presentation/PublicationAttachment/5b673fb7-7383-4a5a-88fc-2871bb865e08/287_HKT_CCH.pdf), archived at <https://perma.cc/YMN6-YP53> (providing an example of relevant scholarship in the field of law).

<sup>46</sup> Drew Lewis & Arun Amin, *Top Tech Trends for eDiscovery in 2015*, PARAGON (Dec. 30, 2014), <http://www.paragonafa.com/top-tech-trends-ediscovery-2015>, archived at <https://perma.cc/M69C-48CH>.

<sup>47</sup> *Id.*

<sup>48</sup> Caponi & Orlacchio, *supra* note 43.



challenges of having two organizations become one” and the merged organization “is usually shocked to find the degree of differences that exist between their two, soon to be merged, organizations—and too few actively consider these integration challenges before the deal.”<sup>49</sup>

[21] We have also seen additional focus on the division and distinction between sell-side financial due diligence, which “requires a seller to critically analyze its own financial position and assess the opportunities and risks it may encounter prior to a transaction” and buy-side financial due diligence, analysis

performed by a buyer . . . of assumptions being made about a deal as they relate to financial matters. Its purpose is to enable the buyer to challenge the financial information provided by a target company and to ensure that the potential benefits of the deal outweigh the risks. In contrast to sell-side financial due diligence, buy-side financial due diligence is typically performed as a final component of the M&A transaction process.<sup>50</sup>

New research, which explicitly includes the evaluation of a type of IG in the form of knowledge management, stresses that an accurate appraisal of that buy-side due diligence is crucial—at least in cross-border Deals, as “the more the firm learns about the target in the due diligence [deal], the better will be the cross-border acquisition success.”<sup>51</sup>

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<sup>49</sup> David Fubini, *Before a Merger, Consider Company Cultures Along with Financials*, HARV. BUS. REV. (Dec. 26, 2014), <https://hbr.org/2014/12/before-a-merger-consider-company-cultures-along-with-financials>, archived at <https://perma.cc/T32W-F9C4> (emphasis omitted).

<sup>50</sup> *Considering a Merger or Acquisition? How Not to Become an Unfortunate Statistic*, COHN REZNICK (Mar. 26, 2015), <http://www.cohnreznick.com/insights/newsletters/considering-a-merger-or-acquisition-how-not-to-become-an-unfortunate-statistic>, archived at <https://perma.cc/9TY4-7L5L>.

<sup>51</sup> Sacek, *supra* note 2, at 53.

[22] An increased interest and awareness in data security, perhaps due to recent and well-publicized breaches, has led to additional thinking regarding the impact data security has on M&A Activity.<sup>52</sup>

[23] As noted by one commentator, “Mergers and Acquisitions represent a significant risk to organizations as integration and data sharing can expose assets to confidentiality, integrity, and availability threats.”<sup>53</sup> Another commented that buyers in Deals, “should ask questions about any historical incidents in these areas and assess the target’s measures for preventing similar future breaches or attacks,”<sup>54</sup> which in turn supported still another article’s conclusion that these threats can stretch back years, if not decades, in terms of the target’s practices.<sup>55</sup>

[24] We noted that one area which we thought would matter to clients was the timing of these analyses, and considered whether there was more commentary on the importance of that timing.<sup>56</sup> Specifically, we stated that the best time to undertake this diligence was the present, when the money associated with the deal was “on the table” such that it would “be available to address otherwise unfunded liabilities” and afford Acquirers the opportunity to make improvements to the ultimate merged organization.<sup>57</sup> This was a point also reinforced in recent literature, where

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<sup>52</sup> See Caponi & Orlacchio, *supra* note 43.

<sup>53</sup> Matthew Rosenquist, *M&A Information Security Areas of Interest (AOI’s)*, SLIDESHARE (Apr. 8, 2015), <http://www.slideshare.net/MatthewRosenquist/mergers-and-acquisition-security>, archived at <https://perma.cc/WKP9-T66R>.

<sup>54</sup> Archie, *supra* note 44.

<sup>55</sup> See *Fools Rush In: The Importance of Pre-Acquisition Due Diligence*, PHARMEXEC.COM (Jul. 29, 2014), <http://www.pharmexec.com/fools-rush-importance-pre-acquisition-due-diligence>, archived at <https://perma.cc/GCW6-JWJ6>.

<sup>56</sup> Sherer et al., *supra* note 1, at ¶ 69.

<sup>57</sup> *Id.* at ¶ 5 (emphasis omitted).

one commentator noted more colloquially that “[j]ust like someone shopping for a home or a car, acquirers have the most leverage **before** a contract is signed and they use that leverage to learn as much as possible before moving forward.”<sup>58</sup>

[25] Another article took a similar approach with timing, by recommending an examination of issues related to personal data security *during* the Deal, asserting that

[C]ompanies are particularly vulnerable to data breaches when they exchange information as part of due diligence in mergers and acquisitions. Businesses may set aside normal security protocols when they are wrapped up in negotiations and focused on completing a transaction. They may not be aware of best practices that govern exchanges of information in due diligence, and they necessarily must rely on the good faith and competence of employees and agents of the other company.<sup>59</sup>

[26] Finally, we examined those instances where documents of inherent value came into play, and examined areas such as Patent Portfolio Compilation, Insurance Policy Compilation, and Vendor Management Analysis. We also confirmed individuals at a Target as the sources of information about information. At least one commentator noted—in the

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<sup>58</sup> Matt Glick, *Getting Your Ducks in a Row: Preparing for Due Diligence Before Selling Your Company*, LEGAL HERO (Aug. 20, 2015, 11:38 A.M.), <http://blog.legalhero.com/getting-your-ducks-in-a-row-preparing-for-due-diligence-before-selling-your-company>, archived at <https://perma.cc/57HW-YDNQ> (emphasis in original).

<sup>59</sup> Karli Swift, *Don't Neglect Personal Data Security in Mergers and Acquisitions*, INSIDE COUNSEL (Jan. 12, 2015), <http://www.insidecounsel.com/2015/01/12/dont-neglect-personal-data-security-in-mergers-and?slreturn=1453241601>, archived at <https://perma.cc/P3UQ-4ALK>.

context of unstructured data insurance policies—that the first thing the Acquirer should

do is to find any long-time employees of the company you acquired who may have been involved in or knowledgeable about any relevant insurance programs. Do this quickly, before engaging in any related downsizing. When you find such persons, debrief them on where any old policies, claims files or the like might be found.<sup>60</sup>

Likewise, insurance was highlighted as playing a role in post-Deal activities, where Deal participants were encouraged to “evaluate which of the target’s cyber risks [would] be mitigated by insurance coverage.”<sup>61</sup>

## 5. Conclusion of the Current Research

[27] The field is nascent,<sup>62</sup> which is promising for future practitioners and for those who would take up the mantles of “thought leaders.”<sup>63</sup> But

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<sup>60</sup> Mark Garbowski, *Insurance Due Diligence in Mergers, Acquisitions, and Spin-Offs*, POLICYHOLDER ADVISOR, Nov.–Dec. 2014, <http://www.andersonkill.com/webpdfext/Insurance-Due-Diligence-in-Mergers-Acquisitions-and-Spin-Offs.pdf>, archived at <https://perma.cc/DJN8-CSHN>.

<sup>61</sup> Archie, *supra* note 44.

<sup>62</sup> Caponi & Orlacchio, *supra* note 43 (“Ten years ago, a CEO in this position could not be faulted if she closed the transaction as soon as possible following basic due diligence into the financial condition of the target. But in today’s environment, there is an evolving threat to the success of every transaction, one requiring an entirely new level of pre-acquisition investigation . . .”).

<sup>63</sup> Russ A. Prince & Bruce Rogers, *What Is a Thought Leader*, FORBES (Mar. 16, 2012, 9:49 A.M.), <http://www.forbes.com/sites/russprince/2012/03/16/what-is-a-thought-leader/>, archived at <https://perma.cc/U9ZJ-VVN8>.

for determining exactly what modern day practices are, while additionally hypothesizing what they should be, a nascent field is less helpful. We therefore continued our examination by looking further afield to additional commentary that we initially did not consider, did not consider instructive, or that may have grown in importance since the prior article.

## II. THE NEW RESEARCH

[28] We had suggested further directed research was warranted in the first article, and our additional survey results supported that contention. In particular, we stated explicitly that

If we investigate further, we propose soliciting the participation of service providers within the IG and e-Discovery space, providing them with this scholarship as well as the original fact patterns, asking them to consider each fact pattern. We would allow the service providers to determine what portion(s) of each fact pattern they would address, the technology they would use, and even how they would characterize the results of their efforts, along with the pricing they would provide. Information shared during this process would be kept confidential vis-à-vis each service provider, unless (a) the service provider gave permission to share their methodology and/or pricing; and (b) at least ten service providers wished to share their particulars publicly.<sup>64</sup>

We undertook that research by compiling a hypothetical for the service providers, and providing that hypothetical along with sixty-five total and sixty-three substantive questions examining the service providers' services in that context.<sup>65</sup>

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<sup>64</sup> Sherer et al., *supra* note 1, at ¶ 126.

<sup>65</sup> See *infra* App. A.

### **A. The Hypothetical: Negotiating the Acquisition**

[29] An Acquiring company (the “Acquirer”) and a Target company (the “Target”) (together, the “Parties”) are in the process of negotiating an acquisition. Acquirer is considering specialized assistance in the due diligence process related to the consideration, collection, processing, evaluation, and management of information (primarily in electronic form).

[30] In support of these efforts, a third-party vendor may be engaged to provide some or all of the following services:

- Hosting a due diligence data room. Support of a data room would include scanning, loading, OCR’ing, and hosting paper documents; and collecting, processing, and loading electronic documents from the Target.
- Identifying additional information that could be material for data room inclusion and subsequent consideration.
  - ◇ This may include identifying “documents of inherent value,” such as leases, contracts, deeds, audits, supplier or customer lists, insurance policies, and intellectual property.
  - ◇ The vendor should assume advanced analytics and/or TAR will need to be used to determine relevant data, at least in part.
  - ◇ The vendor should also assume that there will be human review and coding or “tagging” of the documents for collaboration between reviewers and further analysis.
- Determining the subsequent scope and volume of the Target’s data once the acquisition is complete.

◇ Vendor will be charged with providing supporting consulting services to provide a “data map” or “footprint” for strategic consideration.

- This may include considerations of “documents of inherent value,” such as leases, contracts, deeds, audits, supplier or customer lists, insurance policies, and intellectual property.

- This will also include considerations of “junk” information, such as duplicative files, or NIST or operational files.

◇ Vendor would provide such data processing required to determine data volumes associated with the data map.

◇ Vendor would identify a cost associated with the final steps necessary to render the determined data volume usable to the Acquirer post-acquisition, including proper identifications and provisions for support of legal holds; information governance period information; and data privacy and security considerations.

- The post-acquisition company has a high likelihood of needing the services of a vendor to process the mapped data after the acquisition is complete.

- Assume that the Target Company has 50,000 employees and data is stored in six locations, including New York, London, Japan, Germany, Iowa, and Brazil.

## **B. The Areas of Interest**

[31] We separated out the questions presented to the third-party service providers into seven broad categories:

- (1) M&A Due Diligence Services (Generally)
- (2) Volume Services
- (3) Professional Services
- (4) Records Planning
- (5) Systems Integration and Media Inventories
- (6) Encryption, Bring Your Own Device (“BYOD”) Program, Email Management, and Social Media Analyses
- (7) Legal Holds, Cross-border Data Transfers, and Warehouse Agreements

### **1. M&A Due Diligence Services (Generally)**

[32] Within general M&A due diligence services, we wanted to determine how providers would offer their areas of expertise in supporting Deal due diligence practices generally. The authors had some professional experience that allowed them to hypothesize as to which these services would have been of use in prior Deals. The authors also had taken advantage of “stress-testing” third-party providers’ online due diligence environments, including one enterprise cloud service provider that provides storage, organizational, and collaborative tools for data management purposes.<sup>66</sup>

[33] Using that provider’s public information as a proxy for other, similar third-party service offerings, we examined its representations that

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<sup>66</sup> See *IT and Administrative Controls: Control Your Box Experience*, BOX, <https://www.box.com/business/it-admin-controls>, archived at <https://perma.cc/WB2T-5EW7> (last visited Jan. 31, 2016).



it functions around due diligence,<sup>67</sup> as well as its provision of an online “content manager” that allows an administrator to view, at once, all content on its network, where the audit function allows an administrator to break down which documents are being shared and who they are being shared by.<sup>68</sup> Within this type of environment, and in the context of a litigation hold, the provider indicated that document privileges could be augmented to limit access to prevent edits to responsive documents,<sup>69</sup> even if other commentators indicated the depth to which this functionality operated was limited.<sup>70</sup> In addition, certain processes, like data sorting, are promoted as “creating value on top of [simple data] storage,”<sup>71</sup> can be automated based on clear, established rules.<sup>72</sup> This automation process, if utilized properly, is proposed as a method to aid in organization and records management<sup>73</sup> by further doing “much better things around analyzing that content and helping . . . discover more relevant information.”<sup>74</sup> And this is the way due diligence should operate, where

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<sup>67</sup> See *Secure Virtual Data Rooms for Deal Management*, BOX, <https://www.box.com/business/virtual-data-room>, archived at <https://perma.cc/H944-AXJJ> (last visited Jan. 31, 2016).

<sup>68</sup> See *Control Your Box Experience*, *supra* note 66.

<sup>69</sup> See *id.*

<sup>70</sup> See Beth Stackpole, *Why Box and Dropbox Are Not Document Management*, CONTENTVERSE (Mar. 26, 2015), <http://www.contentverse.com/why-box-and-dropbox-are-not-document-management>, archived at <https://perma.cc/9AEX-JPKD>.

<sup>71</sup> Sam Conforti, *Interview with Aaron Levie: Box CEO*, SOFTWARE LICENSING & MASTER SERVICE AGREEMENTS (Oct. 10, 2012).

<sup>72</sup> *Control Your Box Experience*, *supra* note 66.

<sup>73</sup> *Id.*

<sup>74</sup> James Temple, *Box CEO on Growth, Rivals and the Inevitable IPO*, SFGATE, <http://www.sfgate.com/technology/dotcommentary/article/Box-CEO-on-growth-rivals-and-the-inevitable-IPO-3925017.php?cmpid=twitter#photo-3550853>, archived at <https://perma.cc/T6L3-ZGXL> (last updated Oct. 7, 2012, 7:50 A.M.).

there is a present-day expectation that at least “[t]he data room has a logical table of contents or directory and full text search capabilities (which requires scanning of all documents with optical character recognition software)”<sup>75</sup> and an e-Discovery approach may in fact provide attorneys with an accessible cutting-edge approach.<sup>76</sup>

## 2. Hosting

[34] Every responding third-party provider indicated that it provided data room hosting, with the vast majority providing data analytics, issue coding for data and social media collection, and some kind of social media preservation steps. This indication of service could likely be summed up by one comment, where a provider stated that it was “an eDiscovery provider and our capabilities can be adapted for any one of the M&A services described.”<sup>77</sup> This succinct comment could very well offer the tagline conclusion of our hypothesis: that services currently offered by e-Discovery vendors can and should be incorporated into standard M&A due diligence—services which will be supported by demonstrable return on investment.<sup>78</sup> We also saw respondents indicate that “there appears to be, at the present time, considerably more interest in outside service providers providing support services,”<sup>79</sup> and that clients “are primarily interested in organizing and consolidating key data for due diligence, and creating workflows to identify relevant documents so they may audit and

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<sup>75</sup> Harroch, *supra* note 41, at 14.

<sup>76</sup> See Krauss, *supra* note 13.

<sup>77</sup> Respondent No. 38, Collected Data from Survey for Third Party Service Providers, at 188 (Sept. 15, 2015) (unpublished research results) (on file with author).

<sup>78</sup> Sacek, *supra* note 2, at 53.

<sup>79</sup> Respondent No. 32, Collected Data from Survey for Third Party Service Providers, at 157 (Sept. 2, 2015) (unpublished research results) (on file with author).

certify compliance with certain regulations.”<sup>80</sup> This translated into providers coding for issues even beyond “relevance and privilege,” where one firm coded information according to a variety of categories:

- “Legal Entities/Parties
- Geographic Regions/Sub-Regions Impacted
- Agreement Type, Titles, and Dates (start, expiration, renewals, etc.)
- Terms/Provisions
- Draft versus Final versions
- Governing Law
- Language
- Document Relationships (Master Services Agreements, Statements of Work, Addendums, etc.)”<sup>81</sup>

[35] That same vendor created standardized agreement naming conventions,<sup>82</sup> while another assisted the coding process by identifying specific types of “[c]ontracts and contract fields (e.g., counterparties, dates, services)” and “synchronizing existing fields on data that resides in different places (e.g., identifying that fields ‘location’ and ‘area of operation’ can be adjusted and made consistent).”<sup>83</sup>

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<sup>80</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 127 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>81</sup> Respondent No. 17, Collected Data from Survey for Third Party Service Providers, at 82–83 (Aug. 27, 2015) (unpublished research results) (on file with author).

<sup>82</sup> *See id.*

<sup>83</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 127–28 (Aug. 31, 2015) (unpublished research results) (on file with author).

### 3. Analytics

[36] Our research supported our theory that e-Discovery tools would provide a means by which potential or actual acquirers could identify and understand not only the data required to complete a Deal but other, perhaps-not-otherwise-of-interest data that could impact the value of and pricing associated with a Deal. Indeed, as one provider recently noted, “[E-]discovery technology can make short work of huge data sets both collecting, filtering and analyzing data to get to the key information as quickly as possible.”<sup>84</sup> In a different piece, admittedly presented as near-advertising, a practitioner examined the service offerings of another company and found that leveraging “an artificial intelligence technique called ‘machine learning’ to contract review” helped him to “save about two-thirds of the time” in his review, increasing his “speed and efficiency” while also increasing his accuracy.<sup>85</sup> One writer echoed this general sentiment elsewhere, decrying the current state of play, and stating that if “technological innovation is to play a role across a wider range of legal specialties, now is the time for transactional attorneys to experience and embrace it.”<sup>86</sup>

[37] One law firm’s Electronic Data Discovery Group’s offerings include a “Due Diligence Solution: Dedicated Precision in Confidential

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<sup>84</sup> Jones, *supra* note 19.

<sup>85</sup> Christopher S. Edwards, *eBrevia’s Smart Technology Mitigates the Diligence Bottleneck*, L.J.’S LEGAL TECH. NEWSL. (July 2015), [http://www.lawjournalnewsletters.com/issues/ljn\\_legaltech/32\\_3/news/eBrevias-Smart-Technology-Mitigates-the-Diligence-Bottleneck-161430-1.html](http://www.lawjournalnewsletters.com/issues/ljn_legaltech/32_3/news/eBrevias-Smart-Technology-Mitigates-the-Diligence-Bottleneck-161430-1.html), *archived at* <https://perma.cc/BL4H-2WYY>.

<sup>86</sup> Ned Gannon, *Why Corporate Law Is Ready for Technological Innovation*, L. TECH. TODAY (Feb. 3, 2015), <http://www.lawtechnologytoday.org/2015/02/why-corporate-law-is-ready-for-technological-innovation>, *archived at* <https://perma.cc/2672-ZBYD>.

Review of Privileged or Sensitive Materials.”<sup>87</sup> That service was advertised as incorporating “precise, rapid review of privileged or other sensitive records to promote strategic business decisions and pass regulatory muster” in the context of, among others, “multibillion-dollar mergers and acquisitions” by eschewing “*ad hoc* gatherings of associates or paralegals” and instead employing a process of “precise, high-volume review of privileged or other sensitive materials.”<sup>88</sup> This focus on subject matter experts was repeated elsewhere.<sup>89</sup>

[38] Our survey responses also supported this contention, with one provider indicating that it provided “all manner of advanced search analytics, from complex search, timeline analysis, communication analysis, and analysis of metadata and faceted fields, all the way to Technology Assisted Review.”<sup>90</sup> Another stated that it provided “full spectrum of Advanced Document Analytics Services, including Predictive Coding, Conceptual Searching, Near-Duplication, Email Threading, Visualizations of Data Sources and Data Custodian Activity, Clustering, Social Networking [and] Email Communication Visualizations.”<sup>91</sup> A different service provider focused less on the types of services offered, and more on the manner by which they were provided, shared that it has “structured data experts who can mine and analyze the data that we collect” who had performed these types of services on multiple cases, analyzing email, eDocuments, and time entry and general ledger database

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<sup>87</sup> *Electronic Data Discovery (EDD) Group*, FROST BROWN TODD, <http://www.frostbrowntodd.com/services-practices-imed.html>, archived at <https://perma.cc/598Q-QK3Z> (last visited Jan. 14, 2016).

<sup>88</sup> *Id.*

<sup>89</sup> Archie, *supra* note 44.

<sup>90</sup> Respondent No. 38, Collected Data from Survey for Third Party Service Providers, at 188 (Sept. 15, 2015) (unpublished research results) (on file with author).

<sup>91</sup> Respondent No. 33, Collected Data from Survey for Third Party Service Providers, at 163 (Sept. 2, 2015) (unpublished research results) (on file with author).

system data.<sup>92</sup> Finally, other service providers simply stated the type of analytic engine they used within the datasets, such as “natural language processing,”<sup>93</sup> or “Latent Semantic Indexing.”<sup>94</sup>

#### 4. Volume and Structured Data Services

[39] For volume-type services, we expanded the traditional focus of e-Discovery and related workflow approaches and considered both typical unstructured data sources<sup>95</sup> as well as those inhabiting the “newer” realm of structured and big data.<sup>96</sup> This was born of personal experience; additional commentary, scrutiny, and thought applied to examining certain types of unstructured data; and the pool of unstructured data as a whole by the means of legal or audit practices. This consideration surfaced in the literature when commentators looked at individual practice issues and determined how those issues were evidenced in present-day practice. For example, one service provider theorized that “it may be prudent to conduct a broader investigation into the company’s activities by examining a selection of unstructured data in audits,” at least in those instances where the “the company being acquired operates within markets that have seen

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<sup>92</sup> Respondent No. 31, Collected Data from Survey for Third Party Service Providers, at 152 (Sept. 2, 2015) (unpublished research results) (on file with author).

<sup>93</sup> Respondent No. 20, Collected Data from Survey for Third Party Service Providers, at 97 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>94</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 127–28 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>95</sup> See *Unstructured Data FAQs*, NUIX, <http://www.nuix.com/unstructured-data-faqs>, archived at <https://perma.cc/T3Q3-F9QD> (last visited Jan. 20, 2016).

<sup>96</sup> See Julian Ackert, *Big Data: The Elephant in the E-Discovery Room*, METROPOLITAN CORP. COUNS., July–Aug., at 6, 6 2013, <http://www.metrocorpocounsel.com/pdf/2013/July/06.pdf>, archived at <https://perma.cc/BSR3-474V>.

anti-competitive behaviour or in countries with a greater incidence of corruption and bribery.”<sup>97</sup> Here, the use of structured data analysis was focused on antitrust or bribery allegations, but a host of other considerations might benefit from a similar use of structured data analysis.

[40] To narrow our discussion within this important but still underserved and under-understood source of information,<sup>98</sup> we focused on and will discuss six sources of volume storage: Oracle; Microsoft; IBM; Informatica; EMC; and OpenText. Rather than simply stating (even if accurately) that these volume storage solutions are pervasive and worthy of consideration, we incorporate some brief discussion of each below to explain why we included these within our questions to the service providers. These descriptions may also assist practitioners determine some first-line questions to ask Deal participants in support of the due diligence process; identify some of the issues a due diligence team might have to face if charged with analyzing this type of environment; and indicate the use of third parties to untangle exactly what might be happening in a given organization.

[41] Oracle is a database provider with extraordinarily widespread application, reaching 420,000 customers as well as “100 of the Fortune 100.”<sup>99</sup> Oracle databases rely on the operation of structured query language (“SQL”), and the organization is also among those leading the charge into new forms of database operation, such as enterprise grid computing, which pools industry-standard, modular storage, and

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<sup>97</sup> Jones, *supra* note 19.

<sup>98</sup> As one commentator noted in this specific area, “[t]here are many questions that can be asked, yet not a great deal of answers to these questions today.” Ackert, *supra* note 96, at 6.

<sup>99</sup> *Fact Sheet: Speed Innovation, Streamline IT*, ORACLE (Oct. 2015), <http://www.oracle.com/us/corporate/oracle-fact-sheet-079219.pdf>, archived at <https://perma.cc/AX8G-3VZR>.

servers.<sup>100</sup> Oracle also provides “software as a service (“SaaS”), platform as a service (“PaaS”), infrastructure as a service (“IaaS”), and data as a service (“DaaS”)” as part of its suite of options for customers.<sup>101</sup> While on the one hand pervasive within major corporations, these types of services underscore the difficulty of determining exactly where an organization’s information resides at any given point-in-time, and the added challenge of trying to determine answers when knowledgeable employees become former employees post-Deal.

[42] Microsoft performs a similar service role through its database options,<sup>102</sup> and its cloud service (“Azure”), which provides PaaS using SQL to manage structured data.<sup>103</sup> Microsoft’s systems, like other providers, work with a variety of data access interfaces, such as Entity Framework,<sup>104</sup> ActiveX Data Objects (“ADO”).NET,<sup>105</sup> and Java Database

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<sup>100</sup> See *Database Concepts*, ORACLE, [http://docs.oracle.com/cd/B19306\\_01/server.102/b14220/intro.htm](http://docs.oracle.com/cd/B19306_01/server.102/b14220/intro.htm), archived at <https://perma.cc/7N62-CB2S> (lasted visited Feb. 1, 2016).

<sup>101</sup> *Fact Sheet*, *supra* note 99.

<sup>102</sup> See Mike Chapple, *Choosing a Database for Your Organization*, ABOUT.COM, [http://databases.about.com/od/administration/a/choosing\\_a\\_db.htm](http://databases.about.com/od/administration/a/choosing_a_db.htm), archived at <https://perma.cc/NL62-6HVP> (lasted updated Dec. 16, 2014).

<sup>103</sup> See *What Is PaaS?*, MICROSOFT AZURE, <https://azure.microsoft.com/en-us/overview/what-is-paas/> (last visited Jan. 5, 2016); see also *SQL Database*, MICROSOFT AZURE, <https://azure.microsoft.com/en-us/services/sql-database/>, archived at <https://perma.cc/B32X-THGJ> (last visited Jan. 5, 2016).

<sup>104</sup> See Mike Schutz, *Why Use the Entity Framework with SQL Azure?*, MICROSOFT AZURE (Sept. 28, 2010), <https://azure.microsoft.com/en-us/blog/why-use-the-entity-framework-with-sql-azure/>, archived at <https://perma.cc/HFT3-VJN3>.

<sup>105</sup> See *MSDN Article: How to Connect to SQL Azure Using ADO.net*, MICROSOFT AZURE (Mar. 31, 2011), <https://azure.microsoft.com/en-us/blog/msdn-article-how-to-connect-to-sql-azure-using-ado-net/>, archived at <https://perma.cc/A8BP-38N3>.



Connectivity Technology (“JDBC”).<sup>106</sup> Cloud management of structured data has become pervasive in recent years due to a variety of end-user benefits, including software that is always up-to-date, and the elimination of physical and virtual storage space concerns.<sup>107</sup> Here, again, practitioners should think about the variety of interfaces and comingled operations that arise in now-normal corporate operations, including the use of application programming interfaces (“APIs”) that make data transfer possible. These transfers can be as simple as “cutting and pasting a snippet of a LibreOffice document into an Excel spreadsheet” or creating “new apps that tap into big Web services—social networks like Facebook or Pinterest, for instance, or utilities like Google Maps or Dropbox.”<sup>108</sup> Where APIs may provide access, they can also create their own sets of information and metadata, and this information may be crucial to the new enterprise’s success.<sup>109</sup>

[43] In addition to being a household name, IBM advertises structured data solutions in four areas: DB2 for a variety of platforms (Linux, UNIX,

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<sup>106</sup> See Luis Bosquez, *Connect to SQL Database by Using Java with JDBC on Windows*, MICROSOFT AZURE (Dec. 17, 2015), <https://azure.microsoft.com/en-us/documentation/articles/sql-database-develop-java-simple-windows/>, archived at <https://perma.cc/UC73-4YGK>.

<sup>107</sup> See Neil Desai, *Teradici Extends Pervasive Computing Platform to Microsoft Azure*, TERADICI (Jul. 14, 2015), <http://www.teradici.com/resource-center/newsroom/latest-news/2015/07/14/teradici-extends-pervasive-computing-platform-to-microsoft-azure>, archived at <https://perma.cc/TGV9-K2LL>.

<sup>108</sup> Brian Proffitt, *What APIs Are and Why They’re Important*, READWRITE (Sept. 19, 2013), <http://readwrite.com/2013/09/19/api-defined>, archived at <https://perma.cc/F4LJ-KW6Q>.

<sup>109</sup> *Product Overview*, IBM, [https://www-01.ibm.com/support/knowledgecenter/#/SS5RWK\\_3.5.0/com.ibm.discovery.es.nav.doc/iypofnv\\_prodovert\\_cont.htm](https://www-01.ibm.com/support/knowledgecenter/#/SS5RWK_3.5.0/com.ibm.discovery.es.nav.doc/iypofnv_prodovert_cont.htm), archived at <https://perma.cc/FJL6-38C7> (last visited Jan. 20, 2016).

Windows, Cloud, i, z/OS, and Connect);<sup>110</sup> Information Management System (“IMS”) for “transaction and hierarchical database management;”<sup>111</sup> Cloudant for database as a service (“DBS”) in “private, public, or hybrid cloud platform” environments;<sup>112</sup> and Informix, IBM’s “intelligent database for [the] Internet of Things.”<sup>113</sup> IBM tightly integrates its products with its other information systems like Guardium, FileNet, and Atlas.<sup>114</sup> Again, practitioners might consider the API question and where data may be located, shared, or even copied for integration purposes. Finally, at least one commentator notes that IBM’s pricing structure and technological innovations have streamlined the ingestion process rather than on the retrieval of that data and analytics production.<sup>115</sup>

[44] Informatica has created a number of products, such as Informatica Data Archive and Project Information Management (“PIM”) to address a large number of client use cases—including retirement, compliance, performance optimization, and analytics—by integrating a variety of client data sources and then serving client customers through “multichannel

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<sup>110</sup> *IBM DB2 Database Software*, IBM, <http://www-01.ibm.com/software/data/db2>, archived at <https://perma.cc/9WQP-5PNP> (last visited Jan. 20, 2016).

<sup>111</sup> *Why IMS*, IBM, <http://www-01.ibm.com/software/data/ims/>, archived at <https://perma.cc/7XLE-U3A7> (last visited Jan. 20, 2016).

<sup>112</sup> *About IBM Cloudant*, IBM, <http://www-01.ibm.com/software/data/cloudant/> <https://perma.cc/J89M-JB67> (last visited Jan. 20, 2016).

<sup>113</sup> *IBM Informix*, IBM, <http://www-01.ibm.com/software/data/informix/>, archived at <https://perma.cc/2PZN-9A6L> (last visited Jan. 20, 2016).

<sup>114</sup> See CHUCK BALLARD ET AL., *IBM INFORMATION GOVERNANCE SOLUTIONS* 165, 223, 228 (2014), <http://www.redbooks.ibm.com/redbooks/pdfs/sg248164.pdf>, archived at <https://perma.cc/4854-QXKV>.

<sup>115</sup> Garth Landers, Alan Dayley & Sheila Childs, *Magic Quadrant for Structured Data Archiving and Application Retirement*, GARTNER (June 16, 2015), <http://www.gartner.com/technology/reprints.do?id=1-2IBHG9G&ct=150623&st=sb>, archived at <https://perma.cc/FHY9-NQNH>.

touch points” that include E-Shop, Mobile, Point-of-Sale (“POS”), Print, Social, Data Pools, and Search Engine Optimization “SEO” channels.<sup>116</sup> The company has been generally successful with a one-size-fits-all product, but the complexity of the Informatica Data Archive product makes its use much more likely for clients with large data footprints who utilize multiple applications.<sup>117</sup>

[45] EMC’s InfoArchive product is a collaborative application for archiving structured data and decommissioning legacy systems.<sup>118</sup> And while EMC’s products are tightly integrated, the company relies on partners for connector technology; this results for some reported clients in complicated deployment and sales processes.<sup>119</sup> OpenText provides archiving services for SAP Solutions,<sup>120</sup> however, OpenText does not support Hadoop and there is limited support for Oracle application archiving.<sup>121</sup> Also, data masking capabilities are limited to unstructured content only.<sup>122</sup>

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<sup>116</sup> INFORMATICA, *INFORMATICA PIM VERSION 7.1*, at 24 (2014), [https://www.informatica.com/content/dam/informatica-com/global/amer/us/collateral/data-sheet/informatica-enterprise-pim\\_data-sheet\\_2550.pdf](https://www.informatica.com/content/dam/informatica-com/global/amer/us/collateral/data-sheet/informatica-enterprise-pim_data-sheet_2550.pdf), archived at <https://perma.cc/Z64R-9RP2>.

<sup>117</sup> Landers, *supra* note 115.

<sup>118</sup> See *InfoArchive*, EMC<sup>2</sup>, <http://centera.biz/content-management/infoarchive/infoarchive.htm>, archived at <https://perma.cc/FTJ2-AL2N> (last visited Jan. 20, 2016).

<sup>119</sup> See *EMC InfoArchive*, EMC<sup>2</sup> (Dec. 2014), <https://www.emc.com/collateral/data-sheet/emc-infoarchive-ds.pdf>, archived at <https://perma.cc/8DT6-FNTF>.

<sup>120</sup> See OPEN TEXT, *OPEN TEXT ARCHIVING AND DOCUMENT ACCESS FOR SAP® SOLUTIONS 3* (2010), [http://www.opentext.com/file\\_source/OpenText/en\\_US/PDF/OpenText%20Archiving%20and%20Document%20Access%20for%20SAP%20Solutions%20Whitepaper.pdf](http://www.opentext.com/file_source/OpenText/en_US/PDF/OpenText%20Archiving%20and%20Document%20Access%20for%20SAP%20Solutions%20Whitepaper.pdf), archived at <https://perma.cc/Y7CL-GF8Z>.

<sup>121</sup> See *id.* at 28.

[46] While the majority of these ideas and technologies may seem unfamiliar to many practitioners<sup>123</sup> even while those practitioners may have a duty to learn in the very near future,<sup>124</sup> the third-party service providers that responded to the survey were unfazed. In fact, more than half of the responding vendors indicated that they had the capabilities to determine volumes for *each* of these types of structured data content, an encouraging sign for incorporating these issues into our proposed M&A practices.<sup>125</sup> One provider also noted that they considered SharePoint as a structured data source;<sup>126</sup> this was an important addition and one practitioners should incorporate into the due diligence slate, as it is incorporated into the Microsoft services briefly discussed above.

[47] Interestingly enough, for structured data services—and, indeed, for all related M&A services including those that incorporate structured data services, we saw over 60% of service providers stating that they used hourly consultant billing, and over 60% stating that they based their services on volume.<sup>127</sup> Over 55% also stated that they offered some sort of flat-fee billing.<sup>128</sup> A number of explanations regarding the provision of a slate of services, where providers stated that they “bill on the basis of data

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<sup>122</sup> Landers, *supra* note 115.

<sup>123</sup> Megan Zavieh, *Luddite Lawyers Are Ethical Violations Waiting to Happen*, LAWYERIST.COM (July 10, 2015), <https://lawyerist.com/71071/luddite-lawyers-ethical-violations-waiting-happen>, archived at <https://perma.cc/8YFZ-TU6D>.

<sup>124</sup> Saul Jay Singer, *Speaking of Ethics: R U Competent?*, WASH. LAW. (Nov. 2008), <https://www.dcbar.org/bar-resources/publications/washington-lawyer/articles/november-2008-speaking-of-ethics.cfm>, archived at <https://perma.cc/W5QJ-6J9A>.

<sup>125</sup> See *infra* Appendix A, at A-2 to A-3.

<sup>126</sup> Respondent No. 38, Collected Data from Survey for Third Party Service Providers, at 189 (Sept. 15, 2015) (unpublished research results) (on file with author).

<sup>127</sup> See *infra* App. A, at A-2.

<sup>128</sup> See *infra* App. A, at A-2.

volume, duration, and hourly consulting rates [and] have entertained flat fee arrangements;<sup>129</sup> utilize a “hybrid billing approach;”<sup>130</sup> or provide a “[v]ariety of alternative arrangements, including over/under, and contingencies based on benchmarks.”<sup>131</sup>

[48] We also investigated cloud-hosted data, including Amazon Web Services,<sup>132</sup> Google Cloud,<sup>133</sup> DropBox,<sup>134</sup> Box<sup>135</sup>, and Salesforce.<sup>136</sup> These services allow businesses to outsource data management. Instead of investing capital into creating their own data centers, businesses can opt to use third-party data centers to manage the varying amounts of information that a business may need to access on a daily basis. These sources of data are now being considered and directly analyzed in recent cases—as seen in *Brown v. Tellermate Holdings Ltd.*, an employment discrimination case

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<sup>129</sup> Respondent No. 38, Collected Data from Survey for Third Party Service Providers, at 188 (Sept. 15, 2015) (unpublished research results) (on file with author).

<sup>130</sup> Respondent No. 32, Collected Data from Survey for Third Party Service Providers, at 158 (Sept. 2, 2015) (unpublished research results) (on file with author).

<sup>131</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 128 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>132</sup> See *Cloud Computing with Amazon Web Services*, AMAZON WEB SERVICES, <https://aws.amazon.com/what-is-aws>, archived at <https://perma.cc/3PZD-A9QQ> (last visited Jan. 20, 2016).

<sup>133</sup> See *How Google Cloud Platform Works*, GOOGLE CLOUD PLATFORM, <https://cloud.google.com>, archived at <https://perma.cc/V5Q8-UB9H> (last visited Jan. 20, 2016).

<sup>134</sup> See DROPBOX BUSINESS, <https://www.dropbox.com/business>, archived at <https://perma.cc/WSK5-52ES> (last visited Feb. 17, 2016).

<sup>135</sup> See Box, *supra* note 66.

<sup>136</sup> See *What is Salesforce?*, SALESFORCE, <http://www.salesforce.com/what-is-salesforce/?d=7013000000mA5n&internal=true>, archived at <https://perma.cc/2ZBL-37M6> (last visited Feb. 17, 2016).

where the plaintiffs alleged job termination based on age.<sup>137</sup> As part of their case, plaintiffs sought records from salesforce.com; defendants failed to preserve or export data, and were sanctioned by the court with evidence preclusion.<sup>138</sup> Despite the *Tellermate* holding, Salesforce was the least likely of the cloud services presented to have vendor support; however, it was still noted by over 80% of vendors as a service for which each had collection and review capabilities.<sup>139</sup> Unsurprisingly, cloud services have been explicitly identified as a consideration implicated in M&A transactions for several years.<sup>140</sup>

### 5. Professional Services and Information Security & Cyberbreach Risk

[49] We inquired into whether vendors were providing M&A frameworks; only 29% indicated they were,<sup>141</sup> with one stating that this process would specify “all of the then-recognized required tasks and potential tasks that comprise the most probable eDiscovery process in connection with the specific M&A engagement.” The vendor’s SOW would utilize “information provided by the client as to the scope of the work and its specific requirements and includes (again, with client feedback) project timelines and a schedule of fees.” This response, and the lack of additional information from the service providers, indicated that

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<sup>137</sup> See *Brown v. Tellermate Holdings, Ltd.*, No. 2:11-cv-1122, 2014 U.S. Dist. LEXIS 90123, at \*2 (S.D. Ohio July 1, 2014).

<sup>138</sup> See *Id.* at \*25–26, \*74.

<sup>139</sup> See *infra* App. A, at A-3.

<sup>140</sup> See CHRISTINE LYON, *PRIVACY AND DATA SECURITY ISSUES IN M&A, OUTSOURCING, AND OTHER BUSINESS TRANSACTIONS* 10 (2010), <http://www.americanbar.org/content/dam/aba/publications/blt/2010/09/inside-buslaw-due-diligence-201009.authcheckdam.pdf>, archived at <https://perma.cc/6H95-LF22>.

<sup>141</sup> See *infra* App. A, at A-3.

these types of service providers were likely not (yet) providing unadvertised services in this area.

[50] Just as legal practices have begun to provide services in this area,<sup>142</sup> the majority of the third-party service firms (over 60%) indicated that they perform information security and cyberbreach risk analysis,<sup>143</sup> and over 80% of those firms used at least some form of hourly consultant billing.<sup>144</sup> But the company engaging the vendor must carefully consider these services; one vendor noted specifically that it “assess[es] risk based on policies and practices, but not IT infrastructure.”<sup>145</sup>

## 6. Records Planning

[51] We asked vendors whether they provide records management project plans; over 68% responded in the affirmative.<sup>146</sup> We were unsurprised with the level of involvement within this space, especially given its position as a specialty that might benefit from legal analysis but does not require licensure. While further inquiry would be of interest, our view is that this analysis should be included in the M&A context—and, indeed, would demonstrate a significant return on investment—but that doing so should be at the direction of attorneys with particularized experience.

[52] When asked about records integration plans, the number of vendors providing that service dropped to just over 50%, but 60% indicated they had done that type of work in the past. A third consideration

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<sup>142</sup> Caponi & Orlicchio, *supra* note 43.

<sup>143</sup> See *infra* App. A, at A-8.

<sup>144</sup> See *infra* App. A, at A-8.

<sup>145</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 131 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>146</sup> See *infra* App. A, at A-3.

might be that this type of work *was* part of prior services, but firms have opted against pursuing this type of work in the current climate. When responding to what this type of work entailed, one responded succinctly that they “analyze data and fields and develop plans to synchronize data in different systems into a single system;” they further “provide limited consulting as to selecting a best fit platform to receive the migrated data, out of options that the client has already pre-selected.”<sup>147</sup>

### 7. Systems Integration and Media Inventories

[53] Fewer firms provided systems integration plans, with just over 50% selecting yes.<sup>148</sup> One vendor was specific about the types of services it provided in this area, stating that it consulted with “clients on how to bring eDiscovery and IG applications in-house,” which “involves advising them on how to integrate the applications in to their infrastructure and customizing them according to business requirements.”<sup>149</sup> However, when it came to the percentage of vendors who had provided systems integration services, the percentage of positive responses jumped to about 78%.<sup>150</sup> As with the records planning figures, we consider whether this indicates a subset of vendors who are moving out of this space, rather than entering as M&A due diligence analysis matures. Finally, we inquired as to removable media inventories. This was noteworthy: while over 86% indicated they currently do, 100% of the vendors who replied indicated they had at one point.<sup>151</sup>

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<sup>147</sup> Respondent No. 26, Collected Data from Survey for Third Party Service Providers, at 129 (Aug. 31, 2015) (unpublished research results) (on file with author).

<sup>148</sup> See *infra* App. A, at A-4.

<sup>149</sup> Respondent No. 11, Collected Data from Survey for Third Party Service Providers, at 54 (Aug. 24, 2015) (unpublished research results) (on file with author).

<sup>150</sup> See *infra* App. A, at A-4.

<sup>151</sup> See *infra* App. A, at A-4 to A-5.



## 8. Encryption, BYOD Program, e-mail Management, and Social Media Analyses

[54] We also considered Encryption, BYOD Program, e-mail Management, and Social Media Policy Analyses as portions of the due diligence slate of review. Broadly speaking, encryption—regardless of form—allows businesses to protect sensitive data and assets and maintain the security of their systems.<sup>152</sup> To improve security, encryption scrambles data so that the only individuals who can open and view the data are the ones who possess the “key” to open the file or document and unscramble the contents.<sup>153</sup> Encryption analysis identifies fields with required encryption and uses certain aspects of the fields to determine the encryption scheme being used;<sup>154</sup> it may also include some methods of password recovery in instances of unavailable files.<sup>155</sup>

[55] BYOD Programs are implemented so employees can use devices they already use on a daily basis.<sup>156</sup> Such programs permit employees’

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<sup>152</sup> See Vangie Beal, *Encryption*, WEBOPEDIA, <http://www.webopedia.com/TERM/E/encryption.html>, archived at <https://perma.cc/J267-K8J7> (last visited Feb. 17, 2016).

<sup>153</sup> See *id.*; see also B. Schneier, *Description of a New Variable-Length Key, 64-Bit Block Cipher (Blowfish)*, SCHNEIER ON SECURITY, (Dec. 1993), <https://www.schneier.com/paper-blowfish-fse.html>, archived at <https://perma.cc/E5RZ-5G65> (describing a “secret-key block cipher” from the 1990s).

<sup>154</sup> See JULIAN JAMES STEPHEN, SAVVAS SAVVIDES, RUSSELL SEIDEL, & PATRICK EUGSTER, PRACTICAL CONFIDENTIALITY PRESERVING BIG DATA ANALYSIS part 4 (2014), <https://www.usenix.org/system/files/conference/hotcloud14/hotcloud14-stephen.pdf>, archived at <https://perma.cc/YA55-DVN8>.

<sup>155</sup> See *Password Recovery Services*, EDISCOVERY SOLUTIONS, <http://discoverydc.com/home/password-recovery-services/>, archived at <https://perma.cc/2CBH-RCFW> (last visited Jan. 15, 2016).

<sup>156</sup> See *BYOD: Bring Your Own Device – Why and How You Should Adopt BYOD*, IBM MOBILEFIRST, <http://www.ibm.com/mobilefirst/us/en/bring-your-own-device/byod.html>, archived at <https://perma.cc/MG89-BESL> (last visited Jan. 15, 2016); Melinda L.

personal devices to access enterprise systems like email and documents stored on corporate servers. Analysis of such programs requires knowledge of and access to the personal devices that could house corporate data necessary to M&A due diligence. Moreover, companies should be mindful in Deals of unique data stored on BYOD—what will the Target be required to do to ensure that unique data on BYOD relevant to the Target’s business is provided to the Acquirer, particularly in light of potential employee turnover?

[56] With the surge in mobile and social media use,<sup>157</sup> businesses are creating policies to deal with their employees’ use of social media. In some instances, businesses encouraged employees’ use of social media to “build stronger, more successful business relationships.”<sup>158</sup> The data created by the use of social media in accordance with these policies may need to be analyzed in the context of M&A due diligence. Data privacy may take on additional weight as a recent 2014 survey reported that “[m]ore than half—about 60 percent—of corporate respondents said that their M&A investments will involve acquiring a target in a foreign market.”<sup>159</sup> This matters especially when an “alignment of cultures” is

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McLellan, James A. Sherer & Emily R. Fedeles, *Wherever You Go, There You Are (With Your Mobile Device): An Examination of Privacy Risks and Legal Complexities Associated with Cross-Border “Bring Your Own Device” Programs*, 21 RICH. J.L. & TECH. 11, ¶ 4 (2015), <http://jolt.richmond.edu/v21i3/article11.pdf>, archived at <https://perma.cc/AF67-3E4Z>.

<sup>157</sup> See Kieran Guilbert, *Surge in Smartphones’ Popularity, Social Media Threaten Online News Providers*, REUTERS (June 15, 2015, 7:30 PM), <http://www.reuters.com/article/2015/06/15/us-media-socialmedia-idUSKBN0OV2WO20150615>, archived at <https://perma.cc/Z2NE-5YHN>.

<sup>158</sup> *Intel Social Media Guidelines*, INTEL, <http://www.intel.com/content/www/us/en/legal/intel-social-media-guidelines.html>, archived at <https://perma.cc/TT7F-YPM8> (last visited Jan. 15, 2016).

<sup>159</sup> DELOITTE, M&A TRENDS REPORT 2014: A COMPREHENSIVE LOOK AT THE M&A MARKET 7 (2014), <http://www2.deloitte.com/content/dam/Deloitte/us/Documents/mergers-acquisitions/us-ma-trends-survey-060114.pdf>, archived at <https://perma.cc/7LFF-9S8L>.

seen as critically important to “the overall success of the integration.”<sup>160</sup> Moreover, social media data may be unique to the Target’s employee’s use, but may still be of great relevance to the Acquirer’s interest in the target. Similarly to BYOD, the Acquirer may need to evaluate and ensure proper valuation/ownership rights are incorporated into the Deal.

[57] We also examined cloud-based email services and asked service providers about whether and how they would consider collection and analysis from such platforms as Gmail, Hotmail, Yahoo!, and Aol.com. All cloud-based email providers provide similar front-end services. On the back end, however, the four most popular email providers (Gmail, Yahoo! Mail, Outlook/Hotmail, and Aol.com) purport to offer varying degrees of enterprise capable compliance tools. We will discuss each of these in turn.

[58] Google’s Gmail service advertises robust tools for business use in addition to its ubiquitous and free personal-use accounts. A business account from Google allows for customer customization of email address suffixes, and as of 2015 each Gmail business inbox is allotted up to 30 GB of storage capacity.<sup>161</sup> Google also bundles its application (“apps”) suite—including Drive, Docs, Sheets, and Calendar—as part of its business integration strategy with its cloud-based email service.<sup>162</sup> Google also allows a company administrator to control the amount of mail stored for each corporate user as well as message retention periods.<sup>163</sup> Google’s content compliance tool also allows an administrator to set certain

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<sup>160</sup> DELOITTE, INTEGRATION REPORT 2015: PUTTING THE PIECES TOGETHER 9 (2015), <http://www2.deloitte.com/content/dam/Deloitte/us/Documents/mergers-acquisitions/us-ma-integration-report-030415.PDF>, archived at <https://perma.cc/822H-WB3H>.

<sup>161</sup> See *Gmail Help: See Your Storage Limit*, GOOGLE, <https://support.google.com/mail/answer/6558?hl=en>, archived at <https://perma.cc/2KPR-4GS7> (last visited Jan. 15, 2016).

<sup>162</sup> See *id.*

<sup>163</sup> See *Google Apps Administrator Help: Email Retention*, GOOGLE, <https://support.google.com/a/answer/151128?hl=en>, archived at <https://perma.cc/53DZ-RDXV> (last visited Jan 15, 2016).

parameters depending on message content, and is advertised as providing a uniform method of sorting and storage if set up appropriately.<sup>164</sup>

[59] Like Google's Gmail for business, Microsoft provides its own corporate email solution called Exchange. Exchange is run on company servers or hosted by Microsoft.<sup>165</sup> Also like Google, Microsoft offers its own "apps" in the form of Office Suite (Office 365) with a subscription to Microsoft Exchange.<sup>166</sup> Certain Office 365 plans also include access to an "eDiscovery Center" where an administrator can run searches for data across various Microsoft services (Exchange e-Mail, SharePoint, and Skype) from one central location.<sup>167</sup> Microsoft also allows administrators to set document retention schedules.<sup>168</sup>

[60] Yahoo! also provides a business email service. While Yahoo! provides standard email filtering, spam guard, and virus protection services, Yahoo! Mail for Business does not offer e-Discovery/data management tools. Yahoo! provides unlimited storage space and an

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<sup>164</sup> See *Google Apps Administrator Help: Content Compliance Setting*, GOOGLE, [https://support.google.com/a/answer/1346934?hl=en&ref\\_topic=2683824&vid=1-635798789195231936-2740051664](https://support.google.com/a/answer/1346934?hl=en&ref_topic=2683824&vid=1-635798789195231936-2740051664), archived at <https://perma.cc/PD2N-KM4L> (last visited Jan. 15, 2016).

<sup>165</sup> See *Exchange Online*, OFFICE, <https://products.office.com/en-us/exchange/exchange-online>, archived at <https://perma.cc/37JT-FW7W> (last visited Jan. 15, 2016).

<sup>166</sup> See *generally Plans & Pricing*, MICROSOFT, <https://products.office.com/en-us/business/compare-office-365-for-business-plans>, archived at <https://perma.cc/XY2T-ZWV> (indicating Microsoft Exchange is available with all Office 365 plans) (last visited Jan. 15, 2016).

<sup>167</sup> See *eDiscovery in the Office 365 Compliance Center*, MICROSOFT, <https://technet.microsoft.com/en-us/library/ms.0365.cc.ediscoveryhelp.aspx>, archived at <https://perma.cc/C8LZ-WNPD> (last modified Oct. 16, 2015).

<sup>168</sup> See *Exchange Online, supra note 165; Retention and Archive Policies in Outlook Web App*, OFFICE, [https://support.office.com/en-us/article/Retention-and-archive-policies-in-Outlook-Web-App-465372e4-e16b-47db-bee0-aba44799085e#\\_toc383432407](https://support.office.com/en-us/article/Retention-and-archive-policies-in-Outlook-Web-App-465372e4-e16b-47db-bee0-aba44799085e#_toc383432407), archived at <https://perma.cc/49W3-4CX3> (last visited Jan. 15, 2016).

unlimited number of email addresses that can be created and a 20 MB e-mail attachment size (the authors note the irony that the unlimited storage may create more data but the service advertises no e-Discovery functionality with which to handle the additional data).<sup>169</sup> Finally, despite retaining popularity as an email URL, Aol.com does not currently provide for any business e-mail solutions nor do they put forth a means to modify a personal email retention schedule.<sup>170</sup> Both Google and Microsoft's offerings in the cloud-based e-mail provider space advertise robust corporate compliance solutions that, if utilized, should help better outline a company's data footprint. Yahoo! references limited corporate service offerings in this area,<sup>171</sup> while Aol.com provides virtually none.<sup>172</sup>

[61] We examined social media source collection, such as Facebook, LinkedIn, Twitter, Instagram, and SnapChat, where some serve as hybrid sources of messaging as well.<sup>173</sup> Facebook lauds itself as a way to “help

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<sup>169</sup> See *Find the Business Email Plan that Suits Your Needs*, AABACO SMALL BUS., <https://smallbusiness.yahoo.com/email/compare-plans>, archived at <https://perma.cc/PJE8-KVBL> (last visited Jan. 15, 2016).

<sup>170</sup> See generally Derreck Johnson, *I Still Use an AOL Email Account*, SLATE (Dec. 30, 2014, 9:56 AM), [http://www.slate.com/articles/technology/technology/2014/12/aol\\_email\\_address\\_why\\_i\\_still\\_use\\_my\\_aol\\_com\\_account\\_and\\_no\\_i\\_m\\_not\\_a\\_technophobic.single.html](http://www.slate.com/articles/technology/technology/2014/12/aol_email_address_why_i_still_use_my_aol_com_account_and_no_i_m_not_a_technophobic.single.html), archived at <https://perma.cc/ZXU8-FDUB> (discussing the popularity of AOL.com); Hayley Tsukayama, *Millions of People Still Use AOL Mail. And Now They Have to Change Their Passwords*, WASH. POST (Apr. 28, 2014), <https://www.washingtonpost.com/news/the-switch/wp/2014/04/28/millions-of-people-still-use-aol-mail-and-now-they-have-to-change-their-passwords>, archived at <https://perma.cc/WJ7K-UWMM> (discussing the issues of security issues for AOL.com users).

<sup>171</sup> See generally *Yahoo! Mail*, YAHOO!, <https://overview.mail.yahoo.com/>, archived at <https://perma.cc/9WN8-G9XV> (last visited Feb. 20, 2016) (not noting any business options).

<sup>172</sup> See generally *Account Management: Contacting AOL Customer Service & Support*, AOL (Sept. 4, 2015), <https://help.aol.com/articles/account-management-contacting-aol-customer-service-support>, archived at <https://perma.cc/PMJ3-PEZD> (not noting any business options).

you stay connected,” providing a forum to share photos and thoughts with friends and family and messaging services to stay in touch on an individual level.<sup>174</sup> LinkedIn is an online network focused on professional connections as opposed to the more personal and familial ones on Facebook.<sup>175</sup> It also provides a space for people to share their virtual resumes and messaging services to maintain those professional connections.<sup>176</sup> Both LinkedIn and Facebook provide spaces for businesses to promote and market their brands and products.

[62] Twitter and Instagram serve as platforms to share short messages in the form of text, pictures, or video. Beyond individuals sharing thoughts and moments with friends, Twitter also touts itself as a source of news with “real-time updates” about what is happening in the world based on 140 character limits.<sup>177</sup> Instagram focuses on photos, allowing users to “share [their] li[ves] with friends through a series of pictures.”<sup>178</sup> Both services also include means of messaging other users. Finally, Snapchat is

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<sup>173</sup> See Margaret DiBianca, *Discovery and Preservation of Social Media Evidence*, BUS. L. TODAY (Jan. 2014), [http://www.americanbar.org/publications/blt/2014/01/02\\_dibianca.html](http://www.americanbar.org/publications/blt/2014/01/02_dibianca.html), archived at <https://perma.cc/V2VB-9JKC> (discussing the application of *Crispin v. Christian Audigier, Inc.*, 717 F. Supp. 2d 965 (C.D. Cal. 2010) and related Stored Communications Act prohibitions to social media providers, including Facebook and MySpace).

<sup>174</sup> *About Facebook*, FACEBOOK, <https://www.facebook.com/about>, archived at <https://perma.cc/T6AY-TFYT> (last visited Jan. 18, 2016).

<sup>175</sup> See *About Us*, LINKEDIN, <https://www.linkedin.com/about-us?trk=hp-about>, archived at <https://perma.cc/76AP-SKYL> (last visited Jan. 14, 2016).

<sup>176</sup> See *id.*

<sup>177</sup> *About Twitter*, TWITTER, <https://about.twitter.com>, archived at <https://perma.cc/L3G5-NGTP> (last visited Feb. 17, 2016).

<sup>178</sup> *FAQ*, INSTAGRAM, <https://instagram.com/about/faq>, archived at (last visited Jan. 14, 2016).

a message service that deletes messages sent after a short period of time.<sup>179</sup>

[63] These sites and applications serve as repositories for large amounts of both personal and professional data. But while they provide new tools and avenues for businesses to promote and market themselves in creative ways, they also create (and duplicate) amazing amounts of data. Organizational uses as well as data created, used, and stored comprise this portion of the IG vertical within the Framework, and may also implicate the e-Discovery vertical as well.

### **9. Legal Holds, Cross-border Data Transfers, and Warehouse Agreements**

[64] Unsurprisingly for our vendor pool—many of whom specialize in e-Discovery services—we had over 90% respond that they had provided legal hold process and ongoing matter review and analysis.<sup>180</sup> Firms were less confident when it came to providing compliance for cross-border data transfers, where only 26% stated that they performed those types of services.<sup>181</sup> One in particular gave insight into how these services may be provided more generally when noting that its work was more tactical than strategic, commenting “[w]e are skilled in creating and implementing collection strategies for cross-border data, but not in setting up firmwide protocols.”<sup>182</sup>

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<sup>179</sup> See *Privacy Policy*, SNAPCHAT, <https://www.snapchat.com/privacy>, archived at <https://perma.cc/V7KM-82SS> (last modified Oct. 28, 2015) (“Snapchat captures what it’s like to live in the moment. So in many cases the messages sent through our services are automatically deleted from our servers once we detect that they have been viewed or have expired. And again in most cases, the services are programmed to delete a message from the recipient’s device once it’s been viewed or expired as well.”).

<sup>180</sup> See *infra* App. A, at A-6.

<sup>181</sup> See *infra* App. A, at A-6.

<sup>182</sup> Respondent No. 31, Collected Data from Survey for Third Party Service Providers, at 155 (Sept. 2, 2015) (unpublished research results) (on file with author).

[65] When it came to the more esoteric types of analysis—such as patent portfolio analysis—we had very few affirmative answers from the vendors. For example, only one firm indicated that it provided patent portfolio compilations, and no firms provided insurance policy compilations.<sup>183</sup> We were especially surprised by the latter, as our research found at least one commentator who focused specifically on insurance policies as “a significant asset class that is often overlooked by the people who work on mergers, acquisitions and spinoffs.”<sup>184</sup> This may be explained by the difficulty to explain in the abstract rather than a lack of capability. After all, the service providers frequently provide document review services on innumerable complex litigation topics, including antitrust, patent litigation, etc., and there is no conceptual distinction as to why they could not do the same in the M & A context under the direction of attorneys with the appropriate expertise.

### III. FOUR CONCLUSIONS

[66] In those instances where existing research is not enough, sometimes researchers are forced to advance the dialogue (and sometimes move the market). This is hyperbole in our particular instance, but we did seek to uncover more about what work is actually being performed than what currently available literature or advertising indicates. We hope that we succeeded—or at least moved the needle—and that the bulk of this additional research has also added some practical underpinning to the Framework and the pricing model we suggested originally. And in support, we summarized briefly and—as covered in greater detail above—broke down much of the continued scrutiny from regulators, courts, and bar associations can into four core issues.

[67] First, recent anti-corruption investigations and other regulatory guidance have highlighted how these types of inquiries will work in

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<sup>183</sup> See *infra* App. A, at A-7.

<sup>184</sup> Garbowski, *supra* note 60, at 1.



practice.<sup>185</sup> While not currently applicable to a requirement within M & A practice, regulatory scrutiny in another area will certainly inform those fact finders who eventually do evaluate such M & A work.

[68] Second, the question of whether this type of work (within any one of the five Framework verticals) constitutes the practice of law, such that attorneys are required to perform or supervise it, has emerged as a consideration at least within the practice of certain types of e-Discovery. It is no great leap of imagination to see this consideration affecting data privacy and due diligence memorialization practices. In contrast, data security<sup>186</sup> and information governance<sup>187</sup> practices and standards have longer histories as separate areas of expertise. Perhaps this mindset is changing, and likely for good reason. There may be, therefore, an argument that attorneys, when handling the M&A diligence work, are required to seek and oversee appropriate third-party assistance in those

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<sup>185</sup> See Krauss, *supra* note 13.

<sup>186</sup> See generally *ISO/IEC 27001 – Information Security Management*, INT’L ORG. FOR STANDARDIZATION, <http://www.iso.org/iso/home/standards/management-standards/iso27001.htm>, archived at <https://perma.cc/H7VH-URLQ> (last visited Jan. 20, 2016) (describing ISO/IEC 27001 as “the best-known standard in the family providing requirements for an information security management system (ISMS).”); *NIST Special Publications*, NAT’L INST. OF STANDARDS & TECH., <http://csrc.nist.gov/publications/PubsSPs.html>, archived at <https://perma.cc/78SS-X8WJ> (last visited Jan. 20, 2016) (providing access to NIST publications on “computer/cyber/information security and guidelines, recommendations and reference materials”); *CISSP® - Certified Information Systems Security Professional*, (ISC)<sup>2</sup>, <https://www.isc2.org/cissp/default.aspx>, archived at <https://perma.cc/9ELV-HRNP> (last visited Feb. 2, 2016) (noting that the Certified Information Systems Security Professional certification is accepted as “an objective measure of excellence, [and] a globally recognized standard of achievement.”).

<sup>187</sup> See, e.g., *About AIIM*, ASS’N FOR INFO. & IMAGE MGMT., <http://www.aiim.org/About>, archived at <https://perma.cc/YTU7-2MBR> (last visited Jan. 20, 2016); *Who We Are*, ARMA INT’L, <http://www.arma.org/who-we-are>, archived at <https://perma.cc/TKH7-WR8B> (last visited Jan. 20, 2016); *The IGI Mission*, INFO. GOVERNANCE INITIATIVE, <http://www.iginitiative.com/mission>, archived at <https://perma.cc/G7LK-67BG> (last visited Jan. 20, 2016).

instances. There is room—and a need—for multiple areas of expertise in the Deal context,<sup>188</sup> and Deal work is often tailored according to the specific needs of the transaction.<sup>189</sup> Attorneys should provide legal advice on issues and risks that will impact the value of a Deal, not just in the traditional areas of inquiry but also addressing DP, IS and e-Discovery—and service providers have developed the technology and strategies in other contexts to provide counsel with the information they need in these non-traditional areas to value the Deal in a cost effective and efficient manner.

[69] Third, when it comes to the work actually being performed in this area, while the environment is still in flux, it is currently one of specialization and tailored approaches.<sup>190</sup> For example—as we relate above—we have had personal experience and seen vendors share that, while they can (and would like to) provide hosting environments for their services, specialized third-party data room hosting services are still the *choix du jour*. But where analytics come into play for diligence purposes, especially when evaluating unstructured data sources in support of attorney determinations, e-Discovery seems to have the most cutting-edge approaches to those volumes.<sup>191</sup> These approaches, of course, can—and should—be applied to the Framework.

[70] Fourth, structured data sources are becoming more and more common within all verticals of the Framework as well as modern-data case law. However, while the (bare) majority of our responding vendors were confident they could provide services in this space, the contrast between the percentage of service providers offering these services, when compared to general e-Discovery services, was stark. The same rang true for DS, IG, and DP considerations, not to mention the esoteric issues

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<sup>188</sup> See Caponi & Orlacchio, *supra* note 43.

<sup>189</sup> Archie, *supra* note 44.

<sup>190</sup> *Id.*

<sup>191</sup> Krauss, *supra* note 13.

associated with insurance policies, leases, or other so-called documents or information of inherent value. This contrast supported the final, and perhaps most salient (if somewhat self-serving) conclusion: that because of the continued, nascent status of this practice, there is still room for thought leadership. In fact, we would argue it is required.

**APPENDIX A****Anonymity**

1. Do you want your responses to be anonymous?

- Yes (73.33%)
- No (26.67%)

2. If you would like your responses publicized, how would your firm like to be identified and with which contact information?

**M&A Due Diligence Services**

3. Does your firm have international capabilities?

- Yes, we have offices outside of the United States (45.83%)
- Yes, we partner with other providers (54.17%)
- We would get something set up if need be (12.50%)
- No, not at this time (4.17%)
- No, and we have no further plans (4.17%)
- This requires a more detailed response: (12.50%)

4. Does your firm currently provide services for M&A due diligence? (60.00%)

5. What M&A Services does your firm currently provide? Please check all that apply.

- Data room hosting (100.00%)
- Issue coding for data (e.g., contracts, leases, licenses, etc.) (76.47%)
- Data analytics (94.12%)
- Social media preservation (70.59%)
- Social media collection (76.47%)
- Social media analysis (67.41%)
- Other (please specify)

6. How many clients have specifically asked for M&A due diligence services?

- 0 (16.67%)

- 
- 1-5 (33.33%)
  - 6-10 (16.67%)
  - 11-15 (16.67%)
  - 16-25 (0.00%)
  - 25-50 (5.56%)
  - >50 (11.11%)

Do you detect any particular emerging trends within the M&A due diligence service area?

7. If you provide issue coding for data (e.g., contracts, leases, licenses, etc.), please describe the general issues for which you've coded.

8. If you provide Data Analytics, please describe the type of Analytics your firm provides.

9. How does your firm bill for M&A Services? Please check all that apply.

- Hourly Consultant Rates (61.11%)
- Data Volume (61.11%)
- Flat Fee (55.56%)
- We use the following alternative billing methods: (27.78%)

#### **Volume Services**

10. Do you have the capability to determine volumes for, collect, and review structured data content? Please check all that apply.

- Oracle (77.78%)
- Microsoft (77.78%)
- IBM (66.67%)
- Informatica (61.11%)
- EMC (66.67%)
- OpenText (66.67%)
- None of these (22.22%)
- You didn't mention the following that we have worked on: (22.22%)

11. Do you have the capability to determine volumes for, collect, and review cloud-based e-mail content? Please check all that apply.

- Gmail (86.67%)
- Outlook (93.33%)
- Hotmail (86.67%)
- Yahoo! (86.67%)
- AOL (80.00%)
- You didn't mention the following that we have worked on: (20.00%)

12. Do you have the capability to determine volumes for, collect, and review social media content? Please check all that apply.

- Facebook (93.75%)
- LinkedIn (93.75%)
- Twitter (93.75%)
- Instagram (81.25%)
- Snapchat (75.00%)
- You didn't mention the following that we have worked on: (25.00%)

13. Do you have the capability to determine volumes for, collect, and review cloud-hosted data? Please check all that apply.

- Amazon Web Services (93.75%)
- Google Cloud (93.75%)
- DropBox (93.75%)
- Box (87.50%)
- Salesforce (81.25%)
- You didn't mention the following that we have worked on: (18.75%)

14. Are there any other considerations and/or services you would like to add?

#### **Professional Services**

15. Does your firm provide Encryption Analysis? (47.06%)

16. Do you have consultants who have performed Encryption Analysis?

- Yes (76.47%)
- No (11.76%)
- This requires a more detailed response: (11.76%)

17. How does your firm bill for Encryption Analysis? Please check all that apply.

- Hourly Consultant Rates (100.00%)
- Data Volume (14.29%)
- Flat Fee (14.29%)
- We use the following alternative billing methods: (0.00%)

18. Does your firm provide Merger & Acquisition Frameworks? (29.41%)

19. Do you have consultants who have provided or contributed to a Merger & Acquisition Framework?

- Yes (40.00%)
- No (53.33%)
- This requires a more detailed response: (6.67%)

20. How does your firm bill for providing a Merger & Acquisition Framework? Please check all that apply.

- Hourly Consultant Rates (62.50%)
- Data Volume (25.00%)
- Flat Fee (37.50%)
- We use the following alternative billing methods: (25.00%)

### **Records Planning**

21. Does your firm provide Records Management Project Plans? (68.75%)

22. Do you have consultants who have provided a Records Management Project Plan?

- Yes (73.33%)
- No (20.00%)
- This requires a more detailed response: (6.67%)

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23. How does your firm bill for providing a Records Management Project Plan? Please check all that apply.

- Hourly Consultant Rates (83.33%)
- Data Volume (16.67%)
- Flat Fee (58.33%)
- We use the following alternative billing methods: (16.67%)

24. Does your firm provide Records Integration Plans? (53.33%)

25. Do you have consultants who have provided a Records Integration Plan?

- Yes (60.00%)
- No (20.00%)
- This requires a more detailed response: (20.00%)

26. How does your firm bill for providing a Records Integration Plan? Please check all that apply.

- Hourly Consultant Rates (83.33%)
- Data Volume (25.00%)
- Flat Fee (50.00%)
- We use the following alternative billing methods: (8.33%)

### **Systems Integration and Media Inventories**

27. Does your firm provide Systems Integration Plans? (53.33%)

28. Do you have consultants who have provided a Systems Integration Plan?

- Yes (78.57%)
- No (14.29%)
- This requires a more detailed response: (7.14%)

29. How does your firm bill for providing a Systems Integration Plan? Please check all that apply.

- Hourly Consultant Rates (90.91%)
- Data Volume (9.09%)



- Flat Fee (27.27%)
- We use the following alternative billing methods: (9.09%)

30. Does your firm provide Back-up Tape Inventories? (80.00%)

31. Do you have consultants who have provided a Back-up Tape Inventory?

- Yes (100.00%)
- No (0.00%)
- This requires a more detailed response: (0.00%)

32. How does your firm bill for providing a Back-up Tape Inventory? Please check all that apply.

- Hourly Consultant Rates (85.71%)
- Data Volume (28.57%)
- Flat Fee (57.14%)
- We use the following alternative billing methods: (7.14%)

33. Does your firm provide Removable Media Inventories? (86.67%)

34. Do you have consultants who have provided a Removable Media Inventory?

- Yes (100.00%)
- No (0.00%)
- This requires a more detailed response: (0.00%)

35. How does your firm bill for providing a Removable Media Inventory? Please check all that apply.

- Hourly Consultant Rates (86.67%)
- Data Volume (40.00%)
- Flat Fee (60.00%)
- We use the following alternative billing methods: (6.67%)

### **BYOD, Email Management, and Social Media Analyses**

36. Does your firm provide Bring Your Own Device (“BYOD”) Device Program Analysis? (73.33%)

37. Do you have consultants who have provided a BYOD Device Program Analysis?

- Yes (86.67%)
- No (13.33%)
- This requires a more detailed response: (0.00%)

38. How does your firm bill for providing a BYOD Device Program Analysis? Please check all that apply.

- Hourly Consultant Rates (92.31%)
- Data Volume (15.38%)
- Flat Fee (53.85%)
- We use the following alternative billing methods: (15.38%)

39. Does your firm provide Email Management Policy Analysis? (66.67%)

40. Do you have consultants who have provided an Email Management Policy Analysis?

- Yes (86.67%)
- No (13.33%)
- This requires a more detailed response: (0.00%)

41. How does your firm bill for providing an Email Management Policy Analysis? Please check all that apply.

- Hourly Consultant Rates (84.62%)
- Data Volume (7.69%)
- Flat Fee (53.85%)
- We use the following alternative billing methods: (7.69%)

42. Does your firm provide Social Media Policy Analysis?

- Yes (46.67%)
- No (40.00%)
- This requires a more detailed response: (13.34%)

43. Do you have consultants who have provided a Social Media Policy Analysis?

- Yes (78.57%)
- No (21.43%)
- This requires a more detailed response: (0.00%)

44. How does your firm bill for providing a Social Media Policy Analysis? Please check all that apply.

- Hourly Consultant Rates (81.82%)
- Data Volume (9.09%)
- Flat Fee (54.55%)
- We use the following alternative billing methods: (9.09%)

#### **Legal Holds, Cross-border Data Transfers, and Warehouse Agreements**

45. Does your firm provide Legal Hold Process and Ongoing Matter Review and Analysis? (73.33%)

46. Do you have consultants who have provided Legal Hold Process and Ongoing Matter Review and Analysis?

- Yes (93.33%)
- No (6.67%)
- This requires a more detailed response: (0.00%)

47. How does your firm bill for providing Legal Hold Process and Ongoing Matter Review and Analysis? Please check all that apply.

- Hourly Consultant Rates (85.71%)
- Data Volume (14.29%)
- Flat Fee (57.14%)
- We use the following alternative billing methods: (7.14%)

48. Does your firm provide Compliance Conflicts and Proposed Strategy for Cross-border Data Transfers? (26.67%)

49. Do you have consultants who have provided Compliance Conflicts and Proposed Strategy for Cross-border Data Transfers?

- Yes (60.00%)

- No (30.00%)
- This requires a more detailed response: (10.00%)

50. How does your firm bill for providing Compliance Conflicts and Proposed Strategy for Cross-border Data Transfers? Please check all that apply.

- Hourly Consultant Rates (85.71%)
- Data Volume (0.00%)
- Flat Fee (28.57%)
- We use the following alternative billing methods: (14.29%)

51. Does your firm provide Warehouse Management Agreements? (6.67%)

52. Do you have consultants who have provided Warehouse Management Agreements?

- Yes (40.00%)
- No (60.00%)
- This requires a more detailed response: (0.00%)

53. How does your firm bill for providing Warehouse Management Agreements? Please check all that apply.

- Hourly Consultant Rates (50.00%)
- Data Volume (0.00%)
- Flat Fee (50.00%)
- We use the following alternative billing methods: (25.00%)

54. Does your firm provide Patent Portfolio Compilations? (6.67%)

55. Do you have consultants who have provided a Patent Portfolio Compilation?

- Yes (33.33%)
- No (66.67%)
- This requires a more detailed response: (0.00%)

56. How does your firm bill for providing Patent Portfolio Compilations? Please check all that apply.

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- Hourly Consultant Rates (75.00%)
  - Data Volume (0.00%)
  - Flat Fee (25.00%)
  - We use the following alternative billing methods: (25.00%)

57. Does your firm provide Insurance Policy Compilation? (0.00%)

58. Do you have consultants who have provided an Insurance Policy Compilation?

- Yes (33.33%)
- No (66.67%)
- This requires a more detailed response: (0.00%)

59. How does your firm bill for providing an Insurance Policy Compilation? Please check all that apply.

- Hourly Consultant Rates (66.67%)
- Data Volume (0.00%)
- Flat Fee (33.33%)
- We use the following alternative billing methods: (33.33%)

60. Does your firm provide Vendor Management Analysis? (40.00%)

61. Do you have consultants who have provided a Vendor Management Analysis?

- Yes (53.85%)
- No (38.46%)
- This requires a more detailed response: (7.69%)

62. How does your firm bill for providing a Vendor Management Analysis? Please check all that apply.

- Hourly Consultant Rates (87.50%)
- Data Volume (0.00%)
- Flat Fee (25.00%)
- We use the following alternative billing methods: (12.50%)

63. Does your firm assess clients for Information Security/Cyberbreach risk? (60.00%)

64. Do you have consultants who have assessed clients for Information Security/Cyberbreach risk?

- Yes (71.43%)
- No (21.43%)
- This requires a more detailed response: (7.14%)

65. How does your firm bill for assessing clients for Information Security/Cyberbreach risk? Please check all that apply.

- Hourly Consultant Rates (81.82%)
- Data Volume (0.00%)
- Flat Fee (45.45%)
- We use the following alternative billing methods: (9.09%)