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Accounting for the Costs of Electronic Discovery

David Degnan*

I. INTRODUCTION

Experts estimate that conducting an electronic discovery (e-discovery) event may cost upwards of \$30,000 per gigabyte.¹ Given the complexity of the subject and the amount of money involved, many lawyers, litigation support vendors, experts, consultants, and forensic accountants have found e-discovery to be quite lucrative.² However, few commentators have offered guidance to help courts, attorneys, and clients predict and plan³ for litigation.⁴ Despite the lack of research, the civil procedure⁵ and evidence rule⁵ committees, Congress,7 and courts8

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^{1.} Herbert L. Roitblat, Search & Information Retrieval Science, 8 SEDONA CONF. J. 192, 192 (Fall 2007).

^{2.} See, e.g., In re Fannie Mae Sec. Litig., 552 F.3d 814, 817 (D.C. Cir. 2009) (noting that Fannie Mae spent approximately 9% of its total annual budget of six million dollars on the production of electronically stored information for the litigation at issue).

^{3.} FED. R. CIV. P. 26 advisory committee note (2006 Amendment) ("The particular issues regarding electronically stored information that deserve attention during the discovery planning stage depend on the specifics of the case.").

^{4.} See Pension Comm. of the Univ. of Montreal Pension Plan v. Banc of Am. Sec., 685 F. Supp. 2d 456, 472 n.56 (S.D.N.Y. 2010) (relying on how many hours it took to write the opinion to describe the cost of electronic discovery).

^{5.} See generally FED. R. CIV. P. 26 advisory committee's note (1993 Amendment) ("[Parties should] discuss how discovery can be conducted most efficiently and economically"); FED. R. CIV. P. 26 advisory committee's note (2006 Amendment) ("[The 26(f) conference and plan] can facilitate prompt and economical discovery by reducing delay before the discovering party obtains access to documents, and by reducing the cost and burden of review by the producing party.").

^{6.} FED. R. EVID. 502 initial advisory committee notes prepared by the Judicial Conference Advisory Committee on Evidence Rules (Revised

frequently address the cost of e-discovery. That said, the general consensus is that e-discovery is expensive, timeconsuming, and risky.9

First, the discovery of electronic evidence is expensive for clients and the other parties involved. Few seriously debate this point; however, some argue that the costs of e-discovery are grossly exaggerated. 10 But to make such an accusation (of exaggerated costs), one must review the process as a whole 11 and analyze both the external costs of outsourcing and the internal costs that are borne by the client or insurer in administering and processing the e-discovery event. For instance, the client may hire an expert to help develop internal information management protocols, but it still has to train its employees on how to use the new email server or software program.12 These steps require the time, talent, and expertise of the e-discovery team, which includes upper level management, in-house counsel, administrative staff, and information technology (IT) personnel.

Once the information management protocols are developed and implemented, employees must consistently use these

^{11/28/2007),} available at http://www.law.cornell.edu/rules/fre/ACRule502.htm ("[The purpose of the rule] is to respond[] to the widespread complaint that litigation costs necessary to protect against waiver of attorney-client privilege or work product have become prohibitive due to the concern of that any disclosure (however innocent or minimal) will operate as a subject matter waiver of all protected communications or information. This concern is especially troubling in cases involving electronic discovery.").

^{7.} Because FED. R. EVID. 502 had to go through Congress before passage, it is included in this list.

^{8.} See Pension, 685 F. Supp. 2d at 472 n.56 (relying on how many hours it took to write the opinion to describe the cost of electronic discovery).

^{9.} See, e.g., id. at 461 ("In an era where vast amounts of electronic information is [sic] available for review, discovery in certain cases has become increasingly complex and expensive.").

^{10.} John B. v. Goetz, No. 3:98-0168, 2010 U.S. Dist LEXIS 8821 (M.D. Tenn. Jan 28, 2010); Spieker, et al. v. Quest Cherokee, LLC., No. 07-1225-EFM, 2009 WL 2168892 (D. Kan. July 21, 2009).

^{11.} See Columbia Pictures v. Bunnell, No. CV 06-1093FMCJCX, 2007 WL 2080419, at *8 n.19 (C.D. Cal. May 29, 2007) (noting that the expert cost projections were not believable because the expert made assumptions about the process).

^{12.} Cf. Arthur Andersen LLP v. United States, 544 U.S. 696, 700 n.4 (2005) (explaining that Arthur Anderson helped to train some of Enron's employees on proper document retention procedures when threatened with litigation, and outlining Arthur Andersen's document retention policy).

protocols until the company reasonably anticipates a lawsuit.¹³ The company's counsel must then place a litigation hold on all relevant documents, suspend its document retention system and procedures, and monitor such hold until the proper documents are collected.¹⁴ This process potentially involves every employee that worked on the litigated matter.¹⁵

After the litigants meet and develop the proper parameters of the electronic document search, 16 the data is collected and processed. 17 Data processing may involve the cost of retaining an outside vendor to erase duplicates and find documents responsive to the requests for production within a larger database of collected files. 18 The outside vendor(s) then charges to process, index, host, review, and finally produce the collected data in an agreed-upon format. 19

Unprofessional discovery tactics may contribute to inflated estimates and costs. Litigation strategies have often utilized ediscovery to force settlement²⁰ or push opposing counsel into an unfavorable negotiating position.²¹ This tactic is not new, and some refer to this practice as "blackmail."²² Before the digital era, discovery may have consisted of thousands of unorganized paper documents produced in warehouses. The high cost and daunting task of organizing and reviewing all that material would often force a party into settlement.²³ Today, this practice

^{13.} See, e.g., Broccoli v. Echostar Commc'ns Corp., 229 F.R.D. 506, 511 (D. Md. 2005) ("[Defendant] plainly had a duty to preserve employment and termination documents when its management learned of Broccoli's potential Title VII claim that could result in litigation.").

^{14.} Zubulake v. UBS Warburg LLC, 220 F.R.D. 212, 220 (S.D.N.Y. 2003).

^{15.} Id. at 218.

^{16.} FED R. CIV. P. 26(f).

^{17.} FED R. CIV. P. 34(b).

^{18.} Steven C. Bennett & Marla S.K. Bergman, Managing E-Discovery Costs: Mission Possible, 832 PLI/LIT 177, 180-81 (2010) (outlining the services that an e-discovery vendor should provide).

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^{20.} Kenneth J. Withers, Electronically Stored Information: The December 2006 Amendments to the Federal Rules of Civil Procedure, 4 NW. J. TECH & INTELL. PROP. 171, 182 (2006) ("Commentators posited that savvy requesting parties could force settlement of cases simply by threatening electronic discovery.").

^{21.} Michael R. Arkfeld, Arkfeld ON ELECTRONIC DISCOVERY & EVIDENCE § 1.3(g) (2d ed. 2008).

^{22.} Daniel B. Garrie & Matthew J. Armstrong, Electronic Discovery and the Challenge Posed by the Sarbanes-Oxley Act, 2005 UCLA J. L. & TECH. 2, 2 (2005).

^{23.} See, e.g., Howard L. Speight & Lisa C. Kelly, Electronic Discovery: Not

still exists, but now the material is data-dumped onto the requesting party.²⁴

Second, metadata and other electronically stored information (ESI) take time to review and understand.²⁵ The data processing stage includes finding important records, redacting sensitive information, and coding relevant and privileged documents.²⁵ These tasks require months or even years, even with the help of software vendors, attorneys, and contract reviewers.²⁷ If protocols for preserving ESI are called into question, the time consumed by this peripheral litigation may mean additional months or years before the parties can complete discovery and focus on the merits of the case.

Third, e-discovery is risky.²⁸ Judges have tired of sophisticated corporations trying to disregard, skirt, or ignore their obligations to understand, address, and preserve ESI.²⁹ Courts readily impose sanctions when parties destroy information contained in email accounts.⁸⁰ However, having an adequate storage system in place before litigation begins can save time and money. Otherwise counsel and the client risk paying both the costs (1) to reactively produce discovery by

Your Father's Discovery, 37 St. MARY'S L. J. 119, 134 n.49 (2005).

^{24.} Withers, supra note 20.

^{25.} FED. R. CIV. P. 26 advisory committee's note (2006 Amendment) (acknowledging delay that electronic discovery causes and proposing compromise as a way to move the case forward).

^{26.} Bennett & Bergman, supra note 18.

^{27.} See generally Bensel v. Allied Pilots Ass'n, 263 F.R.D. 150, 151 (D.N.J. Dec. 17, 2009) (noting that this case has become known for its eight year legal war).

^{28.} Jason Fliegal & Robert Entwisle, Electronic Discovery in Large Organizations, 15 RICH. J.L. & TECH 7 (2009), http://law.richmond.edu/jolt/v15i3/article7.pdf ("Access to all this information may be helpful to the truth-seeking function of the courts, but several problematic side effects result: enhanced discovery compliance costs, enhanced discovery burdens, and the need for lawyers and judges to apply the law to highly technical topics generally beyond the knowledge of laymen.").

^{29.} See, e.g., Order on Motion for Sanctions and Motion to Strike at 1, Maggette v. BL Dev. Corp., No. 2:07CV182-M-A, 2009 WL 4346062 at *1 n.1 (N.D. Miss. Nov. 24, 2009) ("The court has already imposed sanctions upon defendants for what it views as a casual, if not arrogant, rebuff to plaintiffs' repeated efforts to obtain information which is ordinarily easily produced in litigation.").

^{30.} Courts will not, however, impose sanctions if destruction was the result of "mere negligence." Swofford v. Eslinger, 671 F. Supp. 2d 1274, 1280 (M.D. Fla. 2009).

court order³¹ and (2) for the other side's attorney's fees to investigate abuses,³² depose custodians,³³ inspect opposing counsel's computer systems,³⁴ and file motions related to the spoliation of data.³⁵

This article endeavors to explain all the moving parts and assumptions necessary to reach a cost estimate proportional to the litigation. By appreciating the cost assumptions related to e-discovery, the parties, bench, and bar may find ways to implement and create new cost effective solutions to approach e-discovery. In the next section, this article addresses a short, but noteworthy case in which the court found the cost of preserving ESI was too great.³⁶ In the third section, this article explains what the costs of e-discovery are at each step.³⁷ In the fourth section, this article explains the many tools that each party has to reduce costs and advance the case forward.³⁸ And in the fifth section, this article will discuss ethical issues that may impact and increase the client's budget for e-discovery.³⁹

II. COSTS BURDENS: RODRIGUEZ-TORRES V. GOVERNMENT DEVELOPMENT BANK OF PUERTO RICO

In 2006, the Federal Rules of Civil Procedure (FRCP) were

^{31.} See, e.g., In re Fannie Mae Sec. Litig., 552 F.3d 814, 817 (D.C. Cir. 2009).

^{32.} See, e.g., Capellupo v. FMC Corp., 126 F.R.D. 545, 553 (D. Minn. 1989) (ordering the defendant to pay the fees the plaintiff "incurred in investigating, researching, preparing, arguing and presenting all motions touching upon the issue of document destruction.").

^{33.} See, e.g., Arista Records, LLC v. Usenet.com, Inc., 633 F. Supp. 2d 124, (S.D.N.Y. 2009) (finding that it is grossly negligent to send custodians to Europe to prevent them from being deposed).

^{34.} See, e.g., Eugene J. Strasser, M.D., P.A. v. Bose Yalamanchi, M.D., P.A., 669 So. 2d 1142, 1143-44 (Fla. Dist. Ct. App. 1996) (stating that discovery rules are broad enough to encompass plaintiff's request to enter defendant's computer system, but declining to allow access in this particular case). See also FED R. CIV. P. 34 (allowing for inspection of the opposing party's computer systems).

^{35.} E.g., TR Investors, LLC v. Genger, No. 3994-VCS, 2009 Del. Ch. LEXIS 203, at *63 (Del. Ch. Dec. 9, 2009) ("Finally, because Genger's misconduct has occasioned great expense, I award the Trump Group their reasonable attorneys' fees and expenses related to the motions for contempt and spoliation.").

^{36.} See infra Part II.

^{37.} See infra Part III.

^{38.} See infra Part IV.

^{39.} See infra Part V.

updated and specifically addressed the preservation and production of e-discovery. Since that time, courts have broadly interpreted such rules to allow for expansive preservation and production of documents. He with that background, this section will analyze Rodriguez-Torres v. Government Development Bank of Puerto Rico, a noteworthy case where the court found that the costs and time necessary to produce ESI were too high—and, thus, prohibitive—making the emails and other ESI not reasonably accessible in the circumstances presented. This case, therefore, serves as a good example of proportionality in the production of ESI.

Rodriguez-Torres is a case about an employment discrimination dispute where the plaintiff requested the following electronic materials in discovery:

For each year 2007, 2008, 2009, produce in native electronic format with its original metadata all e-mail communications and calendar entries describing, relating or referring to plaintiff Vicky Rodriguez. both inbound and outbound from co-defendant GDB's messaging system servers. Particular attention to the following definition of extract key-words needs to be exercised: a) identification of Rodriguez by different variations of her name; b) designation of pejorative and derogatory terms typically used to demean persons according to their age and gender (including but not limited to phrases such as: vieja, nena, arrugas, años, edad, etc .); c) designation of phrases which could be referring to the current and past litigations, and which could suggest retaliatory animus or activities (including but not limited to phrases such as: demanda, caso, testigos, demandada, plaintiff, etc.); d) designation of record custodians to include all co-defendants, and other unnamed GDB employees known to tease, insult and taunt Rodriguez based on her physical appearance and age (a description of the process is further detailed in the ESI Specialist Report).43

Predictably, the defendant bank objected to the production request, suggesting that it was "irrelevant, overbroad and not reasonably calculated to lead to the discovery of admissible

^{40.} See, e.g., FED. R. CIV. P. 26 advisory committee's note (2006 Amendment) ("Electronic storage systems often make it easier to locate and retrieve information.... But some sources of electronically stored information can be accessed only with substantial burden and cost.").

^{41.} See, e.g., Columbia Pictures v. Bunnell, No. CV 06-1093FMCJCX, 2007 WL 2080419, at *13 (C.D. Cal. May 24, 2007) (according the Federal Rules of Civil Procedure broad applicability with regard to E-discovery after the 2006 amendments).

^{42.} Rodriguez-Torres v. Gov't Dev. Bank of P.R., 265 F.R.D. 40, 43-44 (D. P.R. 2010).

^{43.} Rodriguez-Torres, 265 F.R.D. at 43.

evidence."⁴⁴ Moreover, the defendant bank argued that the plaintiff's request would result in the production of thousands of documents that its counsel must review for responsiveness and privilege, resulting in costs that well exceed the matter in controversy. ⁴⁵ The plaintiff responded by filing two motions, one to compel discovery and one for sanctions relating to the failure to preserve and produce ESI, including emails. ⁴⁶ After these motions were filed, the court requested that both parties file a joint informative motion, detailing the cost of e-discovery and time needed for production. ⁴⁷

The parties' joint informative motion advised the court of the anticipated costs of the requested discovery.⁴⁸ Based on an IT consulting group that prepared a cost report, the itemized⁴⁹ expenses totaled \$35,000 to retrieve the requested information.

Without divulging the amount in controversy, the court ruled that the requested ESI was "not reasonably accessible" under 26(b)(2)(B) because of the undue burden and cost.⁵⁰ The Court reasoned that "\$35,000 is too high of a cost for the production of the requested ESI in this discrimination action."⁵¹

However, even if the data is not reasonably accessible, the requesting party may still be able to obtain the same information upon a showing of good cause. To that end, the plaintiffs argued that based on three articles, they "expect to find more relevant information than that which they have found from the hard copies of documents requested in the initial request for production of documents." Moreover, "[p]laintiffs anticipate finding communications showing discriminatory animus such as derogatory and demeaning references, exclusion from meetings, communications and work activities, and general disregard for Plaintiff Rodriguez's

^{44.} Id.

^{45.} Id.

^{46.} Id. at 42.

^{47.} Id.

^{48.} Id. at 44.

^{49.} Id. ("(1) \$5,000.00 for the configuration and creation of the Concordance Database; (2) \$20,000.00 to import the twenty-four Microsoft Outlook mailboxes that were requested by the plaintiffs; and (3) \$10,000 for the database search and retrieval, and the final ESI report.").

^{50.} Id.

^{51.} Id.

^{52.} FED. R. CIV. P. 26(b)(2)(B).

^{53.} Rodriguez-Torres, 265 F.R.D. at 44.

abilities."⁵⁴ The court noted that the plaintiffs must "provide [the court] with the basis of their belief specifically because the Court wanted to prevent Plaintiffs from requesting the ESI for the sole purpose of conducting a fishing expedition."⁵⁵ Indeed, the plaintiffs failed to show good cause under Rule 26(b)(2)(B) of the FRCP to attain much of what they requested.⁵⁶

Rodriguez is one of a few cases that discuss the undue cost of ESI under FRCP 26(B)(2)(B).⁵⁷ As such, this case reintroduces the cost consideration into the discovery of ESI. It also allows judges and producing parties to determine if the requested amount of discovery would be proportional to the matter in controversy or the novelty of the issues. Armed with such information, counsel can properly suggest that a request for ESI be denied when the matter is of low value or when the discovery requests seek to do more than fully understand the applicable claims or defenses.⁵⁸ Moreover, this case provides a nice introduction and a springboard to discuss the costs of retrieving and producing ESI.

III. ADDRESSING THE COST OF PRESERVING AND THEN PRODUCING ELECTRONICALLY STORED INFORMATION

Evaluating the cost of e-discovery is complex. Additionally, lawyers, consultants, and litigation support professionals can easily inflate or marginalize the same cost data to their benefit in an attempt to impress the client or the court.⁵⁹ The problem is that it is difficult to predict and understand how many documents are in a gigabyte of data, how fast the contract reviewers will review the documents, or

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^{54.} Id.

^{55.} Id.

^{56.} See id. (describing the plaintiffs' request for documents as no more than a fishing expedition, devoid of the requisite good cause).

^{57.} FED. R. CIV. P. 26(b)(2)(B).

^{58.} Cf. Aguilar v. Immigration & Customs Enforcement Div. of the U.S. Dep't of Homeland Sec., 255 F.R.D. 350, 356-57 (S.D.N.Y. 2008) (describing the test for requirement of metadata as consisting of two primary considerations: the need for and probative value of the metadata, and the extent to which the metadata will make the electronic information more useful).

^{59.} Cf. Columbia Pictures v. Bunnell, No. CV 06-1093FMCJCX, 2007 WL 2080419, at *8 (C.D. Cal. May 29, 2007) (noting that one defendant's estimate of space required to store daily Server Log Data was "significantly overstated.").

how much information will be culled out. This section will serve as a starting point in understanding the costs of conducting ediscovery. As a result of this uncertainty, professionals and experts take advantage of this ignorance when producing inflated bids and estimates for e-discovery. This next section breaks down the variables of producing ESI (before attorneys' fees) and explains how those variables may be adjusted to conduct ESI discovery in the most proportional way possible for all parties involved.

A. THE COSTS OF PRESERVING AND PRODUCING ELECTRONICALLY STORED INFORMATION

Litigation support is a lucrative industry.⁶¹ Before the days of ESI, the client would rent and retrofit warehouses to store mass quantities of paper for litigation.⁶² Now, everything may be stored on a mainframe, personal digital assistant (PDA), or other computer device.⁶³ Vendors' jobs, therefore, have changed to meet the need of this emerging niche.⁶⁴ A recent study suggested litigation support industry would be worth \$4.5 billion by 2009.⁶⁵ This is not shocking, given the amount of

^{60.} See, e.g., id. (noting that the defendants' cost projections were not believable); Oracle Corp. v. SAP AG, No. C-07-01658 PJH (EDL), 2008 U.S. Dist. LEXIS 88319, at *3-6 (N.D. Cal. 2008) (holding that an additional \$5 million for electronic discovery on top of an existing cost of \$11.5 million outweighs the benefits that additional discovery may provide, according to proportionality).

^{61.} See generally Charles Skamser, The Cost of eDiscovery, THE EDISCOVERY PARADIGM SHIFT (Sept. 10, 2008, 9:49 AM), http://ediscoveryconsulting.blogspot.com/2008/09/cost-of-ediscovery.html (describing the changes to electronic discovery and the confusion in its application since the FRCP change in 2006, especially regarding the increase in commercial expenditures).

^{62.} Cf. Withers, supra note 20, at 181-82 (noting that in the past, the main costs were storing and copying documents, while today those costs are non-factors as other considerations, such as inaccessibility and custodianship, have become the significant cost factors).

^{63.} Cf. Garrie & Armstrong, supra note 22, at 16 ("Although courts have extrapolated traditional discovery principles from paper documents to digital ones, courts have also been challenged by production costs differences between paper and digital documents.").

^{64.} See generally Skamser, supra note 61 (describing several vendors who have emerged to support demand for specialized electronic discovery services).

^{65.} See George Socha & Thomas Gelbmann, EDD Showcase: EDD Hits \$2 Billion, L. TECH. NEWS (Aug. 2007), http://sochaconsulting.com/2007_Socha-Gelbmann_ED_Survey_Public_Report.pdf (predicting growth in the electronic discovery market based on consumer and provider expectations).

information that must be screened and reviewed before trial.⁶⁶ This section discusses the variables of ESI discovery and explains how those variables may impact e-discovery cost calculations. For purposes of this article, the costs of e-discovery will be based on 100 gigabytes of information unless suggested otherwise. Speaking in terms of paper documents, 100 gigabytes is the equivalent to 100 truckloads of documents.⁶⁷ And when that much information is in play, the client should expect to pay for culling, organizing, and reviewing of the data, unless it has the capabilities and the know-how to conduct such services in-house.⁶⁸

Aside from ESI and trial counsel's fees, there are several other outsourced processing costs to consider (see Table 1). Table 1 is particularly helpful because it shows where the money is spent in a hypothetical litigation scenario. Manual collection costs \$250 to \$500 per hour, depending on the complexity. But with 94 percent of the ESI costs spent on processing and review, the processing and review costs receive most—if not all—the attention in literature and practice. Bringing various elements of discovery in-house may save some of these costs, but the client must also factor in the time and opportunity cost when employees are performing e-discovery instead of their normal job duties.

^{66.} Cf. Craig Ball, Worst Case Scenario, L. TECH. NEWS (Oct. 1, 2006), http://www.law.com/jsp/lawtechnologynews/PubArticleLTNC.jsp?id=1202435547745 (describing how delegating electronic discovery to vendors and outside experts can blur the line between lawyer and service provider and can be both sensible due to the amount of information that must be reviewed and risky because it wrests control away from the lawyer and can adversely affect the client and the case).

^{67.} Cf. E-DISCOVERY TEAM, www.e-discoveryteam.com (last visited July 5, 2010) (describing in a sidebar on the site's landing page that 1 gigabyte of data is equivalent to about 75,000 pages of documents, which would fill a pickup truck).

^{68.} See generally Jason Krause, Don't Try This at Home: Doing E-Discovery is Best Left to Outside Experts, ABA J., Mar. 2005, at 59, 59-60 (describing one law firm that does in-house electronic discovery tasks, noting that it is a rarity and that for more complicated cases, the firm relies on outside consultants).

^{69.} See Skamser, supra note 61.

^{70.} See, e.g., Predictive Pricing Estimator, ORANGE LEGAL TECH., http://orangelt.us/estimator/pricing1.html (last visited Mar. 11, 2010) (providing a cost estimator for electronic discovery services focusing on the cost to process and review the data).

^{71.} Withers, supra note 20, at 182 ("Organizations without state-of-the-

Table 1: Expenses from E-Discovery for 25 Gigabytes (GB) of Information⁷²

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Econolis, Constanting	10	4%
	94	36%
in the state of th	153	58%
	4	2%
还,021年	261	100%
	247	94%
BOOTH NEW #		

B. WHERE IS THE MONEY GOING?

Client, counsel, and the court must understand the costs of e-discovery to make informed decisions about litigation support vendors and the scope of litigation. There are also several types of litigation support vendors to consider. Specifically, some vendors are helpful in front-end analysis and review; others are helpful copying, scanning, warehousing, or managing documents online in a document repository; and still others are helpful at cumulating and packaging all this information in a manner that will ensure the proper presentation of documents for deposition, witnesses, and trial.73 By calculating the tangible cost of outsourcing segments of the review and accounting for the intangible costs of company employees' time, in-house counsel may evaluate the real costs associated with a typical review and make the appropriate staffing decisions. Using the industry averages outlined by others as baselines and reasonable ranges to articulate highs and lows, this article extrapolates those numbers to provide costs analysis for 100 gigabytes of data. Therefore, the following sections outline the variables that are used to calculate costs of document reviewers

art electronic information management programs in place, which classify information and routinely cull outdated or duplicative, data face enormous (often self-inflicted) costs and burdens.").

^{72.} Will Uppington, E-Discovery 911: Reducing Enterprise Electronic Discovery Costs in a Recession, E-DISCOVERY 2.0, (Feb. 20, 2009, 4:40 PM), http://www.clearwellsystems.com/e-discovery-blog/2009/02/20/e-discovery-911-reducing-enterprise-electronic-discovery-costs-in-a-recession/.

^{73.} While acknowledging that such companies exist, it is beyond the scope of this article to recommend any such vendor or service. The author will merely note that he has used several of these companies with success.

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and litigation support vendors.

1. Litigation Support Vendor Services

Litigation support vendors help with data deduplication, culling, processing, and analyzing the information before the contract document reviewers see the documents.

Table 2: Expected Vendor Fees for 100 Gigabytes (GB) of Information⁷⁴

(MD) OF THE	NE THEFFT OF CAR			
	\$750	\$1000	\$1200	\$1800
110 - Leis 2431 - Leis	\$75,000.00	\$100,000.00	\$120,000.00	\$180,000.00

The process of outsourcing to litigation support vendors to load and cull data in its proprietary software program ranges in cost from \$350 to \$500 per gigabyte. The end cost of culling is typically \$750 to \$1800 per gigabyte for the vendor services, considering all the extra fees for hosting, software licensing, advanced culling, consulting services, and technical support. Industry average is approximately \$1000 per gigabyte for hosting and processing.

^{74.} There is information to support the industry average is \$1000 per gigabyte. For the purposes of this study, it is reasonable to assume it would cost an additional \$400 to \$700 per gigabyte for vendor services at the low and medium range. With such information, the test parameters of \$750, \$1000, \$1200, and \$1,800 were developed. See Chris Egan & Glen Homer, Achieve Savings By Predicting And Controlling Total Discovery Cost, METROPOLITAN CORP. COUNS., (Dec. 1, 2008), http://www.metrocorpcounsel.com/pdf/2008/December/08.pdf; Eric Rosenberg, Getting Smart About Analyzing ESI, L. TECH. NEWS (Feb. 15, 2008), http://www.law.com/isp/lawtechnologynews/PubArticleLTN.jsp?id=900005503 372 ("On average, it costs \$1,800 to process and prepare data for analysis, and \$250 per hour to analyze and review it.").

^{75.} See Predictive Pricing Estimator, supra note 70 (comparing its rate of \$350 against the competition's rate of \$500 for additional processing cost per gigabyte).

^{76.} See Egan & Homer, supra note 74; Rosenberg, supra note 74.

^{77.} Egan & Homer, supra note 74.

2. Costs of Contract Document Reviewers

The cost of contract document reviewers are dependent on the volume of information per gigabyte, the hourly rate of the reviewers, the speed of the reviewers, and the cull rate achieved. The below section attempts to define each of the necessary variables needed to predict the cost of hiring document reviewers.

Estimates, with respect to volume suggest that one gigabyte contains between 5000 to 25,000 documents. However, 10,000 documents is the presumed number of documents per gigabyte. A production with 5000 documents will have more files with attachments, graphics, or TIFF images, which take up more storage space. On the other hand, a production with 25,000 documents in a gigabyte will contain more short emails, word documents, or other files that do not take up much space. For example, a Microsoft Word document averages 9 pages per document, and an email averages 1.5 pages per document in length. The chart below suggests, visually, how many documents there are in one gigabyte.

Table 3: Range of Estimates for Documents per

	Gigabyte ((CLD)	_			
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	evintal little participation of	5000	10,000	15,000	25,000	
		•				
- 13						
15		<u> </u>				

The process of document review is often extremely expensive. The literature suggests that it costs \$28 per hour to outsource the first-pass attorney review to another country (India) and upwards of \$65 to do the same review in New

^{78.} See Clearwell E-Discovery Savings Calculator, CLEARWELL SYSTEMS, INC., http://www.clearwellsystems.com/e-discovery-customers/eDiscovery-savings-calculator.php (last visited Mar. 11, 2010) (providing a range of 5,000-25,000 docs per gigabyte for calculating the cost of processing data) [hereinafter Savings Calculator]. See also Egan & Homer, supra note 74.

^{79.} Egan & Homer, supra note 74.

^{80.} How Many Pages are in a Gigabyte, LexisNexis Discovery Fact Sheet, http://www.lexisnexis.com/applieddiscovery/lawlibrary/whitePapers/ADI_FS_PagesInAGigabyte.pdf (last visited Dec. 5, 2010).

York.⁸¹ Additionally, one can hire in-house staff attorneys at the rate of \$80,000 a year or \$40 per hour, depending on the workload.⁸² Using the same assumptions, one can calculate the costs of contract reviewers at \$28, \$40, \$52.50, and \$65 dollars per hour, assuming 2000 hours a year or 40 hours a week for 50 weeks. For a higher price, some staffing and litigation agencies combine document review with other services, this can be helpful given the reviewer's closeness to the documents and the facts of the underlying case.⁸³

Table 4: Rates for Document Review Attorneys

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	105. 1011111 22.7 12115 277.45		, vanot nitte 1019 Primite i nose
\$28 / hour	\$40 / hour	\$65 / hour	\$52.50 / hour
\$56,000	\$80,000	\$130,000	\$105,000

3. Speed of Document Review

Review speed is based on how many documents there are in a gigabyte, the number of document decisions that are required per document, and the speed of the document reviewers. The industry average is approximately 10,000 documents per gigabyte,84 although this number can vary widely. The chart below compares the number of documents based on assumptions of 5000, 10,000, 15,000, and 25,000 documents per gigabyte. The review speed also depends on what tasks the reviewers are performing. Some reviewers only review for privilege; some review for privilege, mark hot documents, and make recommendations on sensitive information; and still other reviewers sample, run reports, and mark categories of documents. The diagram below shows the

^{81.} Egan & Homer, supra note 74.

^{82.} This also considers the prospect of hiring a contract worker at \$30 per hour and adding in \$10 per hour of overhead costs. See Gabe Acevedo, All Play and No Work Made Lance a Disbarred Boy, ABOVE THE LAW (June 2, 2010, 2:35 PM) (noting that a contract attorney is paid \$30 per hour), http://abovethelaw.com/2010/06/all-play-and-no-work-made-lance-a-disbarred-hov/

^{83.} Uppington, supra note 72.

^{84.} Egan & Homer, supra note 74.

review speed as constant and assumes that the reviewers are making many decisions per document and are doing more than simply looking for privileged documents, requiring a linear review.

Table 5: Rate of Document Review

	(2002)	Ben hills	West books &	and color
	5000	10,000	15,000	25,000
Strainach	400	400	400	400
ā i				
	12.5	25	37.5	62.5

But the amount and type of documents reviewed also plays a significant role in how one calculates vendor rates and review speed. St Industry standards suggest that document reviewers can read, understand, and mark 50 documents per hour or 400 documents per day. If the reviewers work at a faster pace, they are likely not doing more than reading the subject line. As a result, this variable should stay constant, although the parties, counsel, and the court should be made aware that review speed is subject to manipulation (and negotiation) in vendor cost projections. St

4. Cull Rate

In every collection, there is a certain amount of "junk" or irrelevant files that must be removed, or culled out, before the

^{85.} Richard Stout, In E-Discovery, It's Not About the Hourly Rate, TRICOM DOC. MGMT. (Mar. 6, 2009), http://tricom.wordpress.com/2009/03/09/in-e-discovery-its-not-about-the-hourly-rate/.

^{86.} Id. This article acknowledges analytic tools that are suggested to save time due to the focus of the review. However, those tools are not always appropriate depending on the type of decision that is being made, as an analytic tool focuses more on a single element, such as a privilege review.

^{87.} Egan & Homer, supra note 74.

^{88.} See, e.g., Egan & Homer, supra note 74; Uppington, supra note 72 (discussing studies suggesting that the reviewers can review 100 documents in this time). Interestingly, pages and documents appear to be used interchangeably in the literature.

^{89.} Perhaps the distinction that is being made is the number of document decisions per hour, meaning that one document may require several document decisions for privilege, relevance or necessary redactions.

contract reviewers see the files and the data is produced.⁹⁰ The percentage of information that is culled out is known as the cull rate, and that number will depend on how specific the collection is, the key-terms used, the search parameters, and the amount of risk that counsel is willing to take in defining the scope of the review and collection.⁹¹ A broad collection will result in a high cull rate and the elimination of more documents. On the other hand, a narrow collection, using precise search terms, will cause more irrelevant files to be deleted before the review starts. For the ease of presentation, this paper suggests three standard review rates: 30% (low); 50% (medium) and 80% (high). The charts below attempt to show the impact that cull rates have on costs of a document review.

90. Withers, supra note 20, at 182.

^{91.} Roland Bernier, Avoiding an E-Discovery Odyssey, 36 N. KY. L. REV. 491, 501 (2009) ("Culling rates are often used by vendors to define, or at least illustrate, success.... If you culled 60% of documents from a population, then that is, roughly, a 60% savings in attorney review time, with attendant reductions on certain costs associated with production and related processes.").

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Table 6: 30% cull rate⁹²

Table 6: 50% Cull Fate					
			VA: statute 4	nairia (a	
	5000	10,000	15,000	25,000	
	500,000	1,000,000	1,500,000	2,500,000	
interior become	30%	30%	30%	30%	
	350,000	700,000	1,050,000	1,750,000	
	400	400	400	400	
9936 18-295	875	1750	2625	4375	
eogy (autora – ofariote de pe electro	\$28.00	\$28.00	\$28.00	\$28.00	
Company.	\$24,500.00	\$49,000.00	\$73,500.00	\$122,500.00	
gufsi selatinan Définisti téyel Glossonia, ésse	\$40.00	\$40.00	\$40.00	\$40.00	
	\$35,000.00	\$70,000.00	\$105,000.00	\$175,000.00	
girst (ngainte Stantos es cue Stantos (na)	\$65.00	\$65.00	\$65.00	\$65.00	
Samuel :	\$56,875.00	\$112,750.00	\$170,625.00	\$284,375.00	

^{92.} See Savings Calculator, supra note 78 (Clearwell's calculator put this at the low end of the assumed cull rate).

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Table 7: 50% cull rate

Table 7	: 50% cull rate			
Articopienels d	5000	10,000	15,000	25,000
P i li	500,000	1,000,000	1,500,000	2,500,000
	50%	50%	50%	50%
	250,000	500,000	750,000	1,250,000
	400	400	400	400
re nine		1250	1875	3125
Tome on state. Standt tere. 1946 (1)	\$28.00	\$28.00	\$28.00_	\$28.00
	\$17,500.00	\$35,000.00	\$52,500.00	\$87,500.00
	\$40.00	\$40.00	\$40.00	\$40.00
		\$50,000.00	\$75,000.00	\$125,000.00
general services of the servic	\$65.00	\$65.00	\$65.00	\$65.00
		\$81,250.00	\$121,875.00	\$203,125.00

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Table 8: 80% Cull Rate93

THOLE OF	Table 5: 80% Cull Rates					
	5000	10,000	15,000	25,000		
	500,000	1,000,000	1,500,000	2,500,000		
St. Struktille	909/	900/	80%	9004		
	80%	80%	0070	80%		
	100,000	200,000	300,000	500,000		
Ferral Diagnosis	400	400	400	400		
en e	250	500	750	1250		
Tome poisoners ariouse 100 Mary	\$28.00	\$28.00	\$28.00	\$28.00		
You Terrain	\$7,000.00	\$14,000.00	\$21,000.00	\$35,000.00		
englished Start State	\$40.00	\$40.00	\$40.00	\$40.00		
	\$10,000.00	\$20,000.00	\$30,000.00	\$50,000.00		
1470 M. 1.00	\$65.00	\$65.00	\$65.00	\$65.00		
Stanikating.	\$16,250.00	\$32,500.00	\$48,750.00	\$81,250.00		

In short, the cost range to review 100 gigabytes of information is between \$7000 and \$284,375, a difference of approximately \$277,375.00, and the cost range to process 100 gigabytes of information is between \$75,000 and \$180,000, a difference of \$105,000. The ranging assumptions that must be accounted for create nightmare scenarios for those who must

^{93.} Cf. Skamser, supra note 61 (noting that litigation support vendors may change the assumptions to assert an exceptional cull rate—such as 90%).

plan a realistic litigation budget.94 As a result, this is an area that needs further research and study to help counsel, the client and the court develop predictable solutions for the client.

C. ESTIMATING THE COSTS OF HIRING E-DISCOVERY COUNSEL

Hiring counsel is the primary expense in any e-discovery project. E-discovery counsel is needed to implement and set up a document retention program, hire and supervise a litigation support vendor, oversee document reviewers, review and categorize documents, and package the requested documents in a manner that is most helpful to trial counsel. 95 As a result, it is helpful that e-discovery counsel also be an experienced trial lawyer, so that she understands what type of documents to use and how to present them.96 In short, counsel's job is to ensure e-discovery is executed in a timely, transparent, and defensible fashion.

Estimating the costs of hiring ESI counsel is difficult because attorneys from firms around the country command different salaries based on experience, skill, and prestige. Ediscovery counsel must provide superior work product and constantly re-evaluate its processes to avoid sanction, which means the end costs to the client are in the thousands or millions of dollars.97 Roughly speaking, the total cost of

^{94.} Others have offered different reasoning for the varied costs outcomes. Cf. Electronic Discovery: A View from the Front Lines, INSTITUTE FOR THE ADVANCEMENT OF THE AMERICAN LEGAL SYSTEM 18 (2008) ("[L]aw firms are afraid of looking incompetent by admitting to a lack of e-discovery knowledge or practice. In other cases, lawyers talk their clients into spending more than necessary on e-discovery, taking deliberate advantage of the client's lack of experience and knowledge in this area. Unfortunately, other commentators support Socha's conclusion.").

^{95.} Costs Associated with a Manual eDiscovery Strategy, IRON MOUNTAIN, http://www.mimosasystems.com/html/ediscovery_worksheet.htm (last visited Mar. 11, 2010).

^{96.} Electronic Discovery: A View from the Front Lines, supra note 94, at 18 ("For organizations that cannot staff an in-house team (as Verizon and other corporations have done), Patrick Oot recommends either hiring an outside boutique law firm that focuses exclusively on e-discovery or a larger firm with an e-discovery practice group headed by senior leadership. Oot says that a partner-level firm leader will have the credibility to direct the group competently and have the courage to give the best advice. Be wary, he says, of the law firm that assigns a junior associate to manage the discovery on any

^{97.} Ralph Losey, The Multi-Model "Where's Waldo?" Approach to Search and My Mock Debate with Jason Baron, E-DISCOVERY TEAM (Feb. 27, 2010),

discovery is suggested to be between \$2.70 and \$4.00 per document or \$2.5 to \$3.5 million to handle an e-discovery case. 95 However, prior articles discussing costs may present higher numbers than it actually costs in practice, given the amount of unknown variables.

D. Understanding the Avoidable Costs of Discovery: The Costs of Investigations and Sanctions

The other side of the cost equation is the cost of failing to preserve ESI. Courts have held that the failure to preserve and produce ESI is dishonest, inexcusable, or worse. 99 Such conduct is not limited to discovery. In an open records request case, the failure to produce native files may result in an order to produce and attorneys' fees awarded to the requesting party. 100 This section will briefly explore the costs of failing to preserve and produce ESI.

Courts will commonly impose monetary sanctions for the failure to preserve ESI. For example, in Cache la Poudre, 101 the court issued a \$5000 sanction for failing to provide all available information to meet the requesting party's discovery request. Similarly, in Phoenix Four, Inc. v. Strategic Res. Corp, 102 the court gave a sanction of \$30,000 for failing to take measures to provide ESI. As the discovery abuses become more distinct, so too does the amount of the monetary sanctions awarded. 103 For example, in Qualcomm, the court ordered the law firm and its client to pay over \$8.5 million dollars in attorney's fees for the client's failure to preserve ESI. 104 Qualcomm's attorneys were

http://e-discoveryteam.com/2010/02/27/the-multi-modal-wheres-waldo-approach-to-search-and-my-mock-debate-with-jason-baron/ (opining that the costs of an electronic discovery case is in the millions).

^{98.} Electronic Discovery: A View from the Front Lines, supra note 94, at 5 ("If a 'midsize' case produces 500 gigabytes of data, this means organizations should expect to spend \$2.5 to \$3.5 million on processing, review, and production of ESI.").

^{99.} Gamby v. First Nat'l Bank of Omaha, No. 06-11020, 2009 U.S. Dist. LEXIS 7687, at *14, 24 (E.D. Mich. Jan 20, 2009).

^{100.} See Lake v. City of Phoenix, 218 P.3d 1004, 1008 (Ariz. 2009).

Cache La Poudre Feeds v. Land O'Lakes, Inc., 244 F.R.D. 614, 637 (D. Colo. 2007).

^{102.} Phoenix Four, Inc. v. Strategic Resources Corp., No. 05 Civ. 4837(HB), 2006 WL 1409413, at *9 (S.D.N.Y. May 23, 2006).

^{103.} Id.

^{104.} Gregory D. Shelton, Qualcomm v. Broadcom: Lessons for Counsel and a Road Map to E-Discovery Preparedness, INT'L ASS'N OF DEF. COUNSEL, Feb. 2008.

also ordered to appear before the California State Disciplinary Board as a result of the failure to preserve. 105

The differences between monetary sanctions and attorneys' fees are astronomical. It is incorrect for courts and commentators to refer to attorneys' fees as mild sanctions, as they are typically in the thousands or millions of dollars. ¹⁰⁶ The costs of investigating, analyzing, and answering a sanctions motion is in many cases far more burdensome than most realize. Additionally, few cases ever reach trial in the first place, so a sanction of attorneys' fees might be the most effective sanction that does not punish the client for the attorney's conduct.

Moreover, the costs of sanctions extend well beyond monetary payments based on the severity of the abuse. 107 These punishments range from attorneys' fees, as discussed above, to adverse inferences, issue preclusion, and terminating sanctions. 108 The costs of losing one's case, or an important issue in one's case, because of the attorney's misconduct is unacceptable to most clients, but it is a remedy that the courts have employed. 109 Indeed, many of these more severe sanctions often accompany attorneys' fees and costs. 110

Moreover, a brief discussion about insurance agencies is warranted. Insurance agencies must appropriately calculate and respond to malpractice claims and allocate the appropriate reserves. E-discovery is a very complex and risky area because minute details are often missed and opposing counsel frequently challenges production. All it takes for a decent protocol to be challenged is showing of unproduced emails, as was the case in *Zubulake I*. 111 As a result, insurance companies

^{105.} Id.

^{106.} In re Fannie Mae Sec. Litig., 552 F.3d 814, 817 (D.C. Cir. 2009) (Fannie Mae spent 6 million dollars to conduct discovery).

^{107.} McDowell v. Gov't of Dist. of Columbia, 233 F.R.D. 192, 204 (D.D.C. 2006).

^{108.} See Pension Comm. of Univ. of Montreal Pension Plan v. Banc of Am. Secs., 685 F. Supp. 2d 456, 469 (S.D.N.Y. 2010).

^{109.} Columbia Pictures Inc. v. Bunnell, No. 2:06-cv-01093, 2007 WL 4877701, at *8 (C.D. Cal. 2007) (granting terminating sanctions).

^{110.} Id.

^{111.} See generally Zubulake v. UBS Warburg LLC (Zublake I), 217 F.R.D. 309 (S.D.N.Y. 2003) (requiring the defendant to produce more than 450 emails and to restore 5 backup tapes based on a few emails that Ms. Zubulake had in her possession that defendant had not preserved).

should not hire just any malpractice attorney. Indeed, the absolute worst situation would be an insurance company hiring a malpractice attorney who is not competent in e-discovery matters, resulting in the malpractice attorney being sued for malpractice.

IV. CONTROLLING COSTS: THE KEY TO MANAGING E-DISCOVERY

Despite the ranging costs of e-discovery, there are ways to control the costs and to do so in a defensible and transparent manner. The key to controlling costs is to make sure the amount requested in discovery is proportional, reasonable, and appropriate for the matter in controversy. 112 Cost considerations have their origin in the FRCP, namely, Rule 26(b). 118 Within the Rule, ESI discovery will be required unless "the burden or expense of the proposed discovery outweighs its likely benefit, taking into account the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues." 114 But, controlling costs is difficult to achieve because it requires some knowledge of mathematics, information technology, and statistics.

Courts, arbitrators, mediators, and special masters all strive to fashion a fair remedy. To reach such a remedy, each overseer needs to understand the tools available to limit costs and advance the case forward. In recent years, e-discovery has changed the idea of what is necessary to reach trial. This next section, therefore, addresses the tools that are necessary to lower the cost of litigation. With the framework provided by Rules 26(b)(1), 26(b)(2)(C), and the accompanying advisory committee's notes in mind, this article proposes four main tools to cut costs: sampling, gap testing, indexing, and cooperation.

A. SAMPLING

Sampling and quality control testing are among the most common and cost effective tools in e-discovery. Sampling allows the requesting parties to take a snap shot of the producing party's files and draw conclusions of the whole population

^{112.} See Garrie & Armstrong, supra note 22 at 7-8.

^{113.} FED. R. CIV. P. 26 advisory committee's note (1993 Amendment).

^{114.} FED. R. CIV. P. 26(b)(2)(C).

based on those findings. 115 To do this, the sample must be random, must compare the same type of variables, must have a representative sample size, 116 and must use a statistically valid method that is planned beforehand. 117 In the same respect, sampling allows a party or the court to determine if expensive and costly discovery is likely to lead to relevant information or if the burdens outweigh the benefit. 118

A sample cannot be extrapolated if is not statistically valid, because the margin of error would not produce results that are accurate with a high degree of certainty. 119 A court will likely overturn any such sampling protocol on due process grounds if the margin of error is too high. 120 For example, in Bell, the court noted that a 32 percent margin of error was too high. 121 In Scottsdale Memorial Health Systems, 122 a noteworthy statistical sampling case involving over 30,000 medical claims brought through a wide variety of circumstances, the court held that:

[U]nder the principles of fairness and justice that underlie our Rules of Civil Procedure, the superior court may adopt statistical sampling and extrapolation as a case management tool only when the specific methodology to be used is tailored to produce a result at least as fair and accurate as would be produced by traditional particularistic fact-finding methods. In making this determination, the court must at a minimum consider the number of claims in the relevant universe, the number and nature of the variables present in those claims, the sample size and whether the sample is truly representative of the universe of claims. The court also must make detailed findings that permit the reviewing court a clear understanding of the entire

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^{115.} Commentary on Achieving Quality in the E-Discovery Process, SEDONA CONF., 24 (Mar. 2009), http://www.thesedonaconference.org/dltForm?did=Achieving_Quality.pdf; Best Practices & Recommendations for Addressing Electronic Document Production, SEDONA CONF. (June 2007), http://www.thesedonaconference.org/content/miscFiles/7_05TSP.pdf.

^{116.} See, e.g., Bell v. Farmers Ins. Exch., 9 Cal. Rptr. 3d 544, 575-78 (Cal. Ct. App. 2004).

^{117.} Commentary on Achieving Quality in the E-Discovery Process, supra note 115 at 24-26,

^{118.} Zubulake v. UBS Warburg LLC, 220 F.R.D. 212, 216 (S.D.N.Y. 2003).

^{119.} Commentary on Achieving Quality in the E-Discovery Process, supra note 115, at 24-26.

^{120.} Bell v. Farmers Ins. Exch., 9 Cal. Rptr. 3d 544, 576-78 (Cal. Ct. App. 2004).

^{121.} Id.

^{122.} Scottsdale Mem. Health v. Maricopa Cnty., 228 P.3d 117 (Ariz. Ct. App. 2010).

methodology and its application. 128

The court found that this case dealt with "thousands of individual factual issues" without an explanation about how each of those facts and issues could be extrapolated in any meaningful way.¹²⁴ The court reasoned that "[w]hile the use of extrapolation to reduce the number of claims [may be] permissible, there simply is no lawful substitute for detailed findings of fact and conclusions of law."¹²⁵

As applied to e-discovery, sampling is a valuable tool to ensure proper litigation hold management, to review non-responsive and responsive documents, and to identify whether further review is necessary. Similarly, sampling allows the quality control document reviewers to investigate non-responsive documents that were culled out by a software program to show good faith compliance with discovery protocols. Finally, as will be discussed in other sections, sampling helps define what information and issues may need further investigation and analysis. 128

More importantly perhaps, sampling provides insight into what the cost numbers for a project will be. After sampling a cross-section of the documents, the attorney can properly educate his client on how responsive the documents are, what the likely cull rate will be, and how many documents will likely be in the average gigabyte. By performing such samples, the client or the insurer will gain at least some predictability and can budget the case accordingly.

B. GAP TESTING

Gap testing—commonly referred to as sequenced discovery—is another important tool to move the case forward through the e-discovery process. 129 Similar to sampling, gap

^{123.} Id. at 134.

^{124.} Id. at 135.

^{125.} Id. at 136.

^{126.} See, e.g., D'Onofrio v. SFX Sports Group, Inc., 256 F.R.D. 277, 278 (D.D.C. 2009) (determining whether a sampling of a 9,400 item privilege log was necessary).

^{127.} See, e.g., id. at 279-80 (finding that courts will only interfere and determine what is discoverable when there is good cause that discovery of certain information is harmful to the proponent of a protective order).

^{128.} See, e.g., McPeek v. Ashcroft, 212 F.R.D. 33, 34 (D.D.C. 2006) (determining whether a second search of backup tapes will produce additional relevant data).

^{129.} Jay E. Grenig & William C. Gleisner, Saving Time and Money,

testing involves using small searches and negotiating issues in controversy before undertaking a full and expensive discovery process. Such a tool is recommended for preparing high volume cases or responding to a motion to dismiss. Gap testing allows both sides to negotiate, advocate, and cooperate with each other and perhaps even reach the resolution of at least some of the pretrial or trial issues. 182

But gap testing means more than merely allowing for some discovery at the front end of litigation. It forces the parties to agree on what is relevant and to focus on the most efficient and inexpensive way to obtain the most responsive information. ¹³³ It does this by requiring the parties to gauge the responsiveness of the proposed search terms, which significantly reduces the number of documents in the original database. Gap testing also creates a recorded and reasoned position from which counsel can choose which documents are responsive. ¹⁸⁴

The whole idea of gap testing cannot be pigeonholed, however, into simply testing and negotiating the responsiveness of search terms. Counsel has an opportunity to openly discuss several topics, including the case, the witnesses, and the merits, to determine if the parties have enough information to proceed. Additionally, parties may identify what areas can be resolved without litigation, what areas would benefit from more 26(f) conferences, what areas of discovery are necessary, and what counsel can do to reach the merits while still "in the gap." 135 Drafting initial disclosure statements,

EDISCOVERY & DIGITAL EVIDENCE § 7.3 (2010).

^{130.} See, e.g., William A. Gross Constr. Assocs., Inc. v. Am. Mfrs. Mut. Ins. Co., 256 F.R.D. 134, 136 (S.D.N.Y. 2009) (resolving an argument as to the proper, narrowly-tailored search terms required to retrieve the relevant emails).

^{131.} Cf. id. at 135 (determining that to allow a broad search would result in the unwarranted "production of the entire Hill email database").

^{132.} Steven S. Gensler, Bulls Eye View of Cooperation in Discovery, 10 SEDONA CONF. J. 368, 369 (2009).

^{133.} See The Sedona Conference Best Practices Commentary on the Use of Search and Information Retrieval Methods in E-Discovery, 8 SEDONA CONF. J. 189, 200-01 (2007).

^{134.} Cf. Equity Analytics, LLC v. Lundin, 248 F.R.D. 331, 332-33 (D.D.C. 2008) (using an expert to certify search terms meant to indentify the relevant information on a computer, allowing for a more focused search).

^{135.} See The Sedona Principles: Second Edition, SEDONA CONF., 21 (June 2007).

identifying and testing jury instructions, or presenting closing arguments, for example, would provide enormous benefit in determining if more expansive discovery is needed, and, if so, where any additional discovery should be focused. 136

Although gap testing is different from sampling, its effectiveness as a means by which to calculate fees accomplishes a similar goal. By conducting limited and sequenced discovery and testing that discovery to see if one has enough information to prove its case, one can narrow and manipulate the cull rate by changing the parameters of the search. In so doing, counsel can achieve a higher cull rate and produce less irrelevant documents for the review stage. This will save the client money on hosting fees, reviewer fees, and quality control counsel's fees. More importantly, perhaps, this allows trial counsel to stay involved in the e-discovery process.

C. CRAWL SYSTEM

Indexing—commonly referred to as crawling—allows for otherwise inaccessible data to become accessible by mapping the files that are on a backup tape or computer system. 187 Crawling refers to a software program that will identify what documents are available and where those documents are located. 138 Technology, such as the crawl system, now enables backup tapes to be indexed so guessing which tape to sample is no longer a problem. 139 As a result, the otherwise inaccessible data outlined by Zubulake I would now be accessible due to the

http://www.thesedonaconference.org/content/miscFiles/TSC_PRINCP_2nd_ed_607.pdf.

^{136.} See, e.g., ARIZ. R. CIV. P. 26.1(a)(9) (requiring the prompt disclosure of electronically stored information and the date(s) that it will be "available for inspection, copying, testing or sampling").

^{137.} Michael D. Berman, et al., Has Indexing Technology Made Zubulake Less Relevant?, INDEX ENGINES 1-2, 4, http://www.indexengines.com/download/Has%20Indexing%20Technogy%20Made%20Zubulake%20Less%20Relevant.pdf (last visited Oct. 25, 2010) ('As predicted by Mr. Rice's treatise, because of technological improvements, 'the currently inaccessible ('or difficult to access'), may become accessible,' and crawling and indexing technologies may change the technological analysis related to 'proportionality' and when ESI is 'not reasonably accessible because of undue burden or cost.").

^{138.} Id. at 4

^{139.} Id. ("The key concept of an 'enterprise solution' is that it is 'proactive' and deploys a re-usable search engine. Once the crawl is complete, the firm's data is indexed and repeatedly searchable without a new project-based expenditure.").

minimal burden in producing fewer relevant backup tapes. 140 Moreover, the cost of producing backup tapes has significantly declined in the past seven years, making the burden to produce such documents significantly lower. 141 As a result, crawling is a particularly useful new technology to obtain information without resort to blind statistical sampling.

Crawling and other such technologies, although in their infancy, have enormous potential to create predictability and transparency in e-discovery cost calculations. 142 If a software program can simply go through the database, report the size of the files searched, and discover the amount of documents per gigabyte, then counsel or the vendor may properly find the appropriate level on the chart in section III. Using crawling technologies allows insurance carriers and corporate counsel to achieve enormous benefits because they can withhold the proper amount of reserves to spend on vendors and consultants.

D. COOPERATION

Cooperation is the attorney's first and best line of defense to lower costs and get through an e-discovery event. 143 Cooperation is easy to write about in an academic context, but in practice can be most difficult to accomplish in an adversarial context. However, it is evident that courts routinely reward parties that cooperate and punish those who do not. 144 For instance, courts uphold ESI discovery agreements, including those agreeing not to produce certain information; courts allow for parties to stipulate evidentiary issues; and courts let parties define the format of production and the scope of the lawsuit, so

^{140.} Id. at 3-4 ("The cost disparity between restoration and indexing, however, remains substantial and it is even more pronounced because of another cost that was required in 2003—the infrastructure to hold restored backup data—has been rendered insignificant due to indexing.").

^{141.} Id. at 2 (comparing the \$166,000 cost of making the 77 tapes in 2003 versus the \$38,500 cost in 2009).

^{142.} Cf. Fliegal & Entwise, supra note 28, at 31 ("Advanced forms of technology are being explored that are intended to reduce costs while enhancing accuracy. While in its infancy, such methods show great promise.").

143. Gensler, supra note 132, at 370-71; see also The Sedona Conference

^{143.} Gensler, supra note 132, at 370-71; see also The Sedona Conference Cooperation Proclamation, SEDONA CONF., 3 (July 2008), http://www.thesedonaconference.org/content/tsc_cooperation_proclamation/proclamation.pdf.

^{144.} E.g., In re Seroquel Prods. Liab. Litig, 224 F.R.D. 650, 664-65 (M.D. Fla. 2007).

long as such agreements do not violate the FRCP.¹⁴⁵ Similarly, if the parties cooperate or at least attempt to cooperate, they appear more reasonable, even if judicial involvement becomes required.¹⁴⁶

Moreover, cooperation is necessary. According to FRCP 26, parties that undertake a discovery plan must do so within the scope of the rule. And the plan should articulate the following:

(A) What changes should be made in the timing, form, or requirement for disclosure under Rule 26(a), including a statement of when initial disclosures were made or will be made; (B) the subjects on which discovery may be needed, when discovery should be completed, and whether discovery should be conducted in phases or be limited to or focused on particular items; (C) any issues about disclosure or discovery of electronically stored information, including the form or forms in which it should be produced; (D) any issues about claims of privilege or of protection as trial-preparation materials including—if the parties agree on a procedure to assert these claims after production—whether to ask the court to include their agreement in the order; (E) what changes should be made in the limitations on discovery imposed under these rules or by local rule, and what other limitations should be imposed; and (F) any other orders that the court should issue under Rule 26(c) or under Rule 16(b) and (c). 148

Essentially, the rule makers are making it easier on the litigants, providing an outline of the important issues that must be addressed and contemplated before counsel may start reviewing documents.¹⁴⁹

However, cooperation must exist between all members of the litigation team. ¹⁵⁰ There is a need to coordinate efforts and tasks with in-house counsel to ensure that tasks are not duplicated and that the proper information is discovered. ¹⁵¹ The Sedona Principles recommend a team approach to ensure everyone is working together towards the final goal of reaching the merits of the case. ¹⁵² This article does not deviate substantially from that position, except to note that ESI

^{145.} FED. R. CIV. P. 26 advisory committee's note (1993 Amendment).

^{146.} See, e.g., MICHAEL ARKFELD, ARKFELD'S BEST PRACTICES GUIDE FOR ELECTRONIC DISCOVERY AND EVIDENCE § 4.6(A) (2d ed. 2007) (outlining criteria for selecting an e-discovery service vendor to facilitate parties' cooperation).

^{147.} FED. R. CIV. P. 26(f)(2).

^{148.} FED. R. CIV. P. 26(f)(3).

^{149.} See FED. R. CIV. P. 26(f) advisory committee's note (2006 Amendment).

^{150.} See The Sedona Principles: Second Edition, supra note 185, at 19.

^{151.} Id.

^{152.} Id.

counsel and the client should be aware that they too, may be liable for discovery abuses; each is not insulated from ediscovery abuses by its position, even if she is not the counsel of record. 153

Cooperation will reduce the risk and, thus, costs associated with e-discovery. By cooperating, counsel can decrease the amount of motion practice and "gotcha" tactics (e.g., mismarking five of twenty million documents) that typically happen when one is handling a large e-discovery case. In that respect, it is difficult to know what the other party wants—or needs—without a frank conversation of the issues and the type of discovery the opposing counsel is looking for. Therefore, counsel may agree to: narrow, limit, and define the search; define a set of protocols for resolving disputes before judicial involvement; and employ other such techniques to eliminate motion practice and to reach a resolution on the pending matters.

With all these tools, counsel can request a reasonable and proportional amount of discovery to fully develop the claims or defenses necessary to proceed forward to trial. Once the clients, bench, and bar appreciate the true costs of e-discovery, each may take steps to make discovery more predictable. Also, each party can make decisions based on known information, rather than "exaggeration." Judicial involvement (or the involvement of a special master) also ensures that the discovery disputes may be resolved and the case may proceed to the merits, as originally planned. 154 However, in the best case, the parties and their counsel will cooperate (without judicial involvement and the threat of sanctions) to reach agreements about the nature, scope and expense of the ESI discovery using the five tools discussed above.

E. TAXING COSTS: WE'RE NOT COPYING DOCUMENTS ANYMORE

If a party is willing to pay for exhaustive discovery, then it may seek a disproportional amount of discovery. Ordinarily,

^{153.} Swofford v. Eslinger, 671 F. Supp. 2d 1274, 1279 (M.D. Fla. 2009).

^{154.} E.g., Newman v. Borders, 257 F.R.D. 1, 4 (D.D.C. 2009) (ending a bitter discovery dispute by drafting nine questions that the opposing party's expert had to answer); see also FED. R. CIV. P. 26 advisory committee's note (2006 Amendment) (noting that while court involvement in extrajudicial discovery is supposed to be kept at a minimum, the rule tightens judicial sanctions to unjustified impediments to discovery).

the non-requesting party covers the costs of meeting opposing counsel's discovery requests. 155 However, certain situations arise where the requesting party should pay. For example, the benefits of production compared to the costs or attempts to access otherwise inaccessible data are two reasons to share costs. 156 Indeed, while the above serves as a good introduction to sharing costs in the context of e-discovery, a full discussion of both state and federal court's cost sharing rules is beyond the scope of this article. Instead, this section seeks to identify the split between the courts on the type of costs that may be shared with the opposing party, because determining who pays for discovery may be of greater concern than how much discovery costs.

The concept of costs is much more unique in terms of what costs may be transferred to the other party in e-discovery disputes. 157 Some courts hold that the fees associated with collecting documents is "the modern day equivalent of 'exemplification and copies," and, therefore, consider these costs taxable under 42 U.S.C. § 1920. 158 On the other hand, other courts have held these costs to be non-recoverable because "assembling records for production is ordinarily a task done by attorneys and paralegals." 159 As a result, several judicial opinions have set the framework for what may not be taxed as costs. 160

In CBT Flint Partners, LLC v. Return Path, Inc., the court ordered nearly \$230,000 in attorneys' fees and costs as sanctions for litigation misconduct. 161 The court reasoned that "[t]he services are highly technical" and that producing "in paper form . . . the 1.4 million documents plus 6 versions of source code would have cost far more than the fees sought for the e-discovery consultant." 162 The court also held that vendor

^{155.} Zubulake I, 217 F.R.D. 309, 316 (S.D.N.Y. 2003).

^{156.} Semroth v. City of Wichita, 239 F.R.D. 630, 637-38 (D. Kan. 2006).

^{157.} See generally 28 U.S.C. § 1920 (2010) (the various fees the court may tax as costs).

^{158.} CBT Flint Partners, LLC v. Return Path, Inc., 676 F. Supp. 2d 1376, 1381 (N.D. Ga. 2009).

^{159.} Id.

^{160.} This section hopes only to survey the legal landscape to give a brief overview of the split. It is not meant to be an exhaustive listing of such cases addressing the types of costs encountered in e-discovery, as the technology is still in its infancy.

^{161.} CBT Flint Partners, 676 F. Supp. 2d at 1381.

^{162.} Id.

services "are the 21st Century equivalent of making copies." 163 Therefore, the court allowed the taxation of costs under 28 U.S.C. § 1920.

Prevailing parties must show that e-discovery was necessary to share the costs. In Kellogg Brown & Root International v. Altanmia Commercial Marketing Co., the court held that the prevailing party's consultants were not taxable. 164 Defining the limitations of costs under 28 U.S.C. §1920, the court held that data extraction and storage are not taxable as costs because they provide work similar to an attorney in responding to discovery requests. 165 Furthermore, in Fells v. Virginia Department of Transportation, the court did not allow the taxation of \$15,000 to extract metadata. 166 Specifically, the court reasoned that taxable costs did not extend to include "processing records, extracting data, and converting files." 167

The distinctions drawn between the courts have created an area where further discussion and negotiation is necessary. For example, if someone is sanctioned and required to pay costs, such punishments are meaningless if the producing party must still pay the vendor and consulting portions of the e-discovery bill, as addressed in Section III(A). Indeed, as the costs of discovery continue to be defined by courts and litigation support vendors, courts may better understand the importance of their decisions. 168

V. ETHICAL CONCERNS THAT LIKELY RAISE THE COSTS OF ELECTRONIC DISCOVERY

Counsel has an obligation to represent his or her client competently under the Model Rules of Professional Conduct. 169 Model Rule 1.1 defines competent representation as the "legal knowledge, skill, thoroughness and preparation reasonably

^{163.} Id.

^{164.} Kellogg Brown & Root Int'l, Inc. v. Altanmia Commercial Mktg. Co., No. H-07-2684, 2009 WL 1457632, at *5 (S.D. Tex. May 26, 2009).

^{165.} *Id*.

^{166.} Fells v. Virginia Dep't of Transp., 605 F. Supp. 2d 740, 748 (E.D. Va. 2009).

^{167.} Id.

^{168.} See Withers, supra note 20, at 182 ("The costs for the producing side, however, have increased dramatically, in part as a function of volume, but more as a function of inaccessibility and the custodianship confusion.").

^{169.} MODEL RULES OF PROF'L CONDUCT R. 1.1 (2007).

necessary for the representation."170 This section will address cost concerns impacted by one's ethical obligations. These ethical rules are helpful in diagnosing and understanding an ediscovery project. The rules also suggest that some shortcuts may not produce the savings that the client or his counsel originally hoped.

A. OUTSOURCING

Document review is the primary cost associated with an ediscovery event.¹⁷¹ Due to the large amount of information, contract reviewers are often hired because it would take years for one attorney to review the millions of documents that are produced.¹⁷² These contract attorneys and reviewers can perform document review from anywhere in the world.¹⁷³ Accordingly, outsourcing the review to other countries is common, but often implicates the unauthorized practice of law and other ethical concerns.¹⁷⁴

Pursuant to Model Rule 5.5, "[a] lawyer shall not practice law in a jurisdiction in violation of the regulation of the legal profession in that jurisdiction or assist another in doing so." 175 Moreover, Model Rule 5.3(b) requires "a lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer." 176 In addition, ABA Formal Op. 08-451 suggests that even attorneys in foreign countries may need to be treated as

^{170.} Id.

^{171.} See generally Steven C. Bennett, The Ethics of Legal Outsourcing, 36 N. Ky. L. Rev. 479 (2010) ("Increasing costs for legal services, wider regulatory obligations... and the explosive growth of electronic discovery... have all driven businesses (and law firms) to consider outsourcing of certain functions as a means to reduce costs, while maintaining high-quality service.").

^{172.} See id. at 480-81.

^{173.} See generally ABA Comm. on Ethics and Prof's Responsibility, Formal Op. 08-451 (2008) (opining that there is nothing inherently wrong with outsourcing, in fact it is a salutary goal to reduce the end costs to the client).

^{174.} See generally id. at 6 ("IThe outsourcing lawyer must be mindful... to avoid assisting others to 'practice law in a jurisdiction in violation of the regulation of the legal profession in that jurisdiction... Ordinarily, an individual who is not admitted to practice law in a particular jurisdiction may work for a lawyer who is so admitted, provided that the lawyer remains responsible for the work being performed and that the individual is not held out as being a duly admitted lawyer.").

^{175.} MODEL RULES OF PROF'L CONDUCT R. 5.5 (2007).

^{176.} MODEL RULES OF PROF'L CONDUCT R. 5.3(b) (2007).

nonlawyers, shifting the burden for their failures to local counsel and heightening local counsels' duty to supervise. 177

Supervising nonlawyer work in another country raises concerns that impact the cost and quality of the review.¹⁷⁸ For example, counsel must overcome culture, language, confidentiality, quality control, and communication issues.¹⁷⁹ On the other hand, the cost saved by sending the discovery overseas may be worth the added headache. Some scholars have noted that outsourcing to India is expected to be a \$4 billion dollar industry by 2015.¹⁸⁰ Additionally, to save costs, many very respectable firms open up satellite offices overseas, in countries such as India, where the cost of review is around \$30 per hour.¹⁸¹

Adding to the already difficult ethical duties of a lawyer, the Indian legal system contains its own hurdles to outsourcing as well. The 1961 Indian Advocates Act requires that only attorneys with Indian citizenship may work on matters in India. Under this Act, corporations cannot outsource to India without meeting strict guidelines. This Act, coupled with the

^{177.} ABA Comm. on Ethics and Profs Responsibility, Formal Op. 08-451 (2008) ("[I]t will be more important than ever for the outsourcing lawyer to scrutinize the work done by the foreign lawyers—perhaps viewing them as nonlawyers—before relying upon their work in rendering legal services to the client.").

^{178.} See id. at 4-6.

^{179.} See generally id. at 3-6 (discussing the issues in foreign outsourcing, including issues relating to a foreign country's legal education, professional regulatory scheme, and judicial system).

^{180.} Anthony Lin, Legal Cutsourcing to India is Growing, but Still Confronts Fundamental Issues, N.Y.L.J. at 1 (Jan. 23, 2008), available at http://www.law.com/jsp/ihc/PubArticleIHC.jsp?id=1201169145823) (citing predictions that legal outsourcing to India may grow to \$4 Billion level by 2015).

^{181.} Id.

^{182.} See generally Kian Ganz, A New Writ Filed Against Entry of Foreign Firms in Madras HC, LEGALLY INDIA (March 22, 2010, 8:01 PM), http://www.legallyindia.com/20100322609/Law-firms/a-new-writ-filed-against-entry-of-foreign-law-firms-in-madras-hc (stating that an advocate in India filed a writ petition against 30 foreign law firms to prohibit the firms from practicing any legal matter in the country).

^{183.} *Id*.

^{184.} See generally id. (stating that the Advocates Act 1961 requires an attorney to be an Indian citizen and possess a law degree from a university within the country in order to practice law in India).

local unauthorized practice of law concerns, ¹⁸⁵ may be enough to steer counsel away from outsourcing. ¹⁸⁶ As applied to ediscovery, nonlawyers practicing in India may run into several ethical problems that require counsel to consider its breakeven point on costs. ¹⁸⁷ The client must determine whether the additional hours of supervision by local counsel ¹⁸⁸ outweigh the \$13 dollar per hour difference between local and foreign document reviewers. ¹⁸⁹ The results of this decision will be crucial in determining if outsourcing is best for the client.

As an alternative to outsourcing, counsel should consider hiring other paralegals and law clerks to conduct a review inhouse. In-house review must be done in a place where the review can be supervised and confidentiality can be assured. He review can be supervised and confidentiality can be assured. He within the United States, the unauthorized practice of law is less of a concern because courts have consistently allowed paralegals and law clerks to perform this type of work. He author is unaware of any research or case law suggesting that using a paralegal to conduct document review amounts to the unauthorized practice of law. In addition, during in-house document review, it is likely that an attorney will be in the same building, enhancing the frequency and the level of communication between the attorney and her staff.

^{185.} ABA Comm. on Ethics and Profs Responsibility, Formal Op. 08-451 (2008) ("The challenge for an outsourcing lawyer is, therefore, to ensure that the tasks are delegated to individuals who are competent to perform them, and then to oversee the execution of the project adequately and appropriately.").

^{186.} Id. at 3 ("[T]he professional regulatory system should be evaluated to determine whether members of the nation's legal profession have been inculcated with core ethical principles similar to those in the United States . . . ").

^{187.} See id.

^{188.} See generally id. (stating that attorneys must oversee the execution of the project, even when it is outsourced).

^{189.} See generally Legal Process Outsourcing [LPO], Document Review: The X-Files Revealed (Aug. 16, 2009), http://lpowatch.blogspot.com/2010/01/document-review-x-files-revealed.html (stating that the average attorney in India is paid \$10-\$30 an hour for document review).

^{190.} See generally MODEL RULE OF PROF'L CONDUCT R. 5.3 (2007)

^{191.} See generally Covad Common Co. v. Revonet, Inc., 254 F.R.D. 147, 151 (D.D.C. 2008) (requiring both parties to share the cost of a paralegal to conduct a privilege review).

B. COMPETENCE

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Counsel is required to be competent. 192 According to Model Rule 1.1, "[a] lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."193 For example, an attorney unfamiliar with email technology should not supervise the collection of emails.194 Moreover, a client pays not only for the attorney to be competent, but to ensure that other members of the review team are competent, including litigation support vendors. 195 The more steps counsel can take to understand the company's architecture and orchestrate a document retention program, the easier it will be to supervise the review. 198 Further, following these steps may result in less information that will be available to review and produce. 197 Competent counsel will take such steps necessary to ensure that as few irrelevant documents as possible make it to the review stage and effectively negotiate to such ends on behalf of the client. 198

^{192.} MODEL RULE OF PROF'L CONDUCT R. 1.1 (2007).

^{193.} Id.

^{194.} C.f. MODEL RULE OF PROF'L CONDUCT R. 1.1cmt 6 ("To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, engage in continuing study and education").

^{195.} See MODEL RULE OF PROF'L CONDUCT R. 5.3 (stating that lawyers who employ nonlawyers "shall make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that the person's conduct is compatible with the professional obligations of the lawyer."); See generally In re A & M Fla. Prop. II, LLC v. GFI Acquisition, LLC, Bankr. No. 09-15173, 2010 WL 1418861, at *6 (Bankr. S.D.N.Y. Apr. 7, 2010) (reiterating the importance of a lawyer's obligations during document review, holding that "[w]hile the delays in discovery were not caused by any intentional behavior, GFI's counsel did not fulfill its obligation to find all sources of relevant documents in a timely manner. Counsel has an obligation to not just request documents of his client, but to search for sources of information.").

^{196.} See In re A & M Fla. Prop. II, at *6 ("Counsel must communicate with the client, identify all sources of relevant information, and become fully familiar with [the] client's document retention policies, as well as [the] client's data retention architecture.").

^{197.} See generally Essential Discovery, Best Practices Case Study: A Guide to Complex Document Review (2009), http://www.essentialdiscovery.net/media/ed/Guide-to-Complex-Document-Review.pdf (last visited April 19, 2010).

^{198.} See generally The Sedona Conference Working Group on Electronic Document Retention and Production, The Sedona Conference Commentary on Email Management: Guidelines for the Selection of Retention Policy, 8 SEDONA CONF. J. 239 (2007) (discussing the importance of establishing a set of email

Acquiring competence in this field is an intensive undertaking. However, often by cooperating, agreeing to the search terms, 199 establishing document destruction protocols, 200 developing advance searches, 201 and prohibiting document reviewers and vendors from seeing confidential data not associated with the case, 202 counsel can limit the number of documents available and avoid complications in the review where one's competence would be called into question. 203 Indeed, counsel has several tools to limit the review and decrease the cost for her client. Counsel needs to be competent enough to understand how to use these tools and/or obtain the necessary training to do so.

Competent counsel may also negotiate more favorably, or with a better end goal in mind. For example, one cannot accurately measure what a reasonable settlement or compromise is without understanding the tools of proportionality.²⁰⁴ The result of hiring competent counsel includes having fewer documents to review, a greater command of what the documents say, and an ability to understand where the documents are going through each stage of the review.²⁰⁵ Hiring competent counsel is preferable to exclusively trusting

management policies during the discovery phase of litigation and following these policies through the discovery review team).

^{199.} See Thomas Y. Allman, The Sedona Principles After the Federal Amendments: The Second Edition (2007), THE SEDONA CONF. (August 17, 2007).

http://www.thesedonaconference.org/dltForm?did=2007SummaryofSedonaPrinciples2ndEditionAug17assentforWG1.pdf (discussing Principle 11).

^{200.} See generally Arthur Andersen LLP v. United States, 544 U.S. 696, 704 (2005) ("Document retention policies," which are created in part to keep certain information from getting into the hands of others, including the Government, are common in business.").

^{201.} See generally The Sedona Conference Best Practices Commentary on the Use of Search and Information Retrieval Methods in E-Discovery, supra note 133, at 206–07 (discussing the importance and efficiency of search terms).

^{202.} FLA FORMAL OP. 07-02 (2007).
203. See generally Essential Discovery, Best Practices Case Study: A Guide to Complex Document Review (2009), http://www.essentialdiscovery.net/media/ed/Guide-to-Complex-Document-Review.pdf (last visited April 19, 2010) (discussing the importance of establishing well-organized and well managed discovery practices).

^{204.} Kenneth J. Withers, Ephemeral Data and the Duty to Preserve Discoverable Electronically Stored Information, 37 U. BALT. L. REV. 349, 367–68 (2008).

^{205.} Id.

vendors—primarily nonlawyers—with one's information. 206

Simply put, an experienced ESI counsel will cost less in the long-run. Counsel will limit the review as much as possible, understand case law, and work with opposing counsel to reduce the costs of discovery, within the bounds of ethical and civil rules. By ensuring that counsel is well-versed in ESI, the client can decrease costs and effectively navigate through all the ediscovery traps that present themselves along the way.

C. CANDOR WITH THE COURT & TRANSPARENCY

Candor means that counsel cannot feign cooperation or trick the court into a position that will inhibit the full and fair adjudication of the pending matter.²⁰⁷ The ethical rules²⁰⁸ and the Civil Rules prohibit shuffling documents into an unusable form,²⁰⁹ data dumping, hiding documents from trial counsel,²¹⁰ or failing to follow up on requests for production.²¹¹ According to Model Rule 3.3, candor requires that "[a] lawyer shall not knowingly: (1) Make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer."²¹² Similarly, Model Rule 3.4 requires fairness, stating, "[a] lawyer shall not . . . unlawfully obstruct another party's access to the

^{206.} Id.

^{207.} FED. R. CIV. P. 26 advisory committee's note (1993 Amendment) ("litigants should not indulge in gamesmanship with respect to disclosure obligations"); see generally MODEL RULES OF PROFL CONDUCT R. 3.3 (discussing a lawyer's ethical duty of candor to the court).

^{208.} See MODEL RULES OF PROF'L CONDUCT R. 3.4 (discussing a lawyer's ethical duty of fairness to the opposing party and opposing counsel).

^{209.} Ses generally FED. R. CIV. P. 26 (discussing the duties and obligations of lawyers during disclosure); id. at 1 (stating that the rules should "be construed and administered to secure the just, speedy, and inexpensive determination of every action and proceeding.").

^{210.} See generally Qualcomm Inc. v. Broadcom Corp., No. 05cv1958-B (BLM), 2010 WL 1336937 at *4 (S.D. Cal. Apr. 2, 2010) (noting that the discovery failures by the attorneys were exacerbated by an "incredible lack of candor on the part of the" client, when employees failed to provide the attorneys with necessary information, resulting in six attorneys defending sanctions motions for over two years).

^{211.} See Swofford, 671 F. Supp. 2d 1274, 1279 (M.D. Fla. 2009) ("[I]t is no defense to suggest . . . that particular employees were not on notice. . . . The obligation to retain discoverable materials is an affirmative one; it requires that . . . corporate officers having notice of discovery obligations communicate those obligations to employees in possession of discoverable materials.").

^{212.} MODEL RULES OF PROF'L CONDUCT R. 3.3 (2007).

evidence or unlawfully alter, destroy or conceal a document or other material having potential evidentiary value."213

Attorneys may think they are being tactical by resisting efforts to cooperate and ignoring their opportunity to engage in e-discovery at the initial 26(f) conference.²¹⁴ However, by failing to cooperate, the lawyer is only hurting their client's ability to economically resolve the dispute through cooperation.²¹⁵ Associate Justice Stephen Breyer exemplifies this point in his recent preface to the Sedona Conference Journal on Cooperation stating:

The Case for Cooperation [articles] suggest that if participants in the legal system act cooperatively in the fact-finding process, more cases will be able to be resolved on their merits more efficiently, and this will help ensure that the courts are not open only to the wealthy. I believe this to be a laudable goal, and hope that readers of this Journal will consider the articles carefully in connection with their efforts to try cases. ²¹⁶

When parties cooperate and avoid gamesmanship, the courts become a place where justice may be reached by all, even large corporations that are sensitive to their litigation budgets and bottom lines.

Consistent with the original 1938 comments to the FRCP, counsel would be wise to put its advocacy hat aside during discovery, and cooperate with opposing counsel, attempt to meet with opposing counsel and, at the very least, agree to the scope of production.²¹⁷ Alternatively, counsel can agree to resolve the issues through arbitration, where the parties can decide on the level of discovery amongst themselves.

^{213.} MODEL RULES OF PROF'L CONDUCT R. 3.4 (2007).

^{214.} See MODEL RULES OF PROFL CONDUCT R.3.4 cmt.2 (2007) ("Documents and other items of evidence are often essential to establish a claim or defense... [t]he exercise of that right can be frustrated if relevant material is altered, concealed, or destroyed.") Thus, by failing to place a litigation hold on documents, the documents are often destroyed without the user's knowledge, thereby implicating this rule.

^{215.} See FED. R. CIV. P. 26 advisory committee's note (1993 Amendment) ("[I]t is desirable that the parties' proposals regarding discovery be developed through a process where they meet in person, informally explore the nature and basis of the issues, and discuss how discovery can be conducted most efficiently and economically.").

^{216.} The Sedona Conference, The Sedona Conference Journal Volume 10 Supplement, 10 SEDONA CONF. L. J. at 1 (2009).

^{217.} See The Sedona Conference Cooperation Proclamation, supra note 143.

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VI. CONCLUSION

Technology has a major impact on our lives today. If individuals use technology on a daily basis, counsel must learn how to work with electronic material and understand the cost of doing so. However, until we remove the fear and mystery of calculating costs, we cannot fully understand the price of ediscovery or the implications of such sanctions received by counsel who did not represent their clients competently.