

ADJUDICATING BEYOND THE SCOPE OF
ORDINARY BUSINESS: WHY THE
INACCESSIBILITY TEST IN *ZUBULAKE*
UNDULY STIFLES COST-SHIFTING DURING
ELECTRONIC DISCOVERY

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INTRODUCTION

Electronic discovery presents unique problems during litigation. It often involves a broad search of files by the opposing side and may impose a high risk to potentially privileged information due to the depth of information residing on computer systems.¹ Additionally, the producing party cannot simply turn over the data as is, and often must create programming to retrieve discoverable information.² The sheer volume and complexity of data involved with electronic discovery impose significant burdens on the producing party and present challenges to judges interpreting the impact of technology access requests. Existing jurisprudence is unclear regarding when parties producing electronic data during discovery may shift the cost burden to the requesting party for the retrieval, production, and review of electronic evidence.³ The lack of clarity is exacerbated by the Federal Rules of Civil Procedure (“Federal Rules”), which offer minimal guidance regarding electronic discovery.⁴

1. See Mark D. Robins, *Computers and the Discovery of Evidence: A New Dimension to Civil Procedure*, 17 J. MARSHALL J. COMPUTER & INFO. L. 411, 421 (1999) (deeming computer systems a potential gold mine for the discovering party and potential mine field for the producing party, as they may reveal damaging information and confidential material such as trade secrets, communications with counsel, and other privileged information).

2. See *infra* Part I.B (comparing the unique differences between electronic and traditional discovery).

3. Electronic evidence pertains to “electronically-stored information subject to pre-trial discovery.” Hon. Shira A. Scheindlin & Jeffrey Rabkin, *Electronic Discovery in Federal Civil Litigation: Is Rule 34 Up to the Task?*, 41 B.C. L. REV. 327, 332-33 (2000) (suggesting “electronic document” refers to a type of electronic evidence “intentionally created by a computer user and stored in electronic form”); see, e.g., RICHARD A. LAZAR, *THE GUIDE TO ELECTRONIC DISCOVERY: HOW TO NAVIGATE THE PROCESS OF ELECTRONIC DISCOVERY QUICKLY AND EFFECTIVELY* 1 (2002) (defining electronic discovery as the “collection, preparation, review[,] and distribution of electronic documents”); MICHAEL R. OVERLY, *OVERLY ON ELECTRONIC EVIDENCE IN CALIFORNIA* § 1.01, at 2 (2002) (defining electronic evidence as “information stored in electronic form . . . that is relevant to the issues in a particular litigation”).

4. See Scheindlin & Rabkin, *supra* note 3, at 330 (observing that the Federal Rules of Civil Procedure make only slight reference to electronic evidence and provide no guidance regarding the discovery of e-mail). *But see* Robert F. Carangelo & Gina M. Graham, *Passing the Buck: Cost-Shifting in Electronic Discovery*, 50 FED. LAW. 35 (2003) (noting that electronic discovery is a regular part of discovery under the

This Comment explores the economic, political, and social impact of cost-shifting during electronic discovery⁵ by examining the decision in *Zubulake v. UBS Warburg LLC*.⁶ The conclusion suggests that *Zubulake* unduly limits judicial discretion during electronic discovery disputes, as the rule eliminates accessible data from the universe of information subject to a cost-shifting analysis. The new threshold test articulated in *Zubulake* based on inaccessibility fails to consider the burden this limitation will have on forced settlements and unfair requests. The corresponding result will require corporate counsel to craft document management practices and processes with an eye for expense reduction by making files easier to retrieve and discover during litigation.

Part I provides background regarding the applicable rules regulating discovery, existing jurisprudence regarding electronic discovery disputes, and considers the type of factors that may trigger a cost shift to the requesting party. Part II provides a comparative analysis of the undue burden test⁷ in the context of electronic

Federal Rules of Civil Procedure, as the Rules require the production of all documents, including electronic documents). See also Mary Kay Brown & Paul D. Weiner, *Digital Dangers: A Primer On Electronic Evidence in the Wake of Enron*, 30 LITIG. 24, 25 (2003) (suggesting the Federal Rules of Civil Procedure evolve as technology changes and that electronic documents are subject to discovery according to Rule 34).

5. See, e.g., Marnie H. Pulver, Note, *Electronic Media Discovery: The Economic Benefit of Pay-Per-View*, 21 CARDOZO L. REV. 1379, 1386 (2000) (examining from an economic perspective the cost benefit analysis regarding the maintenance and improvement of information systems versus bearing the costs to retrieve); *The New "New" Economy: How Real and How Durable Are America's Extraordinary Gains in Productivity?*, ECONOMIST, Sept. 13, 2003, at 64 [hereinafter *Productivity*] (explaining that productivity improvements from information technology investment may boost efficiencies across the organization from design to accounting and across multiple sectors). Additionally, implementing technology improvements for the purpose of making documents more accessible could reduce more than just litigation expenses. See discussion *infra* Part III.D. In addition to economic utility, cost-shifting impacts the political system of the judiciary. See Ronald Braeutigam et al., *An Economic Analysis of Alternate Fee Shifting Systems*, 47 L. & CONTEMP. PROBS. 173, 174 (1984) (suggesting that requiring the judiciary to determine what fees to shift and what fees are reasonable would be time consuming and burden judicial administration). But see William H. Wagener, Note, *Modeling the Effect of One-Way Fee Shifting on Discovery Abuse in Private Antitrust Litigation*, 78 N.Y.U. L. REV. 1887, 1915 (2003) (suggesting that limiting the applicability of cost-shifting hinders the adversarial system of the judiciary since the limitation increases settlement incentives). Finally, the social policy implications of cost-shifting in electronic discovery may come at the expense of civil justice. See *Fleishmann Distilling Corp. v. Maier Brewing Co.*, 386 U.S. 714, 718 (1967) (arguing that the poor should not be unjustly discouraged from vindicating their rights by having to incur penalties for defending or prosecuting an action). A plaintiff unable to pay for the discovery of information may have better access to courts and a better ability to adjudicate where cost-shifting is limited. *Id.*

6. 217 F.R.D. 309, 322 (S.D.N.Y. 2003) (limiting cost-shifting during electronic discovery where data is relatively inaccessible).

7. See generally FED. R. CIV. P. 26(c) (noting that a court may protect a

discovery announced in *Rowe Entertainment, Inc. v. The William Morris Agency*⁸ and the new *Zubulake* inaccessibility requirement. This Comment suggests that the new *Zubulake* rule, hailing from the same court that issued *Rowe*, departs from the undue burden analysis and will likely have a compelling impact and guide other courts' legal analyses.⁹ While the *Zubulake* court's decision is not binding on the federal courts,¹⁰ other federal courts increasingly rely on *Zubulake* as a guide for determining cost allocation during electronic discovery.¹¹ Finally, Part III applies the new *Zubulake* test and suggests the impact the limitation will have on both corporate counsel and information technology departments. Part III also provides recommendations regarding useful data management techniques to ultimately manage litigation costs.

I. BEARING THE BURDEN OF COSTS IN ELECTRONIC DISCOVERY

Electronic information is implicitly discoverable under the Federal Rules.¹² The rationale for including electronic sources with traditional forms of documents is that the electronic files contain discoverable information in an evolved format.¹³ As a result, the same general rules that govern traditional discovery of documents also

responding party from "undue burden" or expense by shifting the costs of production to the requesting party).

8. 205 F.R.D. 421 (S.D.N.Y. 2002) (permitting cost-shifting during electronic discovery based on an imbalance of burdens on the producing party to retrieve electronic files versus the benefits to the requesting party of obtaining the electronic data).

9. The Southern District of New York helps guide federal circuit decisions regarding electronic discovery disputes vis-à-vis cost-shifting. See *Rowe Entm't, Inc. v. William Morris Agency*, 205 F.R.D. 421 (S.D.N.Y. 2002) (containing the test for determining burden that became the new gold standard for cost-shifting in electronic discovery disputes); see also Robert W. Hamilton, *The State of State Corporation Law*, 11 DEL. J. CORP. L. 3, 16 (1986) (finding that corporate law matters related to federal securities were predominately brought in the United States Court of Appeals for the Second Circuit and the United States District Court for the Southern District of New York, suggesting expertise in complex corporate litigation).

10. See Jonathan M. Redgrave & Erica J. Bachmann, *Ripples on the Shores of Zubulake: Practice Considerations from Recent Electronic Discovery Decisions*, 50 FED. LAW. 31, 33 (2003) (reminding counsel that *Zubulake* is not binding on federal courts other than the Southern District of New York and that some courts may find the accessibility standard too limiting).

11. See *infra* note 227 and accompanying text.

12. See *Bills v. Kennecott Corp.*, 108 F.R.D. 459, 461 (D. Utah 1985) (stating "[i]t is now axiomatic that electronically stored information is discoverable under Rule 34 of the Federal Rules of Civil Procedure" and denying the request to shift costs for the production of computer data).

13. See *Anti-Monopoly, Inc. v. Hasbro, Inc.*, No. 94 CIV.2120, 1995 WL 649934, at *1 (S.D.N.Y. Nov. 3, 1995) (noting that the description of documents is revised with changing technology and inherently includes electronic data compilations made clear by Rule 34).

govern electronic discovery.¹⁴ However, electronic evidence retains unique challenges and costs.¹⁵ Consequently, courts may follow different protocols when examining whether and when to shift the costs of electronic document production to the requesting party.¹⁶ Nevertheless, courts remain steadfast to the traditional rules and typically adopt the presumption that each party should bear its own costs for discovery.¹⁷

A. *General Rules Regulating Electronic Discovery*

The Federal Rules of Civil Procedure 34,¹⁸ Federal Rules of Civil Procedure 26,¹⁹ and Federal Rules of Civil Procedure 1²⁰ play a significant role during electronic discovery by offering guidance regarding how to allocate costs during litigation. The interplay of these rules requires a balancing process to determine who bears the costs of electronic discovery when the facts suggest the burden of producing files outweighs the benefit.²¹

In general, judicial discretion to control discovery is available to relieve congested dockets and avoid spiraling litigation costs.²² Judges have Rule 1 within their arsenal as a tool available to control litigation costs.²³ However, as states began to adopt the Federal Rules and as courts interpreted the rules, the mandate for “just, speedy and inexpensive”²⁴ adjudication under Rule 1 played less of a role since

14. See *infra* Part I.A (describing the foundations of electronic discovery).

15. See *infra* Part I.B (outlining the differences between electronic and traditional discovery).

16. See *infra* Part I.B (discussing cost-shifting as a function of a court’s specific interpretation of the facts combined with the practicality of retrieving the information).

17. See *infra* Part I.C (summarizing the origins of cost-shifting and describing the courts’ struggles with finding an equitable solution).

18. FED. R. CIV. P. 34.

19. FED. R. CIV. P. 26.

20. FED. R. CIV. P. 1.

21. See Jonathan M. Redgrave, *The Sedona Conference Working Group on Electronic Document Retention and Production*, 4 SEDONA CONF. J. 197, 204 (2003) (balancing cost allocation by interpreting Rule 34 to encourage broad discovery of documents and things applied in light of the cost-benefit analysis discussed in FED. R. CIV. P. 1, 26).

22. See 28 U.S.C. § 331 (2003) (noting that the Judicial Conference of the United States has the obligation to simplify, ensure fairness in administration, and eliminate unjust expense and inefficiency); FED. R. CIV. P. 1 advisory committee notes (1993) (adding the word “administered” to Rule 1 recognizes the affirmative duty of the courts to resolve civil litigation in a fair manner that avoids undue cost or delay).

23. See *Calpetco 1981 v. Marshall Exploration, Inc.*, 989 F.2d 1408, 1415 (5th Cir. 1993) (citing Rule 1 that empowers the court to control lengthy and arduous litigation and ultimately decide when “enough is enough”).

24. FED. R. CIV. P. 1.

internal operating procedures often sacrificed the economies of uniformity.²⁵

Courts often cite to Rule 1 along with Rule 26 when discussing limitations during discovery.²⁶ The scope of discovery is broad under the Federal Rules,²⁷ and parties may obtain any relevant information “reasonably calculated to lead to the discovery of admissible evidence.”²⁸ Under Rule 26, litigants may find protection from annoying, embarrassing, oppressive, or unduly expensive discovery.²⁹ Courts may adhere to a totality of the circumstances test to determine whether or not to restrict discovery.³⁰

When litigants use discovery tools as weapons rather than to expose the truth, this imposes significant costs on the judicial system and impedes justice.³¹ In general, however, judges are reluctant to limit the use of discovery since the material may serve a truth seeking function and any limitations may hinder the adversarial process.³²

In addition to the broad scope of discovery generally permitted under Rule 26, there are no boundaries on the number of documents that may be requested under Rule 34.³³ By contrast, the Federal Rules impose limits on the number of interrogatories or depositions permitted under Rule 30.³⁴ Similar to Rule 26, under

25. See Susan J. Becker, *Discovery of Information and Documents from a Litigant's Former Employees: Synergy and Synthesis of Civil Rules, Ethical Standards, Privilege Doctrines, and Common Law Principles*, 81 NEB. L. REV. 868, 917-18 (2003) (suggesting that the goal of efficiency and uniformity faded after states adopted the Federal Rules subsequent to Congressional promulgation of the Federal Rules).

26. See *Herbert v. Lando*, 441 U.S. 153, 175 (1979); accord *Jackson v. County of Sacramento*, 175 F.R.D. 653, 658 (E.D. Cal. 1997) (using Rule 1 to limit the scope of discovery where there is undue expense); see also *Reed v. Binder*, 165 F.R.D. 424, 428 (D.N.J. 1996) (indicating that Rule 1 requires cost-shifting where economic obstacles hinder plaintiffs from redressing rights and imposing limitation on discovery).

27. See *Stagman v. Ryan*, 176 F.3d 986, 993-94 (7th Cir. 1999) (indicating that discovery is broad and may even be expanded by the court to include additional sources not referred to by the party seeking discovery).

28. FED. R. CIV. P. 26(b)(1).

29. FED. R. CIV. P. 26(c).

30. See *Rowlin v. Alabama*, 200 F.R.D. 459, 461 (M.D. Ala. 2001) (placing a limit on discovery after finding that, based on the “the totality of the circumstances,” the cost and time needed to provide the information outweighs the value of the material sought and societal interest). Furthermore, the “truthseeking” function of the material requested in some cases may weigh in favor of permitting discovery. *Id.*

31. See FED. R. CIV. P. 26 advisory committee notes (1983) (explaining that abusive discovery practices resulting from the broad nature of discovery violates the spirit of the rules).

32. See *id.*; *Apco Oil Co. v. Certified Transp., Inc.*, 46 F.R.D. 428 (W.D. Mo. 1969) (noting the importance of maintaining an adversarial system and restraining discovery limits).

33. FED. R. CIV. P. 34.

34. A comparative analysis of the amendment history of Rule 34 against Rule 30 indicates that Rule 34 does not provide a limitation on the number of documents

Rule 34 litigants may defend against document discovery requests that are too general, cause undue burden, or contain ambiguous requests.³⁵ Parties producing documents must also abide by the general rules of document discovery and engage in fair play by presenting documents for inspection in an organized manner.³⁶

With the advent of technology in the digital age, the existing rules may not address the unique problems inherent in electronic discovery.³⁷ The Federal Rules include reference to electronic discovery. Rule 34 expressly provides for electronic evidence to be included as discoverable material³⁸ and the advisory committee notes suggest that the term “documents” evolves as technology changes.³⁹ Additionally, Rule 34(b) governs the particularity of the discovering party’s request, in part to avoid an overbroad request but also to ensure that a basis exists for finding relevant information.⁴⁰ However, electronic discovery inevitably involves more information and exponentially increases the exposure to irrelevant information.⁴¹

The complexity embedded within the electronic discovery process has led to a growing concern that the underlying scope of the Federal Rules in Rule 1, to ensure “just, speedy, and inexpensive”

permitted whereas Rule 30 includes new limits on the number of depositions permitted. See FED. R. CIV. P. 30 advisory committee notes (1993) (including a new limit on the number of depositions and citing purpose of limitation to encourage counsel to create a cost-effective discovery plan during adjudication).

35. See *Stiller v. Arnold*, 167 F.R.D. 68, 71 (N.D. Ind. 1996) (noting the prohibition of discovery requests used to harass or increase litigation costs).

36. See *id.* (placing an obligation on producing parties to “organize and label” documents or face the consequences of sanctions).

37. See *infra* note 63 and accompanying text (considering amendments to the Federal Rules of Civil Procedure for issues specific to electronic discovery).

38. See FED. R. CIV. P. 34(a) (stating that “[a]ny party may serve on any other party a request (1) to produce and permit the party making the request, or someone acting on the requestor’s behalf, to inspect and copy, any designated documents (including writings, drawings, graphs, charts, photographs, phono-records, and other data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reasonably usable form), or to inspect and copy, test, or sample any tangible things which constitute or contain matters within the scope of Rule 26(b)”) (emphasis added).

39. See FED. R. CIV. P. 34 advisory committee notes (1970) (noting the Federal Rules of Civil Procedure anticipate technological change and evolve accordingly as a robust set of procedural rules governing litigation).

40. See FED. R. CIV. P. 34(b) (indicating, for the purpose of specificity and to avoid overbreadth, that “[t]he request shall set forth, either by individual item or by category, the items to be inspected, and describe each with reasonable particularity”). But see Stephen N. Subrin, *Fishing Expeditions Allowed: The Historical Background of the 1938 Federal Discovery Rules*, 39 B.C. L. REV. 691, 691 (1998) (moving away from the belief that an overbroad request is burdensome, so long as there is a plausible basis to find relevant information and recognizing the liberal nature of discovery).

41. See Robins, *supra* note 1, at 421 (noting that historical data and multiple versions of the same file therein reside below the surface of electronic files, expanding the universe of discoverable data and increasing data vulnerability).

adjudication,⁴² is not being met because of the outrageous costs of electronic discovery retrieval and review.⁴³ The advisory committee also recognizes that electronic storage expands the amount of information available for discovery and notes the potential that the abundance of data will have on increasing litigation costs.⁴⁴ The complex and laborious process of culling information during electronic discovery costs time and money, which contradicts the goal of the Federal Rules to ensure efficient and inexpensive discovery.⁴⁵

Due to the inherent differences between electronic documents and traditional documents, the Honorable Shira A. Scheindlin and Jeffrey Rabkin recommend changes to the Federal Rules to better address electronic discovery needs. The recommended changes entail adding language to Rule 34 that would require data compilations to be within the “possession, custody, or control” of the producing party in order to avoid unnecessarily costly fishing expeditions for data.⁴⁶ In addition, Scheindlin and Rabkin suggest that courts require cost shifting for requests of duplicate hard-copy evidence and that the burden of persuasion should shift to the requesting party in order to shift costs back to the producing party for duplicate hard-copy evidence.⁴⁷ In order to make changes to the rules, the rulemaking body in charge of the Federal Rules must adhere to a pseudo-legislative process that makes amending the Rules more difficult than the general legislative process.⁴⁸

42. See Carol McKay, *Delays in Litigation Costly All Around*, 48 FED. LAW. 16, 16 (2001) (noting that Congress enacted the Civil Justice Reform Act of 1990, Pub. L. No. 101-650, 104 Stat. 5089 (1990) to “facilitate deliberate adjudication of civil cases on the merits, monitor discovery, improve litigation management, and ensure just, speedy and inexpensive resolution of civil disputes” as required by Rule 1).

43. See Stephen J. Snyder & Abigail E. Crouse, *Applying Rule 1 In the Information Age*, 4 SEDONA CONF. J. 165, 165 (2003) (positing that electronic discovery may negate the underlying goal of fast and inexpensive adjudication).

44. See Advisory Comm. on Rules of Civil Procedure, Judicial Conference of the United States, Minutes, Apr. 19-20, 1999, 1999 WL 1702844, at *29 (citing Judge Niemeyer’s statements about how electronic discovery greatly expands costs because of the increased universe of information available for discovery and that the advisory committee cannot count itself as free from these discovery issues).

45. *Id.*

46. See Scheindlin & Rabkin, *supra* note 3, at 374 (arguing that amending Rule 34(a) to require “possession, custody or control” would reduce judicial intervention during discovery and thus streamline litigation by eliminating mini-trials about discovery disputes outside the province of the producing party).

47. See *id.* at 375 (justifying a cost shift back to the requesting party to pay for duplicate hard copies of electronic evidence by stating each party bears its own costs for preparation and that making duplicates where the discovering party requests the same evidence produced both electronically and in hard copy form should be considered preparation costs).

48. See R. LAWRENCE DESSEM, *PRE-TRIAL LITIGATION: LAW, POLICY, AND PRACTICE* 206-07 (2d ed. 1996) (explaining the steps for the enactment of the Federal Rules of Civil Procedure and the amendment procedure, including submission to the

In addition to Rule 34, Rule 26 also includes references to electronically discoverable information. Disclosure requirements in Rule 26 include electronically discoverable information.⁴⁹ The advisory committee notes make clear that relevant documents and records might include “computerized data and other electronically-recorded information.”⁵⁰ However, whether computer-created information such as temporary files, backup data, cookies, web cache, and history files⁵¹ are considered subject to discovery is uncertain.⁵²

Furthermore, Rule 26 contains limitations on discovery where there is an undue burden on the producing party.⁵³ According to the proportionality test, a method of examining undue burden, where burden on the producing party outweighs the benefit to the discovering party, courts have the discretion to shift costs of

Supreme Court and the ability of Congress to create legislation to reject, modify, or defer the amendment). While there is a general process to follow when suggesting and implementing a change to the Federal Rules, legislative history such as committee reports and hearings are not regularly available for amendments to the Federal Rules of Civil Procedure. See THE FEDERAL JUDICIARY, RULEMAKING PROCESS, JUDICIAL CONFERENCE PROCEDURES: PROCEDURES FOR THE CONDUCT OF BUSINESS BY THE JUDICIAL CONFERENCE COMMITTEES ON RULES OF PRACTICE AND PROCEDURE, at <http://www.uscourts.gov/rules/procedurejc.htm> (last visited Sept. 27, 2004) (on file with the American University Law Review) (describing where to find public information related to promulgation of new rules). The public receives wide circulation of the proposed rules and may attend public hearings about proposed rules. *Id.* In addition, the Administrative Office of the United States Courts maintains records of meetings, reports, and correspondence from the advisory and standing committees. *Id.*

49. See FED. R. CIV. P. 26(a)(1)(B) (requiring a copy or description of all documents, data compilations, and tangible things during initial disclosure).

50. FED. R. CIV. P. 26 advisory committee notes (1993).

See also Scheindlin & Rabkin, *supra* note 3, at 347 (listing backup files, temporary files, cached files, cookies, and other information stored in electronic form as *sui generis* family of computer-created information).

51. Backup is defined as a copy or multiple copies of computer data on an external storage medium. HARRY NEWTON, NEWTON'S TELECOM DICTIONARY 89 (15th ed. 1999). Such media include floppy disks, tapes, and compact discs. *Id.* at 89, 156, 317. Backups are necessary because computers and networks can be unreliable, creating the possibility of loss of data. *Id.* at 89. A cookie is a means by which the server side of an Internet connection can store and retrieve information from the client side. *Id.* at 208. The advantage of cookies is that it allows easier and faster access to previously visited websites. *Id.* One disadvantage is that cookies may be placed on the user's computer without the user's knowledge, thereby raising privacy issues. *Id.* A cookie file is a file on the user's hard drive where the cookie is stored. *Id.* at 209. Cache, when referring to computer systems or networks, is most simply defined as information that is stored in anticipation of need, so that it can be presented more quickly than accessing the hard drive. *Id.* at 130-31. Web cache is a place on a user's computer where graphics and text can be stored to reduce download time when the user desires to view them during subsequent visits to the site. *Id.* at 131, 919.

52. See Scheindlin & Rabkin, *supra* note 3, at 347 (suggesting that the Federal Rules leave open the question of whether system data generated by a computer would be considered a discoverable document by itself).

53. FED. R. CIV. P. 26(b)(2).

production to the discovering party.⁵⁴ The Federal Rules allow judges and advocates to use multiple rules as tools for allocating the costs of discovery.⁵⁵ The 1970 advisory committee notes recommend invoking Rule 26(c) in order to limit discovery.⁵⁶ However, in practice, courts also point to and rely on Rule 26(b)(2)(iii) to limit discovery and shift costs, as Rule 26(b)(2) works in the same way as Rule 26(c) to limit discovery and to shift costs at the court's discretion.⁵⁷

B. Electronic Discovery is Distinct from Traditional Discovery

The Federal Rules govern electronic discovery in the same manner as traditional discovery of paper files.⁵⁸ However, there are profound costs and burdens, as well as technological differences, associated with electronic discovery.⁵⁹ The unyielding costs of retrieving and reviewing electronic data may increase the burden of discovery, even where data management practices enable access to electronic files.⁶⁰

54. See FED. R. CIV. P. 26(b)(2) (enabling the judge to shield discovery or shift costs to the requesting party in proportion to the burden imposed when the "burden or expense of the proposed discovery outweighs its likely benefit").

55. See Redgrave, *supra* note 21, at 204 (discussing court intervention techniques during electronic discovery requests).

56. FED. R. CIV. P. 26 advisory committee notes (1970).

57. FED. R. CIV. P. 26(b)(2)(iii). See, e.g., *Oppenheimer Fund, Inc. v. Sanders*, 437 U.S. 340, 359 (1978) (pointing out that the test should be whether the expense is substantial rather than whether the burden is undue as under Rule 26(c)); *Hickman v. Taylor*, 329 U.S. 495, 507 (1947) (recognizing that the process of discovery includes boundaries as part of fundamental fairness).

58. See *Bills v. Kennecott Corp.*, 108 F.R.D. 459, 461 (D. Utah 1985) (stating that black letter law indicates electronic evidence is discoverable); see also KENNETH J. WITHERS, *ELECTRONIC DISCOVERY: NATIONAL WORKSHOP FOR UNITED STATES MAGISTRATE JUDGES 2* (June 12, 2002), at [http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi08.pdf/\\$file/ElecDi08.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi08.pdf/$file/ElecDi08.pdf) (on file with the American University Law Review) (suggesting that up to ninety-three percent of generated information is electronic, based on a 2000 ABA Litigation Section Survey).

59. See Martin H. Redish, *Electronic Discovery and the Litigation Matrix*, 51 DUKE L.J. 561, 580-81 (2001) (recognizing that technical differences present practical difficulties, immense costs, and socioeconomic effects unlike traditional discovery); Patricia Nieuwenhuizen, *E-Mail: The Smoking Gun of the Future as Paper-Based Data Go by the Wayside, Counsel Must be Prepared to Collect, Produce, and Review Electronic Evidence*, GLASSER LEGALWORKS (2000), WL EDRMS-GLASS-CLE 291, 293 (noting that turning over electronic data in its native format may not be sufficient for the requesting party since problems with privileged information may add to the steps necessary for the requesting party to use the information); Thomas Y. Allman, *The Need for Federal Standards Regarding Electronic Discovery: There are Vast Differences Between Discovery of Hard-Copy Documents and Those Stored Electronically, and the Difference Should be Recognized*, 68 DEF. COUNS. J. 206, 206 (2001) (proposing that the Federal Rules of Civil Procedure change to address the unique discovery needs of electronic files, including the added costs of search, retrieval, and translation of files into a usable format).

60. See Patrick J. Burke & Daniel M. Kummer, *Controlling Discovery Costs*, LEGAL TIMES, Aug. 18, 2003, at 19-20 (considering the unyielding costs of electronic discovery in litigation); *Murphy Oil USA, Inc. v. Fluor Daniel, Inc.*, No. CIV.A.99-

While it has been suggested that different rules should govern cost allocation with electronic discovery because of the increased burden to retrieve, sift through, and organize the information,⁶¹ the traditional rules of discovery still govern, as the rules consider electronic data simply as an evolved version of a paper document.⁶²

While the Civil Rules advisory committee discussed the uniqueness of electronic discovery and referred the matter to the discovery subcommittee, the treatment of electronic discovery vis-à-vis traditional documents remains the same.⁶³ In the meantime, courts continue to struggle with how to deal with the unyielding costs of electronic discovery.⁶⁴ Despite the view that electronic information is simply an evolved version of paper information, there are distinct differences between traditional and electronic discovery. One of the main distinctions between electronic discovery and traditional

3564, 2002 WL 246439, at *3 (E.D. La. Feb. 19, 2002) (estimating that to conduct digital discovery would cost \$6.2 million and require six months to retrieve, produce, and present e-mail stored in backup databases).

61. See Redish, *supra* note 59, at 561 (espousing the conditional cost shift model that examined accessibility of data as part of the reasonableness analysis for cost-shifting).

62. See *Bills*, 108 F.R.D. at 461; *supra* note 39 and accompanying text (maintaining that the Federal Rules of Civil Procedure apply to electronic data in the same way as with paper files, as the rules evolve as technology advances). In the context of depositions, the Rules evolved to include the telephone as a means of recording information while conducting depositions. See FED. R. CIV. P. 30 advisory committee notes (1980) (authorizing, under Rule 29, the use of a telephone as a method for recording depositions). Moreover, Rule 29 permits parties to take depositions in “any manner” so long as stipulated, and parties are encouraged to agree on the least expensive and least time-consuming methods of obtaining information. FED. R. CIV. P. 29 advisory committee notes (1993).

63. See Civil Rules Advisory Committee, Judicial Conference of the United States, Minutes, at 23-28 (Oct. 14-15, 1999), available at <http://www.uscourts.gov/rules/Minutes/1099mnCV.pdf> (on file with the American University Law Review) (discussing electronic discovery as a topic of interest regarding cost-shifting but making no changes to the rules specific to electronic data). *But see* Civil Rules Advisory Committee, Judicial Conference of the United States, Minutes, at 34-37 (Oct. 3-4, 2002), available at <http://www.uscourts.gov/rules/Minutes/CRAC1002.pdf> (on file with the American University Law Review) (hinting that electronic discovery may warrant amendments to the Federal Rules of Civil Procedure if issues remain prevalent and unresolved); Carangelo & Graham, *supra* note 4, at 37 nn.20-21 (listing seven aspects to consider related to electronic discovery when the advisory committee next drafts amendments to the Federal Rules including: wrapping electronic discovery issues into the Rule 26(f) conference; requiring disclosure of computer systems; redefining the term “document” as it relates to deleted data and backup data; specifying the form of production of electronic data such as whether additional software is needed; exploring the level of effort needed to produce electronic data; defining privileges as they relate to electronic data; and creating a safe harbor provision to better guide document retention practices).

64. See Carangelo & Graham, *supra* note 4, at 37 nn.20-21 (arguing that amendments should clarify how to deal effectively with the unique issues of electronic discovery, and until the Federal Rules of Civil Procedure change to accommodate the complexity of electronic data, courts will continue to wrestle with how to manage costs).

discovery of documents is that the costs are typically much greater for electronic data production.⁶⁵

Additionally, there are cost saving methods available for paper documents that are not available for electronic documents.⁶⁶ Notably, in traditional document retrieval, the requesting party may search for pertinent information after the producing party retrieves the files rather than require the producing party to find the relevant information.⁶⁷ This reduces the burden on the producing party by reducing the amount of time needed to sift through files by giving the requesting party the option of searching through the paper files.⁶⁸

By contrast, allowing the requesting party to review electronic files freely is not practicable.⁶⁹ Unlike information culled from traditional discovery, data discovered electronically may require additional steps in order to put the information in a usable format.⁷⁰ Moreover, the

65. *See id.* at 35 nn.4-5 (suggesting that because of the large volume of e-mail generated at different subsidiary locations within a dispersed organization, electronic discovery imposes more costs than old-fashioned paper documents, particularly when large corporations are involved); *see also* Allman, *supra* note 59, at 206-07 (arguing that electronic records differ from traditional documents because of the sheer volume of data, multiple versions of documents, and practical problems associated with retrieval). *But see* Carlton S. Chen et al., *Managing Discovery in Large-Scale and Pattern Litigation*, ACCA DOCKET, WL 21 NO. 9 ACCADKT 60, 72 (2003) (noting, during a study comparing the costs for an electronic search with a manual search done by paralegals who retrieved files through traditional paper-based discovery, that electronic discovery saves money in searches). However, while the electronic search cost only four seconds in time compared with sixty-seven hours in time for the manual search, the electronic search required programmers to code, image, and set up a database which cost a total of \$22,300 versus the manual search that cost \$7,370. *Id.*

66. *See* Pulver, *supra* note 5, at 1386, 1407 (arguing that cost saving techniques such as handing over files for the requesting party to review are not available in electronic discovery since electronic discovery demands greater protection of documents).

67. *See id.* at 1386 (arguing that the cost-saving option in traditional discovery to have the requesting party search for pertinent information once records are made available from the producing party is no longer a viable technique during electronic discovery, because parties need programming expertise to search through another party's database for relevant information).

68. *See id.* (suggesting time-saving techniques available during traditional discovery are not available during electronic discovery due to complex electronic data that often requires expertise outside the scope of opposing counsel).

69. *See* Robins, *supra* note 1, at 421 (finding electronic discovery increases the risk of exposure to privileged or confidential information); *see also* Rothman v. Emory Univ., 123 F.3d 446, 455 (7th Cir. 1997) (prohibiting parties from turning over a mass of documents or deliberately mixing documents during discovery).

70. *See, e.g.,* Redish, *supra* note 59, at 591 (explaining that preparation of electronic evidence requires special knowledge of computer technology to obtain and translate the data into a readable format); Lisa M. Arent et al., *EDiscovery: Preserving, Requesting & Producing Electronic Information*, 19 SANTA CLARA COMPUTER & HIGH TECH. L.J. 131, 134 n.8 (2002) (elaborating on constraints whereby electronic evidence is only usable on respondent's devices and data requires special preparation in order to be read by the requesting party).

producing party may have to create additional software programs⁷¹ to access the information, or purchase software licenses for technology no longer in use.⁷² Further, the expertise required to navigate through the information systems is unlike sifting through paper files because the search and retrieval may require technical expertise and understanding of information technology infrastructure and document management policies.⁷³

Despite some of the disadvantages of computer-based discovery, searches from retrieved electronic files may save costs and increase the efficiency of discovery.⁷⁴ By understanding how an opponent's computer systems work, parties can leverage the technological advantage of expedited searches through databases.⁷⁵ Computer-based discovery may reduce litigation costs and delays by saving time.⁷⁶ Furthermore, electronic discovery may reveal even more evidence than in traditional discovery, as computers assist litigants in the collection, manipulation, analysis, and transmission of truths otherwise lost or destroyed.⁷⁷

In addition to requiring additional steps to readily access files and demanding specialized knowledge of computer systems, electronic discovery may also increase exposure to confidential and irrelevant files. Allowing access to a central file room containing business documents in hard copy form is not the same as enabling the adverse party to access central servers containing multiple electronic

71. See *In re Air Crash Disaster at Detroit Metro. Airport*, 130 F.R.D. 634, 636 (E.D. Mich. 1989) (noting that extra programming was needed solely for litigation).

72. See Scheindlin & Rabkin, *supra* note 3, at 379 (illustrating that one company may use a different word processing program than the requesting party, and so the requesting party would require its own license to view the data generated by the producing party).

73. See Lesley Friedman Rosenthal, *Electronic Discovery Can Unearth Treasure Trove of Information or Potential Land Mines*, 75 N.Y. St. B.J. 32, 35 (2003) (noting new career opportunities for digital detective work because of the influx of deeply complex electronic evidence investigation).

74. See Scheindlin & Rabkin, *supra* note 3, at 364 (noting that there are practical distinctions between traditional and electronic discovery such as time saved through expedited searches).

75. See Jay E. Grenig, *Electronic Discovery: Making Your Opponent's Computer a Vital Part of Your Legal Team*, 21 AM. J. TRIAL ADVOC. 293, 324 (1997) (suggesting effective use of technology by understanding how opponents store and generate computer based information may afford efficiencies during electronic discovery).

76. See Kenneth J. Withers, *Advanced Discovery Issues: Discovery and Protection of Electronic Data*, ALI-ABA COURSE OF STUDY, WL SG101 ALI-ABA 835, 849-50 (2002) (noting time savings during document discovery in electronic form through more organized searches, the improved ability to add electronic data directly to litigation support systems, and quick media conversion during electronic courtroom presentations).

77. *Id.* at 850.

systems.⁷⁸ For example, the requesting party may not have the expertise necessary to search through or translate the electronic data, and the information contained in the electronic database may contain confidential information related to the opposing counsel's litigation strategy.⁷⁹ Adding to the complexity, additional layers of information may be available during electronic discovery, including multiple versions of documents within the same electronic document file.⁸⁰ Further, a lengthy e-mail trail may involve hundreds of duplicates of the same electronic message sent to multiple recipients and could be included as files requested and required to be retrieved by the producing party.⁸¹

Finally, the added cost of productivity loss from computer downtime during electronic discovery may have an impact on business processes unlike traditional discovery since retrieving electronic files may take away from the use of computer systems necessary for employees to do their work.⁸² Loss of the computer system for a significant amount of time may undermine a party's business and cause substantial disruption.⁸³ Additionally, employees

78. See Scheindlin & Rabkin, *supra* note 3, at 348 (discussing the impracticability of providing direct access to computer data since privileged information such as trade secrets or proprietary data may be accessed during electronic discovery); see also Redish, *supra* note 59, at 591 (providing that direct access to data storage facilities is not a viable option during litigation because of the confidential nature of data storage locations and content). *But see* Playboy Enter. v. Welles, 60 F. Supp. 2d 1050, 1054 (S.D. Cal. 1999) (finding that electronic files were still discoverable despite the proprietary nature of data containing embedded confidential information).

79. See Pulver, *supra* note 5, at 1415-16 (discussing the trepidation involved with translating computer-stored information into a format considered usable by the courts since the rules fail to specify what a "usable" form entails); see also Richard L. Marcus, *Confronting the Future: Coping with Discovery of Electronic Material*, 64 LAW & CONTEMP. PROBS. 253, 264, 269 (2001) (suggesting that electronic discovery requires additional experts to analyze and access data not otherwise needed for hard-copy documents). Accessing electronic data may be more revealing because e-mail communication often generates unguarded and spontaneous communication. *Id.*

80. See Scheindlin & Rabkin, *supra* note 3, at 365 (revealing that "invisible" evidence may be embedded within a computer and not easily retrieved by an average computer user); see also Kenneth K. Dort & George R. Spatz, *Discovery in the Digital Era: Considerations for Corporate Counsel*, 20 COMPUTER & INTERNET LAW. 11, 13 (2003) (describing layers of electronic documents that include "metadata" such as creation date or modification date within the electronic file). The "metadata" reveals the traits of a document and generates history within the document itself and may be subject to discovery. *Id.*

81. See Scheindlin & Rabkin, *supra* note 3, at 370 n.167 (noting that "the text of e-mail communications can be forwarded to multiple individuals along with additional comments" and that "a critical communication may be passed on to many users and stored on their computer as a data file").

82. See Robins, *supra* note 1, at 440 (explaining the process of analyzing a computer system inevitably requires the use of the physical hard drive for a specific, but variable amount of time).

83. See *Welles*, 60 F. Supp. 2d at 1055 (recognizing that turning over a hard drive to enable the requesting party to discover information relevant to the lawsuit disrupts

often include personal information on their computer systems, thus promoting additional resistance by employees against discovering their confidential files.⁸⁴ Some employees feel that their individual privacy rights are infringed during discovery of electronic files stored on their computer systems.⁸⁵

C. *Background of Cost-Shifting Jurisprudence*

Courts have struggled with how to address cost-shifting disputes during electronic discovery. What began as a tight reign on cost-shifting loosened after courts started to understand the complex and burdensome nature of electronic discovery requests. One court, however, did not follow this trend and instead restricted cost-shifting to matters pertaining to inaccessible data rather than basing its decision on the particular facts and circumstances of the case.⁸⁶

In general, there is an overall presumption for the producing party to bear the burden of costs for all forms of discovery and for the responding party to comply with discovery requests.⁸⁷ Each party bears its own costs for discovery, barring any legislative limits, undue burden, or excessive costs.⁸⁸ In some cases, however, the judge managing electronic discovery may limit discovery where the request

business and may reveal confidential information related to the litigation).

84. *Id.*

85. See Michael Marron, *Discoverability of "Deleted" E-mail: Time for a Closer Examination*, 25 SEATTLE U. L. REV. 895, 922 (2002) (discussing privacy concerns of individual employees as only one aspect of document production and explaining that in *Rowe*, the court rejected privacy concerns as a reason to stall or reduce production of e-mail messages). Since the e-mail messages reside on resources belonging to the company, the personal nature of electronic files is irrelevant since the organization for which the employee works owns the electronic information. See Bonnie C. Glassberg et al., *Electronic Communication: An Ounce of Policy is Worth a Pound of Cure*, 39 BUS. HORIZONS 74, 79 (1996) (indicating that electronic mail belongs to the company and not the employee).

86. See *Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309, 320 (S.D.N.Y. 2003) [hereinafter *Zubulake I*] (finding that the requesting party, Laura Zubulake, who sought to retrieve e-mail evidence from backup tapes in a gender discrimination lawsuit against her former employer, UBS Warburg LLC, may bear some of the costs of restoring inaccessible data).

87. See *S. Ute Indian Tribe v. Amoco Prod. Co.*, 2 F.3d 1023, 1029-30 (10th Cir. 1993) (discussing the presumption that the producing party must pay for the expense of discovery requests, but that the court may grant protection against "undue burden or expense" by shifting costs of discovery to the requesting party as a condition of discovery).

88. See Redish, *supra* note 59, at 612 (revealing that express legislative directives that protect a group of plaintiffs may require cost-shifting); see also *Rowe Entm't, Inc. v. William Morris Agency*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002) (elaborating on Rule 26(c) whereby courts may protect parties from undue burden or expense by exercising discretion). *But see* Braeutigam, *supra* note 5, at 173-74 (distinguishing the American rule, where each party bears the costs of its own litigation, and the English rule, where the losing party pays for the legal fees of both parties).

results in an undue burden, produces redundant data, contains irrelevant information, or infringes on privacy rights by accessing privileged files.⁸⁹ Nevertheless, a majority of courts deny requests to shift costs because the need to obtain the discoverable information outweighs the burden on the producing party.⁹⁰

Initially, the courts did not typically permit cost-shifting during electronic discovery because the cost of doing business inevitably involved the production of electronic data as a natural progression of business operations.⁹¹ Courts, reluctant to sympathize with businesses that failed to take precautions necessary to manage risks, did not want to force opponents to pay for the faulty business practices and record keeping of the opposing party.⁹² Courts often found that the requesting party should not have to pay for the producing party's poor choice of electronic storage and data management devices and techniques.⁹³ As a result, the party responding to discovery requests often had to bear the costs of electronic discovery.⁹⁴ For example, in *Daewoo Electronics Co. v. United States*,⁹⁵ the court considered the normal and reasonable translation of data into a usable form as part of an ordinary and foreseeable burden imposed on businesses. Cases reveal that the effective management of technological resources

89. See Jonathan M. Redgrave, *The Sedona Conference Working Group on Electronic Document Retention and Production*, 4 SEDONA CONF. J. 197, 198-99, 223 (2003) (imposing a "rule of reasonableness" for electronic discovery and suggesting a common sense approach for counsel to object to unreasonable discovery requests); see also Kenneth J. Withers, *Computer-Based Discovery in Federal Civil Litigation*, 2000 FED. CTS. L. REV. 2, III.B.1-III.B.2 (2000) (suggesting the pre-trial conference as an important judicial management tool for tackling electronic discovery issues).

90. See Corinee L. Giacobbe, Note, *Allocating Discovery Costs in the Computer Age: Deciding Who Should Bear the Costs of Electronically Stored Data*, 57 WASH. & LEE L. REV. 257, 267 (2000) (indicating that courts generally disfavor cost-shifting in instances where the producing party should have electronic data in a usable form as an ordinary and foreseeable cost of doing business); see also William W. Schwarzer, *The Federal Rules, The Adversary Process, and Discovery Reform*, 50 U. PITT. L. REV. 703, 703 (1989) (suggesting that the volume and complexity of cases necessitates judicial control of discovery to manage the scope and pace of litigation).

91. See *In re Brand Name Prescription Drugs Antitrust Litig.*, Nos. 94 C 897, MDL 997, 1995 WL 360526, at *3 (N.D. Ill. June 15, 1995) (finding that the parties must produce backup tapes as a cost of doing business in the digital age).

92. See, e.g., *Kozlowski v. Sears, Roebuck & Co.*, 73 F.R.D. 73, 76 (D. Mass. 1976) (finding that costly or time-consuming discovery should not halt production of documents where the material is relevant and necessary to discovery evidence).

93. See *In re Brand Name Prescription Drugs Antitrust Litig.*, Nos. 94 C 897, MDL 997, 1995 WL 360526, at *1 (N.D. Ill. June 15, 1995) (holding the producing party responsible for retrieving electronically stored data at a cost approximated at \$50,000 to \$70,000 as an expense of doing business).

94. See *Kozlowski*, 73 F.R.D. at 76 (requiring discovery even though the retrieval was unduly and costly).

95. 650 F. Supp. 1003, 1006 (Ct. Int'l Trade 1986).

becomes a business imperative in light of judicial allowance of broad discovery.

Courts later broadened the ability to shift costs back to the requesting party due to the unyielding costs inherent in electronic discovery retrieval, production, and review.⁹⁶ The court in *Rowe Entertainment, Inc. v. William Morris Agency*⁹⁷ quickly set the standard for cost-shifting during electronic discovery by permitting broader application of the undue burden test.⁹⁸ In *Rowe*, the court granted the responding party's motion to compel discovery of back-up tapes and hard drives at the expense of the requesting party because the burden of retrieval outweighed the perceived benefit to the requesting party.⁹⁹ The estimated cost shifted to the requesting party in *Rowe* was between \$158,000 and \$236,000.¹⁰⁰ By allocating costs in proportion to benefit and need, the cost burden for electronic discovery shifted to the requesting party when there was an undue burden on the producing party.¹⁰¹

Following *Rowe*, courts favoring cost-shifting often based their decision on the flexible eight-factor undue burden test announced in *Rowe*, which properly allocated the costs of electronic discovery on the benefits and burdens to the parties.¹⁰² The *Rowe* test examined the following eight factors to determine whether to shift costs: the specificity of the request; the likelihood of discovering crucial information; the availability of such information from alternative sources; the purposes for maintaining requested data; the benefit to both parties; the costs of production; the ability and incentive for

96. See *Rowe Entm't, Inc. v. William Morris Agency*, 205 F.R.D. 421, 431-32 (S.D.N.Y. 2002) (shifting cost of discovery to requesting party when retrieval and disclosure of information would otherwise prove too costly).

97. *Id.* at 421.

98. See Carangelo & Graham, *supra* note 4, at 35-36 (noting that, prior to *Zubulake*, multiple courts turned to the *Rowe* standard for guidance on the appropriate allocation of costs during electronic discovery production disputes); see also Andrew J. Ruzicho & Louis A. Jacobs, *Discovery Seeking Inaccessible Material Can Result in Cost-Shifting*, 26 NO. 11 EMPL. PRAC. UPDATE 2, 6 (2003) (discussing the proportionality test from the Federal Rules of Civil Procedure in Rule 26(b)(2) that limits discovery in cases where the "burden or expense of the proposed discovery outweighs its likely benefit").

99. *Rowe*, 205 F.R.D. at 433.

100. See *id.* at 431 (indicating that the "magnitude of these expenses favors cost-shifting").

101. See *id.* at 433 (holding that plaintiffs shall bear the costs of production).

102. See, e.g., *In re Bristol-Myers Squibb*, 205 F.R.D. 437, 443 (D.N.J. 2002) (following the *Rowe* cost-shifting approach where requesting party bears costs of discovery); *Murphy Oil USA, Inc. v. Fluor Daniel, Inc.*, No. CIV.A.99-3564, 2002 WL 246439, at *3 (E.D. La. Feb. 19, 2002) (noting that *Rowe* "provides sound guidance for resolution of these issues where the retrieval, production, and review of e-mail from backup tapes is at issue").

each party to control costs; and the financial resources available to both parties.¹⁰³ While *Rowe* permitted producing parties to shift costs to requesting parties for the retrieval of electronic information,¹⁰⁴ the producing party had to allow the requesting party to either review e-mails for responsiveness or bear the cost of assembling the files for responsiveness and identifying privileges.¹⁰⁵

However, the recent decision in *Zubulake v. UBS Warburg*¹⁰⁶ limited cost-shifting to only extenuating circumstances by requiring the data to be inaccessible in order to shift the burden of costs to the requesting party. This shift further increases the burden on the producing party.¹⁰⁷ The new *Zubulake* test eliminates the “specificity” and “purposes” factors and replaces the *Rowe* test with a seven-factor test organized in order of importance rather than based on flexible factors.¹⁰⁸ The court in *Zubulake* unveiled the new seven-factor test for shifting costs during discovery, the factors being: the extent the request is specifically tailored to discover relevant information; the availability of information from other sources; the total cost of production compared to the amount in controversy; the total cost of production compared to the resources available to each party; the ability of each party to control costs and its incentive to do so; the importance of the issues at stake in the litigation; and the benefits to the parties of obtaining the information.¹⁰⁹ The *Zubulake* decision includes a three-step cost-shifting analysis that determines the threshold question of whether the electronic evidence is inaccessible.¹¹⁰ If the court considers the data inaccessible, the producing party may provide sample data to predict the costs of overall production.¹¹¹ Finally, considering the *Zubulake* seven-factor

103. See *Murphy Oil USA, Inc.*, 2002 WL 246439, at *5 (describing the eight step *Rowe* test for determining undue burden by balancing the cost of production against the need for the information).

104. See *id.* (applying *Rowe* test where plaintiff had to bear costs of retrieving e-mails from backup tapes).

105. *Id.* at *7.

106. See *Zubulake I*, 217 F.R.D. at 318 (imposing a threshold test where data must be in an inaccessible format in order to analyze whether or not production of documents imposes an undue burden).

107. See *id.* at 324 (indicating that courts should only consider cost-shifting in situations where electronic data is relatively inaccessible).

108. See *id.* at 321 (noting the elimination of the redundant *Rowe* factor of “specificity of the discovery request” and the “purposes for which the responding party maintains the requested data” since the business reason for storing the data does not impact accessibility).

109. *Id.* at 322.

110. *Id.* at 324.

111. *Id.*

test, the court weighs the benefit of the data against the burden for retrieving and producing data.¹¹²

1. *The difference between inaccessible and accessible data*

While limiting cost-shifting to situations where data is relatively inaccessible may provide a bright line rule, whether the data is indeed inaccessible is not so easily determined and must be considered based on the circumstances.¹¹³ In order to determine whether to shift costs under the *Zubulake* rule, the court must first examine the accessibility of the requested data.¹¹⁴ Accessible data can be retrieved with relative ease and resides in a readily identifiable location.¹¹⁵ By contrast, disaster recovery data on backup servers used for emergency purposes would likely be considered inaccessible.¹¹⁶ The justification for treating inaccessible data differently is that the data has to be restored or manipulated in order to be usable.¹¹⁷

One way to analyze accessibility turns on the method of storage.¹¹⁸ In *Zubulake*, the court listed five categories of data based on storage method and included backup tapes, erased, fragmented, or damaged data as types of data likely to qualify as inaccessible.¹¹⁹ New forms of

112. *Id.*

113. *See id.* at 323-24 (noting that a quandary exists whereby the courts must struggle with applying a rule of inaccessibility and a multi-factor test weighed in descending order). The *Zubulake* test contains both a rigid rule of accessibility and flexible standards when dealing with cost-shifting. *Id.* An analogous approach in Civil Procedure uses a threshold test in a flexible manner in the context of class actions to determine whether or not to grant a preliminary injunction motion. *See* Robert G. Bone & David S. Evans, *Class Certification and the Substantive Merits*, 51 DUKE L.J. 1251, 1280 (2002) (suggesting that the threshold test performs a gatekeeping function yet allows for adjustment based on the merits of the case before certifying a class); *see also In re Ski Train Fire in Kaprun, Austria* on Nov. 11, 2000, No. MDL No. 1428(SAS), 2004 WL 515534, at *3 (S.D.N.Y. Mar. 15, 2004) (applying a threshold test in the context of jurisdiction where a litigant must first establish minimum contacts in order to determine the reasonableness of exercising jurisdiction over a defendant).

114. *See Zubulake I*, 217 F.R.D. at 324.

115. *See id.* at 320 (categorizing data that is easily retrieved and usable without manipulation as accessible).

116. *See id.* (noting the more complex process for restoring backup data to a usable form); *see also McPeck v. Ashcroft*, 202 F.R.D. 31, 33 (D.D.C. 2001) (explaining the random nature in which backup tapes collect and store information).

117. *See Redish, supra* note 59, at 584-85 (suggesting that the retrieval of data unknown to the user, such as temporary files, involves more effort and expense than searching for active data); *see also Dort & Spatz, supra* note 80, at 11 (showing that complex technology systems, including Personal Digital Assistants (PDAs), cellular phones and pagers, and digital cameras, may be electronic devices subject to discovery and may require further expertise to retrieve data).

118. *Zubulake I*, 217 F.R.D. at 319.

119. *See id.* at 319-20 (listing five categories of data including: (1) active, online data; (2) near-line data; (3) offline storage/archives; (4) backup tapes; and (5) erased, fragmented, or damaged data). As technology changes, it is likely that the

electronic evidence, however, such as cookies, temporary files, residual data and web caches¹²⁰ may qualify as accessible even though these types of data are not easily found by the computer user and require additional retrieval steps.¹²¹ Notably, instant messaging (IM) might surpass e-mail as the number one business communication method in electronic form¹²² and could become the new treasure trove containing highly relevant information during discovery. The impact that IM, as a communication medium, will have on companies could be substantial, particularly since employees lack awareness that instant messages remain on corporate systems and may be retrieved at a later date as evidence.¹²³

In addition, electronic evidence that must be retrieved and subsequently translated in order to be utilized may not pass the *Zubulake* inaccessibility test.¹²⁴ The ability to access data implicitly includes the ability to use the data. Furthermore, even if data is not accessible, where the lack of usability was due to inadequate business practices, the cost of doing business may include translating the data into usable form.¹²⁵ The threshold test of inaccessibility may exclude inaccessible data that should have been accessible under ordinary business circumstances.

Zubulake rule will correspondingly change to examine retrieval and usability as categorization tools rather than limiting analysis to a specific storage method. *Id.*

120. See Scheindlin & Rabkin, *supra* note 3, at 338-41 (positing conflicting types of technology that may not necessarily fall under the definition of accessible). Data embedded within temporary files contains crucial information that tracks the history of the file, and this form of information will likely qualify as highly relevant and subject to discovery. *Id.* at 337-38. However, because of the special programming and skill required to retrieve the information, the courts may consider unique forms of technology inaccessible. See *infra* Part I.D; *infra* note 157 (discussing cases that allowed cost-shifting where special programming requirements inhibited production).

121. See Redish, *supra* note 59, at 584-87 (describing how information automatically generated by the computer system and embedded within hidden files is not easily found by the computer user but may provide key facts necessary to win a case).

122. See Pike & Fischer, Inc., *Instant Messages Emerging as Newest Source of E-evidence*, 3 DIGITAL DISCOVERY AND E-EVIDENCE 1 (2003), available at <http://www.sochaconsulting.com/Publications/DDEE%2009.03.pdf> (on file with the American University Law Review) (noting that analysts predict instant messaging will surpass e-mail as the top electronic communication medium in business).

123. See *id.* at 2 (warning that remarks made while instant messaging become a part of the "corporate DNA" and can be used as evidence in a lawsuit). Retrieving the electronic data created from instant messaging could be considered accessible yet the burden on producing parties to retrieve such files may be a question with which courts will have to wrestle. *Id.*

124. See *supra* Part III.B (suggesting limitations on cost-shifting when discoverable information relates to the ordinary cost of doing business).

125. See Giacobbe, *supra* note 90, at 267 (explaining the court's belief that cost of translating data into usable form should normally fall upon the requested party).

2. *Uncertainty when data is not in usable form*

While discovering parties may be able to easily retrieve electronic data in raw form, thus failing to clear the hurdle of the inaccessibility test from *Zubulake*, they may be unable to interpret the data due to its unusable format.¹²⁶ The extraordinary steps necessary to produce the data in a format usable by the requesting party may meet the undue burden test. However, it may not trigger the cost-shifting analysis under *Zubulake*, as technically, the producing party is able to retrieve the data. The producing party may be able to obtain the data but must take steps such as programming or licensing in order to *use* the data.¹²⁷

Courts have allowed cost-shifting where the producing party had to create “special programming” in order to access the information. The requesting party may bear the burden of paying for “special expenses” incurred by the responding party such as the creation of special programming or the licensing of software in order to review the data.¹²⁸ In *Anti-Monopoly, Inc. v. Hasbro, Inc.*,¹²⁹ the plaintiff paid discovery costs to extract data from files. Another example of a discovery request for information outside of the scope of ordinary business and not readily usable occurred where the requesting party had to bear costs because the tape did not exist prior to the request.¹³⁰

126. See *OpenTV v. Liberate Tech.*, 219 F.R.D. 474, 477 (N.D. Cal. 2003) (including the substantial time and expense needed to extract data and create data in usable form as factors that earmarked the electronic data as inaccessible under the court’s interpretation of the *Zubulake* inaccessibility test). *But see* *Kozlowski v. Sears, Roebuck & Co.*, 73 F.R.D. 73, 76 (D. Mass. 1976) (noting that Sears was not allowed to frustrate discovery because of an inadequate filing system despite being costly and time-consuming).

127. The “get it” versus “use it” distinction may turn on whether companies should create the document in a usable form as a cost of doing business. See *infra* Part I.D.1 (examining how courts allocate costs during translation cases when documents are not available in English). *But see* IRON MOUNTAIN, THE CIO CHALLENGE: CHANGE DISRUPTIVE TRENDS INTO BUSINESS OPPORTUNITY 4-5 (2004), available at http://www.ironmountain.com/File_Uploads/Resource_Items/USA/598_0_Disruptive_Trends.pdf (on file with The American University Law Review) [hereinafter CIO CHALLENGE] (suggesting that when an electronic file resides on a backup tape for disaster recovery purposes, the business reason for keeping the data pertains to information technology use, not record retention use, hence requiring the file to be readable falls outside the scope of the business purpose for the data).

128. See ABA Section of Litigation, Civil Discovery Standards 29(b) (iii), available at [http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi02.pdf/\\$file/ElecDi02.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi02.pdf/$file/ElecDi02.pdf) (Aug. 1999) (on file with the American University Law Review) (suggesting that the discovering party should pay “special expenses” incurred, such as creating supplemental software to retrieve the information or acquiring licenses in order to legally access the information).

129. No. 94 Civ. 2120(LMM) (AJP), 1996 WL 22976, at *2 (S.D.N.Y. Jan. 23, 1996).

130. See *In re Air Crash Disaster at Detroit Metro. Airport*, 130 F.R.D. 634, 636 (E.D. Mich. 1989) (shifting costs of producing data in a special format for litigation

The court in *In re Air Crash Disaster at Detroit Metro. Airport*¹³¹ contemplated whether the producing party should pay to create the requested data in a specific format even though the procedure required debugging and manually checking input for accuracy.¹³² Since the data requested only fulfilled litigation purposes, the requesting party bore the costs instead of the producing party.¹³³ Consequently, if electronic data requires extra steps in order to open or interpret the information, the data is not usable and courts may consider the material inaccessible.

3. *Sampling inaccessible data predicts the costs of production*

In addition to applying the threshold test of inaccessibility, an important part of the *Zubulake* test involves sampling inaccessible data. After determining whether or not the electronic data requested falls under the category of “inaccessible,” the next question to consider involves sampling the inaccessible data in order to determine the cost-benefit of shifting costs.¹³⁴ The sampling test from *McPeck v. Ashcroft*¹³⁵ discusses the attempt to balance the opposing interests of overbroad requests and the need for adherence to the general purpose of discovery rules, which is to enable broad discovery of information.¹³⁶ *McPeck* revealed the competing policies of liberal discovery and the protection against discovery abuse, and the court created the sampling step for electronic discovery disputes as a way to solve the dilemma.¹³⁷

As a means of predicting costs during electronic discovery disputes, sampling electronic data benefits both parties by examining scope and ensuring relevancy.¹³⁸ If there are multiple tapes to access, based on the economic analysis of producing the samples versus all of the evidence, the lower cost of production will likely be the test run.¹³⁹ To

purposes to the requesting party).

131. *Id.* at 635.

132. *Id.*

133. *Id.* at 636.

134. *See Zubulake I*, 217 F.R.D. at 324 (suggesting that parties first sample the inaccessible data to better predict the overall costs of retrieval).

135. 202 F.R.D. 31 (D.D.C. 2001).

136. *See id.* at 34 (suggesting that the requesting party might, “like the Rolling Stones . . . hope that if they ask for what they want, they will get what they need”).

137. *See id.* (hoping that a sample of the requested material may yield relevant information and further resolve the competing issues).

138. *See id.* at 35 (ordering a test run of the database to determine cost, time, and responsiveness of sample e-mails searched and retrieved); *see also* Carangelo & Graham, *supra* note 4, at 36 (discussing the second prong of *Zubulake* test, the sampling step, which requires a factual showing that supports cost-shifting to the requesting party).

139. *See Zubulake I*, 217 F.R.D. at 324 (describing the benefit of sampling data in

make the most out of the sampling step explored in *Zubulake*, IT departments may want to estimate costs upfront for sampling of back-up tapes to determine costs.¹⁴⁰

In some cases, the court may opt to skip the sampling step because of the obviousness of the corresponding costs of retrieval. In *OpenTV v. Liberate Technologies*,¹⁴¹ the court found that the data requested conformed to the definition of inaccessible and did not require data sampling to determine whether or not to shift costs back to the requesting party. Since the producing party, Liberate Technologies, provided the amount of time programmers needed to spend extracting the data to comply with the discovery request, the court had an approximation of the resources needed to extract the data.¹⁴² The court deemed the electronic data inaccessible, analyzed the *Zubulake* factors, and shifted some of the costs based on both the benefit the data could provide to the requesting party and the corresponding neutral benefit but high cost to the producing party.¹⁴³

Overall, the *Zubulake* test minimizes the chances for a producing party to shift discovery costs back to the requesting party.¹⁴⁴ While some costs shifted to the requesting party in *Zubulake*, the producing party, UBS Warburg, ultimately paid for the majority of the discovery costs.¹⁴⁵ The new *Zubulake* test leaves open the possibility for a requesting party to elicit an overly broad request of electronic

order to better predict overall costs of retrieving electronic files).

140. See *McPeck*, 202 F.R.D. at 34 (premiering the testing step for electronic discovery as a practical option to forecast the burden of retrieval).

141. See 219 F.R.D. 474, 477 (N.D. Cal. 2003) (finding that unduly burdensome time requirements and the potentially expensive process needed to make data available in a usable format qualified the discovery request as an inaccessible format for discovery purposes).

142. See *id.* (estimating that extracting source code would take between 125 and 150 hours of work to complete the discovery request for OpenTV).

143. See *id.* at 478-79 (finding that both parties must share equally in the costs of extracting source code in order to convert it to accessible format given the relative resources of each party and the corresponding benefits).

144. See *Zubulake I*, 217 F.R.D. at 324 (indicating that responding party should pay for the costs of production for data kept in accessible formats and courts should only consider cost-shifting in cases where data is relatively inaccessible); see also *Zubulake v. UBS Warburg LLC*, 216 F.R.D. 280, 291 (S.D.N.Y. 2003) [hereinafter *Zubulake II*] (allowing cost-shifting to requesting party, Laura Zubulake, for twenty-five percent of costs associated with restoring backup servers but requiring producing party to pay for the review and production of data once it is accessible).

145. *UBS Must Pay 75% Of Cost for E-mails*, WALL ST. J., July 25, 2003, at C7. See generally *UBS Warburg Is Ordered To Pay*, WALL ST. J., May 19, 2003, at C9 (announcing the initial outcome of *Zubulake I* case where court required the producing party to pay for review and production of e-mail from backup servers); Susanne Craig & Ann Davis, *Judge Orders UBS to Pay to Retrieve E-Mail*, N.Y. TIMES, July 25, 2003, at 10 (highlighting the outcome of *Zubulake II* case after further analyzing data that ultimately shifted only twenty-five percent of costs to the requesting party, despite the inaccessible nature of the data).

information during discovery, so long as the data is accessible.¹⁴⁶ As a result, cost-shifting occurs only in narrow cases.¹⁴⁷ Courts may require companies to pay to make data accessible, even though the data does not have to be accessed in the regular course of business.¹⁴⁸ Therefore, understanding information systems will help companies predict potential exposure to broad requests.¹⁴⁹

Corporate counsel will need to anticipate litigation costs and prepare for potentially broad and burdensome electronic discovery requests.¹⁵⁰ While judges may intervene to limit discovery abuse,¹⁵¹ the rules are discretionary and will not likely shield producing parties from excessive costs during discovery. In practice, most judges will not halt discovery simply because of a broad discovery request.¹⁵² If the request relates to electronic discovery, courts typically require the producing party to produce electronic files in usable form.¹⁵³

D. *The Tipping Factor: Cost-Shifting During Electronic Discovery*

Courts often grapple with how to weigh factors during pre-trial discovery and limit costs where document requests cause undue burden on the producing party. According to a survey conducted for the Federal Judiciary Center, one of the main problems of electronic discovery pertains to sharing costs for retrieving information.¹⁵⁴ The

146. *Zubulake I*, 217 F.R.D. at 324.

147. See Rosenthal, *supra* note 73, at 37 (noting *Zubulake* limits cost-shifting to instances where data is relatively inaccessible and does not apply the undue burden test where the data format is accessible).

148. See Merrick T. Rossein, *Zubulake Modification of Rowe: Eliminating Two Factors*, in 1 EMPLOYMENT DISCRIMINATION LAW AND LITIGATION § 14:29:75 (2004) (noting that “it is accessibility, which is the core basis for calculating the cost of production, not whether the data is kept for a business purpose or another purpose”).

149. See Gene Klimov & Samuel H. Soloman, *The Art of War*, GLASSER LEGALWORKS, WL EDRMS-GLASS-CLE 62 (2002) (suggesting that companies prepare a working group designed to understand retention policies, know the risks and scope of the organization’s information, and implement audits as a way to better prepare for electronic discovery requests).

150. See Dort & Spatz, *supra* note 80, at 14-16 (analyzing *Zubulake* factors and providing practical tips to corporate counsel for managing risks and costs, such as sending a notice letter to opposing counsel to preserve potentially relevant data and creating document retention policies and procedures to ensure better organization of electronic files). *But see UBS Must Pay 75% Of Cost for E-mails*, *supra* note 145 (indicating that a spokesman for UBS stated, “We are pleased the judge has shifted a portion of the cost of e-mail restoration to the plaintiff. Traditionally the full cost is placed on the producing party.”).

151. See Wagener, *supra* note 5, at 1897 (suggesting that the federal rules allow for cost-shifting of discovery costs for paper files).

152. See *id.* (arguing that judges are hesitant to deter discovery because of the difficulty of distinguishing between abusive discovery practices and legitimate discovery requests that could reveal relevant evidence).

153. See *infra* Part I.C.2 (discussing the usable format required for electronic files).

154. See MOLLY TREADWAY JOHNSON ET AL., *A Qualitative Study of Issues Raised by the*

issues that give rise to cost-shifting disputes include hiring computer experts, accessing privileged information, managing the on-site inspection of computer systems, and facing preservation or spoliation issues.¹⁵⁵ In the survey, the majority of cases involving electronic discovery issues included individual plaintiff employment disputes, general commercial litigation, and patent or copyright issues.¹⁵⁶ These matters may often involve cost-shifting.

1. *Granting cost-shifting for unduly burdensome requests*

Cost-shifting requests are not regularly granted, but where extraordinary steps are necessary to produce documents, the court may shift costs. During discovery, courts may require parties to share expert costs and may shift translation expenses to the requesting party.¹⁵⁷ In electronic discovery, factors that trigger cost-shifting include overbroad requests, information not likely to be found, privileged information, requests that require special programming, or the inability to access the information because it is not available in the form requested.¹⁵⁸

Discovery of Computer-Based Information in Civil Litigation 2 (Sept. 13, 2002), at [http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi10.pdf/\\$file/ElecDi10.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/ElecDi10.pdf/$file/ElecDi10.pdf) (on file with the American University Law Review) (summarizing that three out of five magistrate judges handled issues about computer-based evidence during discovery disputes and that the problem of sharing the costs during retrieval of computerized information was frequently reported as an issue). Moreover, attorneys generally preferred rule adjustments to resolve electronic discovery issues more than judges, who thought the Civil Rules had no major effect on how to accommodate electronic discovery issues. *Id.* These findings were based on a survey of 110 magistrate judges, 17 attorneys working on ten key cases relevant to computer discovery, and 10 computer experts. *Id.* at 2, 5, 9.

155. *Id.* at 2.

156. *See id.* at 6 (listing breakdown of matters with relevant computer discovery issues as twenty-six percent employment, twenty-three percent general commercial litigation, and eighteen percent patent or copyright issues).

157. *See* Robins, *supra* note 1, at 475 (noting the requesting party usually must pay a fair portion of fees and expenses for retrieving computer-related information from a producing party's expert); *see also* Pearl Brewing Co. v. Jos. Schlitz Brewing Co., 415 F. Supp. 1122, 1136, 1141 (S.D. Tex. 1976) (requiring that the requesting party bear costs for the producing party to retrieve documentation pertaining to a computer program used by the producing party's expert witness and to pay for a computer expert to analyze the computer program). Converting a foreign language document into a usable form may take additional steps for the requesting party to read the documents. *Compare* Stapleton v. Kawasaki Heavy Indus., Ltd., 69 F.R.D. 489, 490 (N.D. Ga. 1975) (requiring producing party to pay for English translation of documents because it was a reasonable cost of doing business in the United States), *with* Daewoo Elec. Co. v. United States, 650 F. Supp. 1003, 1006 (Ct. Int'l Trade 1986) (finding that normal and reasonable translation of data into usable form was an ordinary and foreseeable burden).

158. *See, e.g.,* Fennell v. First Step Designs, Ltd., 83 F.3d 526, 530-32 (1st Cir. 1996) (holding that a failure to explain the basis for a belief that the materials would be relevant meant extensive electronic discovery of hard drive to find whether memo had been modified would be "extremely cumbersome and expensive"); Van

Another approach to allocating the burden of costs during electronic discovery is to allow cost-sharing rather than cost-shifting.¹⁵⁹ Notably, even where the court shifts costs to the requesting party for particular requests, overall, both parties will share the discovery costs.¹⁶⁰ In *Williams v. E.I. duPont de Nemours & Co.*,¹⁶¹ the requesting party paid the costs for special programming to encode and to duplicate data while the producing party paid costs to search and produce requested documents.¹⁶² Similarly, in *National Union Electric Corp. v. Matsushita Electric Industrial Co.*,¹⁶³ the court required a party who requested both hard copy and electronic versions of data to pay the extra costs of duplication, as the burden of producing the documents was disproportional to the benefit of multiple copies.¹⁶⁴ Cost-sharing offers an attractive alternative in cases involving complex discovery costs since it distributes the burden among the parties.

2. Denying cost-shifting in favor of broad discovery

Not surprisingly, the majority of requests related to cost-shifting in discovery are denied.¹⁶⁵ Judges have extraordinary caseloads and lack

Westrienen v. Americontinental Collection Corp., 189 F.R.D. 440, 441 (D. Or. 1999) (disallowing overbroad access and requiring discovering party to specify what it is seeking); *Stalling-Daniel v. Northern Trust Co.*, 52 Fed. R. Serv. 3d 1406, 1408 (N.D. Ill. 2002) (holding that speculations alone are not enough to impose discovery costs on the producing party); *In re Air Crash Disaster at Detroit Metro. Airport*, 130 F.R.D. 634, 636 (E.D. Mich. 1989) (requiring the requesting party bear costs because the tape did not exist prior to the request). Compare *In re P. R. Elec. Power Auth.*, 687 F.2d 501, 506 (5th Cir. 1982) (refusing to require producing party to pay costs of translating from Spanish to English for the requesting party), with *Anti-Monopoly, Inc. v. Hasbro, Inc.*, No. 94 Civ. 2120(LMM)(AJP), 1996 WL 22976, at *2 (S.D.N.Y. Jan. 23, 1996) (requiring cost-shifting where producing party had to create "special programming" in order to access information). The court gave the plaintiff the option of paying extraction costs if it required data in electronic format. *Id.*

159. See, e.g., *Sattar v. Motorola, Inc.*, 138 F.3d 1164, 1171 (7th Cir. 1998) (permitting cost-splitting for paper printouts even though information was also available on readable format disk); *In re Two Appeals Arising Out Of San Juan Dupont Plaza Hotel Fire Litig.*, 994 F.2d 956, 967 (1st Cir. 1993) (ordering cost-sharing and indicating that "[r]eallocating cost-sharing assessments affords a way of balancing case-specific inequities").

160. See Robert D. Cooter & Daniel L. Rubinfeld, *An Economic Model of Legal Discovery*, 23 J. LEGAL STUD. 435, 457-59 (1994) (supporting the idea of a cost-sharing method for discovery requests, allowing the producing party to shift some of the costs back to the discovering party rather than pay for the entire discovery request).

161. 119 F.R.D. 648 (W.D.K.Y. 1987).

162. See *id.* at 651 (ordering parties to share costs because of the undue hardship imposed in terms of time and expense in order to encode manually the massive documentation necessary to analyze the raw data and expert reports).

163. 494 F. Supp. 1257 (E.D. Pa. 1980).

164. See *id.* at 1262 (requiring production of hard copy and electronic version of data but shifting costs to the discovering party to pay for the creation of duplicate tapes).

165. See *Giacobbe*, *supra* note 90, at 267 (noting that the majority of courts require the producing party to bear all costs of production of electronic discovery requests).

the time necessary to deal with routine discovery disputes.¹⁶⁶ As a result, generalized searches are often allowed and broad requests to compel all electronic files are granted.¹⁶⁷ In addition, courts are hesitant to shift costs to the requesting party where the producing party uses discovery costs as a shield to avoid upgrading computer systems.¹⁶⁸ Even cost-shifting requests by representative plaintiffs require parties deriving the benefit to generally bear the cost of compiling information.¹⁶⁹

Given the low chance of successfully shifting costs during electronic discovery, the pre-trial conference that requires a discussion of discovery strategies by both parties may be an important way—perhaps the only way—to limit burden.¹⁷⁰ By bringing discovery issues to the attention of both parties earlier, there may be increased incentives to settle fruitless disputes in which it would otherwise prove too burdensome for parties to comply with discovery requests.¹⁷¹

Moreover, establishing a professional relationship with the court requires effort to avoid discovery battles. See Jack J. Goldwood, *Professional Conduct: Building Credibility with the Court*, FOR THE DEFENSE, Jan. 2004, at 14 (suggesting lawyers avoid taking up discovery issues with the court since the court should not play the role of “babysitter” during pre-trial litigation).

166. See Richard Corbett & Virginia R. Llewellyn, *The Next Discovery Frontier*, 21 ACCA DOCKET 116, 128 (2003) (noting that judges have little patience for cost-shifting disputes because of their enormous workload, including 250,000 civil cases often pending at one time in the federal court system).

167. See *Kleiner v. Burns*, 48 Fed. R. Serv. 3d 644, 649 (D. Kan. 2000) (including voice mail messages and files, back-up voice mail files, e-mail messages and files, backup e-mail files, deleted e-mails, data files, program files, backup and archival tapes, temporary files, system history files, web site information stored in textual, graphical or audio format, web site log files, cache files, cookies, and other electronically-recorded information, despite the failure to particularize the nature and location of the electronic data).

168. See *In re Brand Name Prescription Drugs Antitrust Litig.*, Nos. 94 C 897, MDL 997, 1995 WL 360526, at *2 (N.D. Ill. June 15, 1995) (finding that plaintiff should not have to pay for defendant’s choice of electronic storage and management).

169. See *Oppenheimer Fund, Inc. v. Sanders*, 437 U.S. 340, 359 (1978) (drawing an analogy to cost-shifting requests during discovery and finding that the defendant in a class action lawsuit should not bear the expense of compiling a class member list and that the cost must be borne by the plaintiff).

170. See David H. Schultz & J. Robert Keena, *Discovery Challenges in the Electronic Age*, 24 PA. LAW 24, 25-26 (2002) (discussing the importance of the pre-trial conference to gauge costs anticipated during discovery under Rule 26(f) insofar as the conference purports to resolve conflicts related to discovery, such as complex requests to conduct electronic discovery).

171. Bruce Rubenstein, *Electronic Discovery Costs Are Leveraging Settlements*, CORP. LEGAL TIMES, Sept. 1997, at 26. But see RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 21.5 (6th ed. 2003) (explaining the more predictable an outcome, the more likely parties will facilitate settlement, but the failure to volunteer information may induce a higher settlement).

II. COMPARATIVE ANALYSIS OF THE UNDUE BURDEN TEST VERSUS THE INACCESSIBILITY REQUIREMENT

The *Zubulake* decision may signal a movement in the direction of judicial efficiency since it creates a bright line test to follow regarding cost-shifting in electronic discovery, even though it is not binding on the federal courts.¹⁷² Unfortunately, a side effect of the new inaccessibility test is the possibility of reduced chances for producing parties to allocate costs to the requesting party where a disproportionately broad request would otherwise cause undue burden.¹⁷³

Looking beyond the format of information requested, the Federal Rules examine whether the producing party would experience disproportionate burden compared to the benefit received by the requesting party.¹⁷⁴ During traditional discovery, common factors of undue burden often trigger shifting costs to the requesting party. Analogous requests during traditional discovery considered unduly burdensome include such factors as the number of documents, sensitivity of the information embedded within the documents, relevance of the information, more convenient alternative locations of information, and technical complexity of the documents requested.¹⁷⁵

172. See *In re Baker*, 264 B.R. 759, 763 (Bankr. M.D. Fla. 2001) (reciting that according to the doctrine of *stare decisis*, one court's decision does not bind another unless the latter is an inferior court); see also *Commonwealth Edison Co. v. Int'l Bhd. of Elec. Workers Local 15*, 961 F. Supp. 1154, 1166 n.2 (N.D. Ill. 1996) (discussing how a decision from one court does not bind other courts of appeals or other district courts yet may persuade a court's legal analysis and provide guidance during interpretation of similar issues). But see POSNER, *supra* note 171, at § 20.4 (noting that "*stare decisis* is less rigidly adhered to the more rapidly the society is changing"). While greater predictability may speed up judicial decisions, unpredictable externalities such as technology change may in fact hinder judicial decision-making. *Id.*

173. See Rosenthal, *supra* note 73, at 36-37 (noting that the court will only entertain cost-shifting in disputes where the data is relatively inaccessible and thus results in a corresponding challenge to corporate counsel to examine existing document retention policies in light of the new development in *Zubulake*).

174. See Ruzicho & Jacobs, *supra* note 98, at 6 (describing the proportionality test according to Rule 26(b) that enables courts to halt discovery or impose costs on the requesting party where undue burden exists).

175. See, e.g., *Coker v. Duke & Co.*, 177 F.R.D. 682, 685-86 (M.D. Ala. 1998) (finding that burden of production outweighed production costs for a document request of all information and all documents related to anyone ever discharged from defendant company, as the broad request for sensitive information showed little relevance); *United States v. Upton*, No. Civ. 3:92-CV-00524(AWT), 1995 WL 264247, at *3 (D. Conn. Jan. 26, 1995) (finding that a request for information already furnished posed an undue burden); *Zonaras ex rel. Zonaras v. Gen. Motors Corp.*, No. C-3-94-161, 1996 WL 1671236, at *3 (S.D. Ohio Oct. 17, 1996) (considering the technical complexity of litigation, relevance of issues, defendant's financial ability to pay for the document production, and public policy implications when examining

By contrast, the inaccessibility test explained in *Zubulake* ignores undue burden and allocates costs where the state of the information is relatively inaccessible rather than according to a cost-benefit analysis.¹⁷⁶ While *Zubulake* considers undue burden on the producing party when allocating discovery costs, the request must first fall into the category of inaccessible data.¹⁷⁷ The undue burden test allows for flexibility and considers electronic discovery on a case-by-case basis, whereas the inaccessibility test shifts costs in narrow cases where electronically discoverable information resides in a format or location that is not accessible.¹⁷⁸

A. *The Undue Burden Test*

The “undue burden” test espoused in *Rowe*¹⁷⁹ is a flexible standard that looks at the individual facts of each case without adhering to a limiting rule of accessibility. The test balances the benefit of the electronic discovery request against the impact on the producing party and expands proportionality analysis within the Federal Rules of Civil Procedure in Rule 26.¹⁸⁰ The courts have shifted the cost of electronic discovery back to the requesting party where undue burden or excessive expenses exist.¹⁸¹

The advantage of having a flexible standard, such as the *Rowe* test, is that it enables the law to conform to the equities of each individual case.¹⁸² Rather than limiting cost-shifting based on the state of the

whether or not expense of proposed discovery outweighed the benefits of production); *Mobley v. Edison Chouest Offshore, Inc.*, No. Civ. A. 95-3120, 1996 WL 363496, at *1 (E.D. La. June 27, 1996) (indicating that the availability of a less burdensome and more convenient source of information squares with the requirements of Rule 26(b)(2)(iii) and precludes redundant discovery).

176. See *Zubulake I*, 217 F.R.D. at 319-20 (deciding cost-shifting based on the type of electronic information requested and the ability to retrieve the electronic file rather than on a balancing test of multiple factors).

177. See *id.* at 324 (investigating undue burden only where data first falls into inaccessible category).

178. See *infra* Part II.B (suggesting the new *Zubulake* test narrows cost-shifting).

179. *Rowe Entm't, Inc. v. William Morris Agency*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002).

180. See *Ruzicho & Jacobs, supra* note 98, at 2 (comparing the proportionality test, a common sense way of determining whether costs and time needed to comply with discovery request are disproportionate to the value of the material, with *Rowe* factors, which further guide courts regarding how to weigh the impact of discovery requests).

181. *Rowe*, 205 F.R.D. at 433.

182. See Karen M. Gebbia-Pinetti, *Statutory Interpretation, Democratic Legitimacy and Legal-System Values*, 21 SETON HALL LEGIS. J. 233, 255 (1997) (noting that the law adjusts to societal changes and achieves fair results, yet remains rigid enough to maintain stability, predictability, and uniformity); see also John Hasnas, *The Myth of the Rule of Law*, 1995 WIS. L. REV. 199, 213 (1995) (positing that “the more definite and rigidly-determined the rules of law become, the less the legal system is able to do justice to the individual” and that “if the law were fully determinate, it would have no ability to consider the equities of the particular case”).

electronic information, a flexible standard examines factors such as bargaining power, benefit of the requested materials to the discovering party, and the purpose of the information in light of the issues in the case.

The undue burden test employs cost-benefit analysis by examining the total circumstances of each case.¹⁸³ Since the judicial role of managing discovery in the federal system is subject to increased scrutiny because of the excessive costs of litigation,¹⁸⁴ a more economically efficient approach to managing discovery shifts costs based on the bargaining power of each party.¹⁸⁵ In other words, producing parties would share discovery costs based on the ability to pay,¹⁸⁶ not on a limiting rule that based cost-shifting on the state of data. The value of the discoverable information will determine whether or not the discovering party is willing to pay to retrieve evidence.¹⁸⁷

The disadvantage to having a flexible standard like the undue burden test is that it is expensive to enforce, especially in high-frequency cases such as electronic discovery disputes. By contrast, a bright line rule costs less to administer.¹⁸⁸ Even though rules may be

183. See Redgrave, *supra* note 21, at 198 (analyzing costs, needs, and benefits of producing electronic evidence through the Sedona principles, a set of best practices conjured up by The Sedona Conference Working Group, a think tank for electronic document production). The requesting party's inquiry should consider whether the data is redundant, irrelevant, or subject to preservation as part of the cost-benefit analysis discussed in the Sedona Principles. See *id.* at 209-11 (considering reasonableness of electronic document production by examining document retention procedures, preservation strategy, type of storage systems, and ability to access files weighed against the benefit and potential for discoverable information within electronic data).

184. See Civil Justice Reform Act of 1990, Pub. L. No. 101-650, 104 Stat. 5089 (1990) (implementing legislation to reduce civil litigation costs and delays in federal courts); Press Release, Brookings Institution, Brookings Task Force Urges Continued Attention to Civil Justice Reform (Mar. 20, 1997), at <http://www.brook.edu/comm/news/19970320civil.htm> (on file with the American University Law Review) (finding that active judicial management, where implemented, can reduce congestion in the civil justice system). As a way to reduce costs and management, early case management and discovery planning will alleviate strain in the judiciary. See JAMES S. KAKALIK ET AL., RAND, DISCOVERY MANAGEMENT: FURTHER ANALYSIS OF THE CIVIL JUSTICE REFORM ACT EVALUATION DATA 40 (1998), at <http://www.rand.org/publications/MR/MR941> (on file with the American University Law Review) (estimating that mandatory discovery management planning reduced time until disposition by an average of 104 days).

185. See Cooter & Rubinfeld, *supra* note 160, at 445 (analyzing the discovery process as contributing to the probability of dispute resolution because it reveals bias and potential bargaining power).

186. See *id.* at 456 (suggesting a balanced approach to discovery to ensure symmetry in transaction costs by requiring each party to bear its own costs until the "switching point" where the value becomes greater to the requesting party and therefore shifts the remaining cost of discovery to the adversary).

187. *Id.*

188. See Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J.

more costly to promulgate than standards due to the added costs of designing and implementing the rules, the application of rules reveals the cost savings.¹⁸⁹

Moreover, managerial judging during discovery may also have disadvantages by reducing litigation efficiency by adding complexity to the pretrial proceedings, and by contributing to a backlog of cases, or worse, by threatening impartiality in order to save judicial resources.¹⁹⁰ In fact, some studies suggest that discovery abuse is the major cause of delay in litigation.¹⁹¹ Electronic discovery disputes amongst parties frequently occur, yet cost-shifting occurs in lower frequency due to the judicial preference against quibbling over the minutiae of discovery costs.¹⁹²

B. *The Inaccessibility Test*

A rigid rule, such as the inaccessibility test in *Zubulake*, requires less judicial involvement and will encourage greater administrative efficiency.¹⁹³ The inaccessibility test requires the court to analyze the type of electronic data requested and whether the process needed to access the data requires an “extraordinary step”¹⁹⁴ in order to complete the discovery request. A bright line rule based on accessibility may result in fewer discovery disputes and cost less

557 (1992) (suggesting that the application of rules is less expensive than standards because of the ability to reflect on the content of previously promulgated rules rather than having to determine application after the conduct occurs).

189. *Id.* at 562-63. Further, where conduct is frequent, the savings realized in rule application will likely exceed the initial costs incurred during rule creation. *Id.* at 621.

190. See Albert W. Alschuler, *Mediation with a Mugger: The Shortage of Adjudicative Services and the Need for a Two-Tier Trial System in Civil Cases*, 99 HARV. L. REV. 1808, 1832-36 (1986) (discussing the shortcomings of managerial judging and its failure to solve discovery abuse problems). More aggressive participation in settlement discussions may encourage settlement and deny parties the full opportunity to be heard. *Id.* See also *Dolgow v. Anderson*, 53 F.R.D. 661, 663 (E.D.N.Y. 1971) (expanding the judicial role in order to supervise and limit discovery during a lengthy, complex case so that the system could protect parties from excessive expenses, particularly where there is a possibility of abuse).

191. See Louis Harris & Assocs., Inc., *Judges' Opinions on Procedural Issues: A Survey of State and Federal Trial Judges Who Spent at Least Half of Their Time on General Civil Cases*, 69 B.U. L. REV. 731, 735 (1989) (listing abuse of discovery and an insufficient amount of judges for caseload as the top two reasons for litigation delays).

192. See *supra* notes 165-71 and accompanying text (noting the types of requests where courts have failed to award cost-shifting).

193. See WOLF HEYDEBRAND & CARROLL SERON, *RATIONALIZING JUSTICE: THE POLITICAL ECONOMY OF FEDERAL DISTRICT COURTS* 185 (1990) (examining the tension between adjudication and administration because caseload management increasingly pressures courts to find ways to minimize decision times).

194. See *Zubulake II*, 216 F.R.D. at 290 (explaining that an “extraordinary step” such as the cost of restoration and search may be subject to cost-shifting in order to make inaccessible materials accessible (quoting TEX. R. CIV. P. 196.4)).

overall to adjudicate.¹⁹⁵ However, if a trial judge lacks the familiarity with computers and fails to understand the complexities of technology, it may be difficult to determine whether the electronic information is accessible or not.¹⁹⁶

In addition, a rigid rule fails to consider the totality of the circumstances and may provide more incentive for discovery abuse.¹⁹⁷ While the Federal Rules may limit unduly burdensome or expensive discovery, *Zubulake* narrows the burden analysis to cases where data is inaccessible.¹⁹⁸ Hence, requesting parties have free reign to cast a wide net during discovery requests.¹⁹⁹

Even though a clear test for cost-shifting may increase judicial efficiency, it does so at the expense of justice and may encourage requests without boundaries, which could stifle business.²⁰⁰ Indeed,

195. See Stephen D. Easton & Franklin D. Romines II, *Dealing with Draft Dodgers: Automatic Production of Expert Witness Reports*, 22 REV. LITIG. 355, 386 (2003) (noting that a clear and straightforward guideline under Rule 26 in the context of the work product doctrine avoids future battles regarding discovery and ultimately reduces discovery costs).

196. See John S. Beckerman, *Confronting Civil Discovery's Fatal Flaw*, 84 MINN. L. REV. 505, 566 (2000) (suggesting that many courts treat discovery problems leniently since judges in district courts generally spend only five percent of their time on discovery matters). Moreover, the lack of technical prowess in the judiciary may pose problems because it could unfairly provide an advantage to parties who misbehave, as judges devote minimal time to discovery issues. *Id.* at 567. See also Withers, *supra* note 58, at 2 (revealing that discovery management may include up to 93 percent of electronic discovery suggesting the proliferation of technology and the corresponding impact on the judicial branch). Furthermore, a survey conducted on behalf of the Federal Judicial Center determined that education and training of the judiciary regarding electronic discovery concerns is warranted. See JOHNSON ET AL., *supra* note 154 (describing the perceived need for further education of the judiciary regarding electronic discovery issues). But see James Boyle, *The Anatomy of a Torts Class*, 34 AM. U. L. REV. 1003, 1055-60 (1985) (convassing arguments for bright line rules and supporting the institutional competency philosophy because courts are uniquely able to resolve complex matters, respond to changing circumstances, and maintain objectivity during litigation).

197. See *McPeck v. Ashcroft*, 202 F.R.D. 31, 34 (D.D.C. 2001) (arguing that requiring restoration of backup tapes creates a settlement weapon to use against the producing party). For practical purposes, a corporate president would prefer to settle a lawsuit for \$100,000 rather than bear the costs of \$300,000 for restoring backup tapes. *Id.*

198. See *Zubulake I*, 217 F.R.D. at 318 (suggesting that courts shift costs to the requesting party only in cases where the electronic data is relatively inaccessible, such as with backup data).

199. See *infra* Part III (discussing how casting a wide net increases the chances of abuse in the discovery process).

200. See Debra Rosenberg, *Hard Pill to Swallow*, NEWSWEEK, Dec. 15, 2003, at 46 (indicating that the threat of litigation "hangs over every move" of professionals); see also Stuart Taylor Jr. & Evan Thomas, *Civil Wars*, NEWSWEEK, Dec. 15, 2003, at 45 (showing that society ultimately pays for litigation and that it paralyzes professionals and hinders competition because of the high costs). Indeed, to avoid litigation and excessive jury awards, corporations often settle. See Rubenstein, *supra* note 171, at 26 (discussing incentives to settle cases rather than face the boundless costs of litigation).

discovery comes at a great expense for both plaintiffs and defendants; the expense may be even more burdensome for the plaintiff who may not be able to afford the cost of litigation.²⁰¹ However, courts also need to recognize that judicial efficiency is not the sole criterion and that other costs may outweigh a bright-line rule. Limiting the opportunities to shift costs to the requesting party may improve the bargaining power of plaintiffs and result in unreasonably high litigation costs that undermine judicial efficiency in the long run.²⁰²

The Northern District of California has applied the *Zubulake* factors in a dispute between two corporations but fine-tuned its definition of inaccessible data.²⁰³ The tipping factor in *OpenTV v. Liberate Technologies*²⁰⁴ hinged on undue burden. In an effort to allocate costs proportionally, the court rejected a formalistic view of the inaccessibility test and applied the *Zubulake* test based on the totality of the circumstances.²⁰⁵ According to the court, the extraordinary steps necessary to retrieve electronic data requested rendered the request inaccessible, despite the fact that the definition of inaccessible from *Zubulake*²⁰⁶ only discussed forms of storage, not retrieval of information.²⁰⁷

201. See Brad M. Friedman, *Mass Products Liability Litigation: A Proposal for Dissemination of Discovered Material Covered by a Protective Order*, 60 N.Y.U. L. REV. 1137, 1140 (1985) (revealing the constraints on plaintiffs whose legal rights may be stifled because of the high cost of funding a lawsuit due to high discovery expenses); see also Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 L. & SOC'Y REV. 95, 97-100 (1974) (explaining the concept of one-shotters, parties who only occasionally utilize courts, and repeat players, parties who often engage in litigation over time, and the correspondingly higher costs and risks for the one-shotters). But see Taylor & Thomas, *supra* note 198, at 48 (providing a synopsis of sympathetic juries that have awarded plaintiffs up to \$28 billion for punitive damages against corporations).

202. See *infra* Part III.C and accompanying text (discussing how economic leverage forces unreasonable settlement); see also Taylor & Thomas, *supra* note 198, at 48 (explaining how "plaintiff-friendly" juries have the effect of increasing the number of lawsuits instigated by individuals which ultimately undermines judicial efficiency by clogging the courts).

203. See *OpenTV v. Liberate Tech.*, 219 F.R.D. 474, 478 (N.D. Cal. 2003) (finding that electronic data stored in a manner difficult to produce in usable form passes the hurdle of *Zubulake's* inaccessibility test and results in cost-sharing for the search and restoration of electronic source code).

204. *Id.*

205. See *id.* at 479 (warranting cost-shifting because the burden of extraction and copying the data is high and both parties are similarly situated, even though four of the seven factors weighed against cost-shifting during the dispute between two corporate parties).

206. Compare *Zubulake I*, 217 F.R.D. at 319 (including backup servers used for emergency purposes in its definition of inaccessible and considering the type of storage device to determine accessibility), with *OpenTV*, 219 F.R.D. at 478 (examining the method of extraction and the total burden on the producing party in order to determine accessibility, noting that the producing party needed to take extra steps to obtain electronic data and hence qualified as inaccessible).

207. See *OpenTV*, 219 F.R.D. at 477 (drawing similarities amongst backup tapes and

The court framed inaccessibility according to whether the data retrieval required excessive time and expense in order to produce the requested files, constituting an undue burden.²⁰⁸ Surprisingly, the cost of searching for data was included in the definition of “inaccessible” and the electronic discovery request was considered unduly burdensome.²⁰⁹ Consequently, the *OpenTV* application of the inaccessibility test analyzed whether retrieving data presented an undue burden in order to determine accessibility.

III. THE NEW RULE FROM *ZUBULAKE* CREATES INCENTIVES FOR ABUSE

The primary concern with the new inaccessibility test from *Zubulake* is that it limits a court’s ability to allocate costs and may result in an increase of speculative discovery requests that yield non-responsive information.²¹⁰ Prior to *Zubulake*, a discovery request that failed to particularize a basis for discovery was “extremely cumbersome and expensive” and thus an undue burden.²¹¹ For example, the failure to specify the type of memorandum or explain the basis for the belief that materials would be relevant would not raise a trial-worthy issue or justify permitting electronic discovery of a hard drive to find out whether a document was modified.²¹² However, *Zubulake* eliminates the factor examining the purpose in which the responding party keeps the data²¹³ and determines undue burden only after passing the threshold test of inaccessibility.²¹⁴ Requesting parties correspondingly have broad discretion in fashioning document requests.²¹⁵

the process of extracting source code where the ordinary organization of the electronic information in both cases results in difficult retrieval).

208. *See id.* (noting that 125-150 hours of work to extract source code requested by plaintiff, *OpenTV*, qualified as inaccessible, as the time was “unduly burdensome and potentially expensive”).

209. *See id.* at 479 (finding the expense involved in extracting and copying the source code warranted some cost-shifting).

210. *See Wagener, supra* note 5, at 1897 (discussing the reluctance to shift costs due to the unfair and wasteful nature of fishing expeditions).

211. *See Fennell v. First Step Designs, Ltd.*, 83 F.3d 526, 531-33 (1st Cir. 1996) (requiring that discovery expose a potential trial-worthy issue and affirming district court’s holding that Fennell insufficiently described her reason for accessing First Step’s hard drive as resulting in substantial costs and risks).

212. *See id.* at 533 (failing to show evidence of discoverable fabrication of “autodating” information embedded in material requested for production).

213. *See Zubulake I*, 217 F.R.D. at 321 (reasoning that the purpose for which a party keeps data is not relevant to the data’s accessibility).

214. *See id.* (discussing how accessibility guides the determination of undue burden).

215. *See Rosenthal, supra* note 73, at 37 (noting the limitations on cost-shifting correspondingly increases the breadth of information requests).

A. *Bright Line Rule Considers Legitimacy of Discovery Requests in Narrow Cases*

Prior to the bright line rule from *Zubulake*, courts analyzed the distinct facts of the case to allocate costs during electronic discovery disputes.²¹⁶ By conducting a cost-benefit analysis, courts allocated costs in proportion to the utility of the information requested.²¹⁷ In *McPeck v. Ashcroft*,²¹⁸ the court held that usefulness of the information requested should justify the cost incurred.²¹⁹ Similarly, the court in *Byers v. Illinois State Police*²²⁰ looked at usefulness, as defined by relevance, and determined that a motion to compel would be granted in cases where the electronic information is related to an issue on trial.²²¹ In each case, and particularly emphasized in *Stallings-Daniel v. Northern Trust Co.*,²²² speculation alone is not enough to compel discovery, otherwise it would be an undue burden without justifiable benefit.²²³ However, because data was accessible in these aforementioned cases, these overbroad requests might be permitted under the *Zubulake* rationale despite the undue burden.²²⁴

B. *Triggering Change: Creating Local Rule Alternatives and Modifying Business Behavior*

Zubulake may increase incentives to make data inaccessible and may alternatively undermine judicial efficiency through increased litigation because of the power advantage given to requesting parties.

216. See *Rowe Entm't, Inc. v. William Morris Agency, Inc.*, 205 F.R.D. 421, 428-32 (S.D.N.Y. 2002) (examining the factual circumstances based on flexible factors).

217. See *Ruzicho & Jacobs*, *supra* note 98, at 2 (describing how to determine whether discovery disproportionately burdens the producing party compared to the value of the requested material).

218. 202 F.R.D. 31 (D.D.C. 2001).

219. See *id.* at 34 (applying the economic principle of “marginal utility” to discovery costs in that the greater likelihood that a backup tape contains relevant information, the greater justification to shift costs to the requesting party).

220. No. 99 C8105, 2002 WL 1264004, at *14 (N.D. Ill. June 3, 2002).

221. See *id.* at *14 (granting motion to compel evidence for requested documents likely to be responsive).

222. No. 01 C2290, 2002 WL 385566, at *1 (N.D. Ill. Mar. 12, 2002).

223. See *id.* at *1 (holding that mere conjecture that data relates to an issue at trial is not enough to compel discovery of electronic data); *McPeck*, 202 F.R.D. at 34 (noting that a “likelihood of finding something” does not outweigh the risk of a costly search).

224. See *Stallings-Daniel*, 2003 WL 385566, at *1 (ruling that the plaintiff failed to show a compelling need to justify the cost of production of e-mail chains and other historical information embedded within documents that might have revealed pre-discovery tampering); *McPeck*, 202 F.R.D. at 32 (disallowing broad discovery under an undue burden test where the type of data requested included backup tapes of e-mails deleted by the user); *Byers*, 2002 WL 1264004, at *11 (requesting data from old e-mails generated from an e-mail program no longer in use at the company disproportionately burdened producing party).

Consequently, a potential trend might arise in state courts that would shift costs back to the requesting party for electronic information not kept in the usual course of business and could inspire a change in the rules.²²⁵ Changes in local rules of practice and procedure often give rise to amendments to the Federal Rules, as state courts serve as a proving ground for judicial change.²²⁶

If the *Zubulake* rule becomes the norm²²⁷ and requires data to be inaccessible before the court will consider shifting costs to the requesting party during electronic discovery, this may create incentives²²⁸ to make data more inaccessible because the clear rule hinges on accessibility. Corporate leaders may point to the excessive costs of retrieving emergency data from some far-off data center with backup servers in India²²⁹ as an excuse for delay and as an unfounded justification for cost-shifting.²³⁰ Even if regulations require document retention policies that store electronic documents longer,²³¹ the regulations apply to records, not all forms of data.²³² This may

225. See THOMAS Y. ALLMAN, NATIONAL CENTER FOR STATE COURTS GENERAL COUNSEL COMMITTEE, A PROPOSED MODEL FOR STATE RULES RE: ELECTRONIC DISCOVERY n.2, at http://www.kenwithers.com/articles/rules_debate/model_state_rule.html (Nov. 15, 2001) (on file with The American University Law Review) (suggesting that states such as Texas have appropriately addressed the unique concerns of electronic discovery costs by shifting costs for requests outside the scope of ordinary business).

226. See *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (noting “one of the happy incidents of the federal system [is] that a single courageous State may, if its citizens choose, serve as a laboratory . . .”).

227. Searching for clarity on how to deal with electronic discovery disputes, several district courts adopted the *Zubulake* approach when analyzing whether or not to shift costs to the requesting party. See, e.g., *Chimie v. PPG Indus., Inc.*, 218 F.R.D. 416, 422 (D. Del. 2003) (citing *Zubulake* factors to determine whether to shift burden of production costs during electronic discovery); *Thompson v. United States Dep’t of Hous. and Urban Dev.*, 219 F.R.D. 93, 98 (D. Md. 2003) (applying *Zubulake* test to determine whether to categorize data as inaccessible and subsequently analyze burden).

228. See *infra* note 234 and accompanying text.

229. See Stephanie Overby, *Inside Outsourcing in India*, CIO MAG., June 1, 2003, at <http://www.cio.com/archive/060103/outsourcing.html> (on file with the American University Law Review) (estimating from 1/2 to 2/3 of Fortune 500 companies outsource technical support to India, demonstrating global reach of electronically stored information).

230. See Rosenthal, *supra* note 73, at 37 (suggesting that because corporations may strategically restrict “accessibility” to effectively shift costs to the plaintiff, attorneys should study the *Zubulake* decisions in order to assess the risk of cost-shifting); see also STEPHEN L. CARTER, INTEGRITY 4 (1996) (preaching that immorality in the market may be due to the American desire to win rather than to play by the rules).

231. Cf. Final Rule: Retention of Records Relevant to Audits and Reviews, Securities and Exchange Commission, 17 C.F.R. § 210 (2003) (citing the requirement that accounting firms retain materials from audits of client financial statements for seven years as an example of record retention regulations).

232. See Peter Sloan, *Retention, Preservation, and Spoliation of Electronic Data*, GLASSER LEGALWORKS, WL EDRMS-GLASS-CLE 24, 25 (2002) (explaining that electronic data retention may not require retaining all data unless necessary for legal or business purposes).

encourage prompt removal of outdated files as long as files are not deleted out of bad faith or for purposes of litigation.²³³ However, the mere existence of an incentive to purposefully make data inaccessible does not guarantee that the court will shift costs to the opposing side, as the benefit to the discovering party may nonetheless outweigh any perceived burden of retrieval.²³⁴

In the interest of efficiency and in response to common discovery issues, some states have created local rules to address cost-shifting during electronic discovery and require that parties discuss electronic discovery problems during the pre-trial conference as set forth in local rules.²³⁵ The Federal Rules do not specify that litigants need to include electronic discovery issues in the Rule 26(f) conference.²³⁶

In addition, some state rules may make cost-shifting mandatory for accessing data outside the course of ordinary business.²³⁷ For example, in Texas, there is an express provision governing electronic discovery that limits discovery to electronic documents kept in the ordinary course of business; otherwise, the costs shift to the

233. See *id.* (noting that by purging documents, companies may reduce storage and retrieval costs of information assets). But see *Simon Prop. Group v. mySimon, Inc.*, 194 F.R.D. 639, 640 (S.D. Ind. 2000) (permitting the discovery of “deleted” computer records).

234. See Rosenthal, *supra* note 73, at 33 (demonstrating that adversaries may try to fool judges and opposing counsel into believing that large volumes of data are unmanageable); see also *Xpedior Credit Trust v. Credit Suisse First Boston, Inc.*, 309 F. Supp. 2d 459, 465-67 (S.D.N.Y. 2003) (finding that, despite the inaccessibility of the information requested, there was no justification to shift the costs to the requesting party when compared to the total monetary stake under the *Zubulake* test).

235. See Redgrave, *supra* note 21, at 211 (citing U.S. DIST. CT. WYO. L. R. 26.1(d)(3)(a) and U.S. DIST. CT. ARK. L. R. 26.1 to compare local rule requirements that require parties to clarify what will be at issue during electronic discovery to federal rules that lack such explicit requirements to resolve electronic discovery disputes at the required federal Rule 26(f) pre-trial conference). As Redgrave points out, the rule in Wyoming federal courts indicates that parties must meet and confer about matters related to computer-based information, e-mail information, deleted information, and back-up data during the federal Rule 26(f) conference. *Id.* Likewise, he notes that the Arkansas rule requires parties to include in the pre-trial conference report filed pursuant to federal Rule 26(f) “[w]hether any party will likely be requested to disclose or produce information from electronic or computer-based media” *Id.* at 211 (citing U.S. DIST. CT. ARK. L. R. 26.1). See also *In re Bristol-Myers Squibb*, 205 F.R.D. 437, 444 (D.N.J. 2002) (discussing the importance of having a conference to prevent problems with electronic discovery), *construed in* Redgrave, *supra* note 21, at 211.

236. See Schultz & Keena, *supra* note 170, at 25-26 (noting the differences between local rules and the default pre-trial conference requirement under Rule 26(f)).

237. See, e.g., TEX. R. CIV. P. 196.4 (requiring the requesting party to “specifically request production of electronic or magnetic data and specify the form in which the requesting party wants it produced”); MISS. R. CIV. P. 26(b)(5) (stating that “the court may also order that the requesting party pay the reasonable expenses of any extraordinary steps required to retrieve and produce the information”).

requesting party.²³⁸ By contrast, where electronic materials are not available in the ordinary course of business, yet the court finds there is a sufficient need to compel production, Texas shifts the cost of production to the requesting party.²³⁹

The discretionary rules in federal courts governing cost-shifting empower judges to decide where to allocate burden, even in cases outside the scope of ordinary business.²⁴⁰ By contrast, the Texas rule requires courts to shift costs if the data is not available in the ordinary course of business.²⁴¹ The Texas rule that insists on cost-shifting where requesting parties seek electronic documents not available in the ordinary course of business would trump the *Zubulake* test for state purposes.²⁴² The Texas rule offers a realistic approach that anticipates the prohibitive costs inherent in electronic discovery for files requested outside the scope of ordinary business and offers a better guideline based on business purposes of records rather than on the state of the information.²⁴³ Other states address electronic discovery by creating local rules that shift costs when the perceived benefit fails to justify imposing such high costs during discovery.²⁴⁴ By

238. See, e.g., TEX. R. CIV. P. 196.4 (indicating that the responding party must produce electronic data “responsive to the request” and “reasonably available to the responding party in its ordinary course of business”). By contrast, the Federal Rules of Civil Procedure do not include an express provision limiting requests for electronic files kept in the usual course of business. See FED. R. CIV. P. 34(a) (allowing requests for the production of documents and things regardless of whether kept during the ordinary course of business); see also FED. R. CIV. P. 34(b) (specifying that a party may produce documents as kept in the usual course of business or may organize and label files according to the categories of the requesting party).

239. See TEX. R. CIV. P. 196.4 (shifting costs to the requesting party for electronic evidence beyond the regular course of business); see also Thomas Y. Allman, *The Case for a Preservation Safe Harbor in Requests for E-Discovery: Despite the Courts’ Increased Attention to Dragnet Requests for Production of Electronic Materials, the Scope of Preservation Should Be Addressed*, 70 DEF. COUNS. J. 417, 417 (2003) [hereinafter *Safe Harbor*] (suggesting to the Federal Rules advisory committee that the Texas rule is working to eliminate abusive requests for electronic materials).

240. See William T. Garcia et al., *Electronic Discovery: Litigation and Antitrust Enforcement in a Digital Age*, 20 ACCA DOCKET 76, 82 (2002), available at http://www.law.com/special/supplement/e_discovery/litigation_enforcement.html (June 18, 2002) (on file with the American University Law Review) (providing commentary from Kenneth Withers, an expert who conducts studies for the Federal Judiciary Center regarding electronic discovery, who noted that a judge may consider the cost of retrieving information, the burden on the business, and the direct relation of the information to the legal issues of the case, instead of requiring document discovery or production simply because a document falls legally within the scope of discovery).

241. TEX. R. CIV. P. 196.4.

242. *Id.*

243. See *Safe Harbor*, *supra* note 239, at 417 (explaining that the party seeking discovery may obtain information outside the bounds of ordinary business under TEX. R. CIV. P. 196.4, where sufficient necessity exists yet, must pay for the costs, including the attorney costs).

244. See Miss. R. CIV. P. 26(b)(5) (noting Mississippi includes a local rule that may

focusing on business requirements rather than technical requirements, these local and state rule alternatives solve the problem of burdensome electronic discovery in a practical manner.²⁴⁵

C. *Straining Resources and Inducing Settlement*

The prohibitive costs of discovering electronic information from unduly broad data requests may encourage unnecessary settlements.²⁴⁶ When a requesting party seeks electronic data, this strains IT staff resources, and the expense of performing the task of retrieval may force settlement.²⁴⁷ Moreover, the producing party may not use the tedious process of searching for records trapped in various locations and formats as a shield during litigation.²⁴⁸

Most cases end without going to trial²⁴⁹ and settle without substantial discovery.²⁵⁰ Discovery costs may create unnecessary

shift costs to the requesting party where the request is beyond the ordinary scope of business or fails to specify the format of the electronic information).

245. *Id.*

246. See Rubenstein, *supra* note 171, at 26 (finding the threat of increasingly high discovery costs related to locating and retrieving electronic files may include seven-figure price tags, thereby triggering otherwise unnecessary settlements); see also Meade W. Mitchell, *Discovery Abuse and a Proposed Reform: Mandatory Disclosure*, 62 MISS. L.J. 743, 764 (1993) (showing that parties can gain economic leverage by using discovery requests that force settlement); Charles Silver, *What We Know and Do Not Know About the Impact of Civil Justice on the American Economy and Polity: Does Civil Justice Cost Too Much*, 80 TEX. L. REV. 2073, 2093 (2002) (demonstrating that litigants use discovery tools to harass opponents with burdensome requests); COMMITTEE FOR ECONOMIC DEVELOPMENT, *BREAKING THE LITIGATION HABIT: ECONOMIC INCENTIVES FOR LEGAL REFORM 5* (2000), available at http://www.ced.org/docs/report/report_legal.pdf (reporting that discovery encompasses at least eighty percent of litigation costs).

247. See CIO CHALLENGE, *supra* note 127, at 6 (suggesting that the prohibitive cost of searching for files not catalogued in *Linnen v. A.H. Robins*, No. 97-2307, 1999 WL 462015, at *4 (Mass. Super. Ct. June 16, 1999), a products liability case, forced settlement because the requesting party sought to search 823 backup tapes for e-mails relating to fifteen employees at a cost of over one million dollars to the producing party).

248. See *Linnen*, 1999 WL 462015, at *4 (noting that producing parties absorb retrieval costs during discovery, despite the burdensome process and unmanageable nature of the technology).

249. According to recent statistics, only 6,015 civil cases ended in trial in the U.S. District Courts compared to the 259,537 cases terminated in 2002. LEONIDAS RALPH MECHAM, 2002 ANNUAL REPORT OF THE DIRECTOR, U.S. DISTRICT COURTS—CIVIL CASES COMMENCED, TERMINATED, AND PENDING DURING THE 12-MONTH PERIOD ENDING SEPT. 30, 2002, 126 tbl.C-1, available at <http://www.uscourts.gov/judbus2002/appendices/c01sep02.pdf> (on file with the American University Law Review); LEONIDAS RALPH MECHAM, 2002 ANNUAL REPORT OF THE DIRECTOR, U.S. DISTRICT COURTS—CIVIL AND CRIMINAL TRIALS COMPLETED, BY DISTRICT, DURING THE 12-MONTH PERIOD ENDING SEPT. 30, 2002 162 tbl.C-7, available at <http://www.uscourts.gov/judbus2002/appendices/c07sep02.pdf> (on file with The American University Law Review) (revealing a 2.3 percent trial rate in the 12-month period ending September 30, 2002 by extrapolating the total number of civil cases terminated in 2002, which amounted to 259,537, compared to 6,015 total civil trials).

250. See Frank H. Easterbrook, *Discovery As Abuse*, 69 B.U. L. REV. 635, 637 (1989) (revealing a disheartening finding that most cases end in settlement and that parties

pressure for parties to settle, regardless of the merits. Parties often inflate claims and distort settlement value,²⁵¹ effectively using settlement as a weapon.²⁵² Because settlement may not be ideal,²⁵³ necessary alternatives afford litigants a way to resolve disputes in a more balanced manner.²⁵⁴ As a last resort, a court may intervene and grant a protective order if a plaintiff has a bad motive during settlement.²⁵⁵

Despite the producing party's reduced ability to shift costs to the requesting party and the increased incentive to settle during electronic discovery disputes, the *Zubulake* limitation may provide incentives for companies to create more organized business practices and processes.²⁵⁶ The party with the most efficient information system can ably respond to discovery demands because search and retrieval of electronic files will be quick and effortless, thus reducing the chance of unnecessary settlement.

who threaten discovery, but never use it, gain the most during settlement negotiations).

251. See Kevin C. McMunigal, *The Costs of Settlement: The Impact of Scarcity of Adjudication on Litigating Lawyers*, 37 UCLA L. REV. 833, 864-65 (1990) (noting how settlement creates pressures to inflate claims).

252. See, e.g., *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 741 (1975) (using discovery for *in terrorem* increment of settlement value); *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1298 (7th Cir. 1995) (suggesting "blackmail settlements" may force defendants to settle weak claims to avoid the threat of risky jury verdicts); see also *Hearings on H.R. 417 Before the Subcomm. on Telecomm. and Fin. of the House Comm. on Energy and Commerce*, 103d Cong. 118, 120 (1994) (testimony of Donald C. Langevoort, Lee S. and Charles A. Speir Professor of Law, Vanderbilt Univ. School of Law) (arguing that unyielding discovery costs create incentives to settle meritless claims to avoid expenses of discovery). But see *Silver*, *supra* note 246, at 2094 (arguing discovery costs increase based on complexity of case and case type and not due to abusive behavior to drive settlement).

253. See *Alschuler*, *supra* note 190, at 1821-26 (suggesting settlement deprives society of the benefits accompanying public adjudication).

254. See *Easterbrook*, *supra* note 250, at 646-47 (revealing an idea of loser-pays system as an alternative to settlement to encourage more meritorious lawsuits because it discourages frivolous lawsuits if the losing party has to pay); Charles B. Craver, *The Use of Non-Judicial Procedures to Resolve Employment Discrimination Claims*, 11 KAN. J.L. & PUB. POL'Y 141, 165 (2001) (offering an alternative to settling meritless claims by using administrative proceedings to resolve employment disputes to avoid costly litigation).

255. See Ellen M. Martin et al., *Discovery Issues in Employment Discrimination Litigation*, 696 PLI/LIT 527, 557 (2003) (describing judicial intervention as a tool to protect parties where the plaintiff has the motive to pressure the defendant into a settlement).

256. See Henry H. Perritt, Jr., *Electronic Records Management and Archives*, 53 U. PITT. L. REV. 963, 986-87 (1992) (suggesting document management systems may improve the ability to search and retrieve files so long as properly implemented and maintained).

D. Updating Data Management Practices and Processes

Zubulake may force corporate counsel to reorganize document management policies and procedures because producing parties accessing multiple information systems will likely absorb the discovery costs.²⁵⁷ Counsel must weigh the need for electronically discoverable information against the cost of retrieval, review, and privacy.²⁵⁸ Since information technology upgrades and document retention practices already implemented are finally boosting productivity, there is an additional advantage to create a more organized electronic filing system.²⁵⁹ This will likely result in financial savings beyond litigation expense reduction and will improve the efficiency of the workforce because data will be easier to access.²⁶⁰ Moreover, understanding weak links in an electronic system will enable corporate counsel to better predict litigation costs and needs.²⁶¹

A well-organized document management system will ultimately reduce litigation expenses through more efficient document retrieval during discovery requests.²⁶² Accordingly, the most effective data management system supports quick and accurate retrieval of electronic information without compromising the structure of the original file.²⁶³ By creating a data management strategy, collaborating

257. See *supra* Part II.B (hypothesizing that the inaccessibility test deters companies with weak document management practices from shielding information systems from discovery because *Zubulake* precludes cost-shifting for accessible yet complex data).

258. See Redgrave, *supra* note 21, at 209-11 (revealing the inherent judicial power to shift costs in cases where the burden of discovery outweighs benefit). Counsel should bear in mind, costs extend beyond litigation expenses and include exposure to privileged information, and also include costs related to the technical expertise required to access data. *Id.*

259. See *Productivity*, *supra* note 5, at 62-63 (finding that information technology investment reaps its benefits years after implementation).

260. See Sidney A. Shapiro, *Scientific Issues and the Function of Hearing Procedures: Evaluating the FDA's Public Board of Inquiry*, 1986 DUKE L.J. 288, 325 (1986) (highlighting that accessibility influences the ways in which agencies organize and maintain records and will improve agency efficiency through easier access to documents); see also *Productivity*, *supra* note 5, at 62-63 (suggesting IT has an impact on productivity in that American labor productivity increased at an annual rate of 3.4% since 2000, attributable to the sharp increase in technology investment).

261. See Burke & Kummer, *supra* note 60, at 19-20 (finding that ready access to computer records increases the ability to predict exposure and may save corporate counsel millions of dollars by avoiding judgments, legal fees, and unnecessary settlements).

262. See J. TIMOTHY SPREHE & HUMMINGBIRD LTD., ENTERPRISE RECORDS MANAGEMENT STRATEGIES S6-S7, at http://www.kmworld.com/publications/white_papers/records/humm-ingbird&sprehe.pdf (Sept. 1, 2003) (on file with the American University Law Review) (discussing how records management strategies may help reduce legal and financial risks and liabilities).

263. See D. Chad McCoy, *A Long-Term Data Management Strategy Reaps Benefits*, 4 ANDREWS E-BUS. L. BULL. 1, 3 (2003) (suggesting that document retrieval and production requires long-term retention planning between the IT department and general counsel so that information garnered is in a usable format).

with business managers and information technology staff, and establishing policies and procedures for document retention, corporate counsel may help control litigation costs by reducing the burden on staff to search, retrieve, and use electronic files.²⁶⁴ Understanding where there are risks within electronic records will further assist corporate counsel in managing costs.²⁶⁵ Because the *Zubulake* rule confines cost-shifting to inaccessible data, corporate counsel armed with knowledge about data risks and document retention requirements can better prepare for discovery requests and forecast burdens.

Organizations need to maintain e-mail and other records for a certain period of time. This period of time and management of records is called document retention.²⁶⁶ Various document and record retention regulations exist that govern different industries.²⁶⁷ Document retention policy requirements may vary according to

264. See Daryll R. Prescott et al., *Electronic Data Balancing Act: Preserve or Delete? Destroying Electronic Data Relevant To a Case Can Result in Severe Sanctions, But Total Preservation May Also Cause Harm*, NAT'L L.J., Aug. 17, 1998, at B7 (involving business and IT staff to plan for data preservation based on the existing IT infrastructure and business processes necessary for operations may reduce overall costs); CIO CHALLENGE, *supra* note 127, at 4-5 (explaining the competing goals of IT personnel and business executives that results in dangerous electronic records management practices for companies whose IT personnel fail to collaborate with business managers on record management systems). IT personnel aim to create an inexpensive temporary copy of data to restore in case of failure and not for the purpose of retrieval, whereas businesses seek to retain files for routine search, discovery and retrieval. *Id.*

265. See Rae Cogar & R. Thomas Howell, *Retention: More Important Than Ever. In the Name of Compliance, BLT Presents Another Perspective on Dealing with Records*, 13 BUS. L. TODAY 44, 49 (2003) (suggesting that corporate counsel should reduce risks, protect critical business assets, and respond to demands of discovery by monitoring, auditing, and enforcing record management policies and procedures).

266. See generally Redgrave, *supra* note 21, at 206-07 (revealing the importance of developing a records management program and offering document retention policy guidelines).

267. See FEDERATION OF TAX ADMINISTRATION, MODEL RECORDKEEPING AND RETENTION REGULATION: A REPORT OF THE STEERING COMMITTEE TASK FORCE ON EDI AUDIT AND LEGAL ISSUES FOR TAX ADMINISTRATION 3 (Mar. 1996), available at <http://www.taxadmin.org/fta/modelreg.pdf> (on file with the American University Law Review) (describing requirements of IRS regulations for retaining electronic records containing tax data drawing on IRS Revenue Procedure 91-59 governing automated recordkeeping and accounting systems); see also Patrick R. Grady, *Discovery of Computer Stored Documents and Computer Based Litigation Support Systems: Why Give Up More Than Necessary*, 14 J. MARSHALL J. COMPUTER & INFO. L. 523, 532-33 n.50 (1996) (showing distinctions between industries that require ten to forty years for record retention such as Banks and Banking, Business Credit and Assistance, Labor, and Emergency Management and Assistance and those that require a length of six years for record retention such as Commodity and Securities Exchange, Labor, Mineral Resources, Money and Finance, and Public Health); see generally OFFICE OF THE FEDERAL REGISTER NATIONAL ARCHIVES AND RECORDS ADMINISTRATION, GUIDE TO RECORD RETENTION REQUIREMENTS (Jan. 1, 1994) (noting record retention schedules with triggering events that impact required length of record retention).

industry and function of the department, but in general, courts require a record retention policy to be reasonable.²⁶⁸ For example, a company may not do indirectly what it cannot do directly by delegating document retention policies to a third party to avoid having to produce the documents upon request during litigation.²⁶⁹ In addition, an organization may not claim privilege as a defense for producing electronic data even though retrieving privileged files may involve the added cost of a protective order for opposing counsel to access privileged electronic files.²⁷⁰

While document retention regulations may not distinguish between electronic records and paper files, the increased capacity for data storage renders electronic documents less expensive to store than traditional documents.²⁷¹ However, corporate counsel may not agree that reduced storage price demands increased information storage because this would keep potential “smoking guns”²⁷² around that would be otherwise eliminated if the usual retention practices were followed.²⁷³ “Smoking guns” might be embedded deep within

268. See *Lewy v. Remington Arms Co.*, 836 F.2d 1104, 1112 (8th Cir. 1988) (requiring document retention policies to be adjusted to preserve records the company believes may be subject to discovery requests); see also Grady, *supra* note 267, at 532-33 n.50 (listing different document retention policies according to industry and function).

269. See *S. Diagnostic Assoc. v. Bencosme*, 833 So. 2d 801, 802 (Fla. Ct. App. 2002) (“United Auto cannot avoid the mandate of *Boecher* by employing Southern Diagnostic in an attempt to shield itself from inquiries about its relationship with its experts.”).

270. See *Playboy Enter. v. Welles*, 60 F. Supp. 2d 1050, 1055 (S.D. Cal. 1999) (permitting expert who specialized in the field of electronic discovery to review electronic files despite exposure to privileged information because the benefit of reviewing files coupled with the protective order ensuring confidentiality outweighed the burden of exposing privileged information to expert).

271. See Christopher V. Cotton, *Document Retention Programs for Electronic Records: Applying a Reasonableness Standard to the Electronic Era*, 24 J. CORP. L. 417, 418 (1999) (arguing that the “tremendous capacity and efficiency” available by electronic means should drive longer retention periods because of the reduced costs).

272. See Elissa R. Hoffman, Note, *Smoking Guns, Stray Remarks, and Not Much In Between: A Critical Analysis of the Federal Circuits’ Inconsistent Application of the Direct Evidence Requirement in Mixed-Motive Employment Discrimination Cases*, 7 SUFFOLK J. TRIAL & APP. ADVOC. 181, 197 (2002) (defining “smoking guns” as documents that could determine the outcome of a case).

273. See Robins, *supra* note 1, at 423 (alluding to safeguards corporate counsel can implement to help reduce the burden of electronic document retrieval such as throwing away and destroying documents as part of a routine document management policy in the course of ordinary business rather than keeping unnecessary documents). *But see* *Danis v. USN Communications, Inc.*, No. 98 C7482, 2000 WL 1694325, at *5 (N.D. Ill. Oct. 23, 2000) (finding culpable conduct where the defendant, as Chief Executive Officer, had the authority and responsibility to implement document management procedures, delegated the function to someone who lacked experience, and failed to ensure that his company properly adhered to the document management policy).

old computer systems that are difficult to access, but are not inaccessible.²⁷⁴

Further, the hidden costs of old computer systems involve litigation expenses that would not have to be made were it not for faulty document retention practices.²⁷⁵ By strategizing a solution to information technology infrastructure concerns through a total data preservation strategy, companies can reduce the amount of data stored and reduce costs.²⁷⁶ Coordinating internal efforts amongst various business departments will ensure better document management.²⁷⁷ Corporate counsel can use technology to assist in record retention and reduce litigation expenses.²⁷⁸ The additional benefit of organized data management includes the reward of productivity improvements.²⁷⁹ Historically, the need to compete globally forced business process improvements, ultimately triggering

274. See Robins, *supra* note 1, at 415 (listing examples of complex electronic data such as hidden files that do not appear when a document is printed, system history that records when a document was accessed and edited, and source code “genealogy” that tracks amendments and deletions to computer software).

275. See Rosenthal, *supra* note 73, at 32, 35 (indicating that many companies use a mix of new and old technologies and will bear the costs of retrieving data from “legacy systems,” a term for old computer systems); see also M. Lewis Kinard, *Beware the Underlying Costs of Using Dated Technology*, N.Y.L.J., July 21, 2003, at T3, available at <http://www.law.com/servlet/ContentServer?pagename=OpenMarket/Xcelerate/Preview&c=LawArticle&cid=1058416408946> (last updated Aug. 14, 2003) (on file with the American University Law Review) (suggesting that companies pay hidden costs by not upgrading information systems to newer and easier to access technologies although the upfront cost of implementing the new software systems requires initial investment); Redgrave, *supra* note 21, at 204 (explaining the cost of doing business in the computer age falls on the producing party).

276. See Prescott, *supra* note 264, at B7 (reducing the amount of data preserved requires an understanding of technology infrastructure and ownership interests of the business managers responsible for the information within the databases).

277. See Redgrave, *supra* note 21, at 207 (proposing that an electronic records management program should include: training management about document retention in the ordinary course of business; creating practices and customs for individual business units geared to business needs; setting limits and communication policies about the use of e-mail and other technology systems; implementing policies and procedures with an understanding of how business units work together to preserve data; and increasing awareness of how data preservation will impact current and future litigation); MICHAEL R. OVERLY, E-POLICY: HOW TO DEVELOP COMPUTER, E-MAIL, AND INTERNET GUIDELINES TO PROTECT YOUR COMPANY AND ITS ASSETS 91-96 (1999) (recommending six essentials to every good corporate technology-use policy including: (1) eliciting an understanding that the computer belongs to the business; (2) explaining privacy interests; (3) explaining what types of monitoring will occur; (4) emphasizing to use care when drafting e-mails; (5) explaining that employees must avoid inappropriate content; and (6) requiring sign-off on computer and e-mail-use policy).

278. See Ruth A. Tressel & Daniel J. Noonan, *Using Technology to Fend Off Future Legal Crises*, 21 ACCA DOCKET 87, 97 (2003) (showing that new technologies can help counsel isolate relevant electronic files to ensure speedy investigation).

279. See *Productivity*, *supra* note 5, at 61 (suggesting that productivity improvements are finally coming to fruition).

better data management in order to efficiently operate and retrieve information.²⁸⁰

Despite some process improvements, the reality of business information systems and document retention policies today is disorganized.²⁸¹ Business executives do not know how to search for information and need to rely on the information technology manager to retrieve, maintain, archive, and be in command of the information.²⁸² Additionally, there is a general reluctance by business managers to deal with litigation strategies for electronic discovery because of their lack of awareness of how technology works.²⁸³

The global reach of information technology and the corresponding document management systems may involve privacy laws outside of the United States. In addition, it could put a further damper on maintaining records and managing the costs of electronic discovery.²⁸⁴ When developing electronic document retention policy

280. See James Flanigan, *Should We Fear High-Pay Job Shift?*, LA TIMES, June 22, 2003, at C1 (explaining the need to globalize information support by moving jobs overseas for businesses to remain competitive in the market-driven economy). Standardizing document management practices and ensuring worldwide employees can easily access, exchange, and produce files offers a business challenge but also a discovery challenge in order to manage the costs of accessing electronic data in worldwide locations. *Id.* See also *Chimie v. PPG Indus., Inc.*, 218 F.R.D. 416, 421-23 n.7 (D. Del. 2003) (involving a potential cost-shift for a review of technology in European offices dating back to 1981); David M. Hudanish, *Disaster Recovery and Business Continuity in an Evolving Regulatory Framework*, 767 PLI/PAT 633, 640 (2003) (suggesting stringent European data protection legislation requires mandatory compliance with standards for disaster recovery planning and business continuity practices which may impact how to conduct electronic discovery overseas).

281. See Heidi L. McNeil & Robert M. Kort, *Discovery of E-Mail and Other Computerized Information*, ARIZ. ATT'Y, Apr. 1995, at 18 (arguing that large companies often fail to organize computer files in a coherent fashion, fail to implement a formal document retention policy, and lack a catalogued system for backup files, and that users within the companies do not properly organize files, resulting in a burdensome task of sifting through disorganized data when served with discovery requests). However, after the Enron debacle and resulting legislation, the Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002), business organizations care much more about information management techniques because of the increased attention to good-faith retention policies. See Daniel E. Toomey & Tamara M. McNulty, *Sarbanes-Oxley: How It Will Affect Contractors and Sureties*, 23 CONSTR. LAW. 32, 38 (2003) (suggesting investment in systems and policies or electronic document retention will prevent greater costs and problems in the future in the event of litigation or government investigation).

282. See Jerold S. Solovy & Robert L. Byman, *Digital Discovery*, NAT'L L.J., Dec. 27, 1999, at A16 (noting that business executives may lack the expertise needed to search and locate electronic files, particularly for data residing in older computers and backup files).

283. See Ashby Jones, *What a Mess! For Corporations, Pileup of Electronic Data Could Be Trouble Waiting to Happen*, NAT'L L.J., Dec. 2, 2002, at C6 (revealing that many companies are unwilling to confront and understand technology, still operate departments as if still paper-based, and are generally uncomfortable with electronic discovery requests).

284. See Julius Melnitzer, *Keeping Track of the Invisible Paper Trail: What Legal*

guidelines, corporations need to consider the international ramifications and how to effectively implement such policies.²⁸⁵ Furthermore, companies who seek to play fair and maintain moral standards will be better off by creating document retention strategies that do not compromise corporate integrity.²⁸⁶ Companies across most industries must retain electronic files for the required length of time to conform to regulations.²⁸⁷ Information technology departments may retain electronic files for longer than necessary because of a misunderstanding regarding the impact of keeping stale documents around, thus spawning a need for legal departments and information technology departments to coordinate procedures and practices regarding the duration of document retention.²⁸⁸

CONCLUSION

As a result of the *Zubulake* decision, the cost of electronic discovery is less likely to shift to the requesting party, adding substantial burden to the litigation process. Cost-shifting will be limited at the expense of fairness in litigation. In the end, the increased economic leverage gained by requesting parties during discovery will only add to the costs society must pay to support such litigious behavior. Management of costs in electronic discovery should not evolve to a rule based on inaccessibility just because it may increase judicial efficiency. A practical approach would be to question whether electronic discovery requires an extraordinary step beyond the

Departments Can Learn from Boeing's Experience, CORP. LEGAL TIMES, Feb. 2003, at 15, available at <http://www.cltmag.com/editorial/technology/feb03.cfm> (on file with the American University Law Review) (exemplifying electronic data retrieval problems faced by large global corporations that operate fragmented technology systems scattered throughout the world through the Boeing case study). Dealing with global offices may require a difference level of review for privileged information in the United States as compared with the European Union. *Id.*

285. See Kathleen M. Porter et al., *Work Station or Purgatory? Steps Toward a Company Policy on E-mail and Using the Net*, 11 BUS. L. TODAY 59, 59-60 (2002) (suggesting that electronic communications program should include: a written policy about personal and professional use of e-mail and the Internet; employee education about how to properly use and the risks of misuse of technology; mechanisms to reduce the company's liability relating to employee's use of technology; and procedures that enable auditing the electronic communications program).

286. See Rosenthal, *supra* note 73, at 33-34 (highlighting that data deletion and the failure to implement an effective document retention policy may result in sanctions and an instruction to the jury to infer that the documents were purposefully deleted).

287. See Grady, *supra* note 267, at 532-33 n.50 (listing required duration of record retention by CFR statute title).

288. See Prescott, *supra* note 264, at B7 (noting the competing interests of IT personnel who perceive data storage costs as low and who focus on the *form* of data preserved and general counsels' concern with high costs of discovery and unnecessary litigation liability as an aftereffect of preserving too much data).

ordinary course of business and to look at cost-shifting based on the totality of the circumstances. State and local rules offer a sensible alternative and provide for the discovery of electronic information only if it is kept in the ordinary course of business. Moreover, local rules anticipate the need to identify electronic discovery issues early during the pre-trial conference.

The potential impact of *Zubulake* may encourage broad requests during electronic discovery and thus will spark much-needed restructuring of information systems practices and processes in order to avoid unnecessary risk. Information technology departments across the country will therefore be required to reorganize practices and processes in order to reduce litigation costs. A carefully crafted data management plan will ensure easy accessibility to information and will enable corporate counsel to better predict litigation costs to avoid unnecessary settlement.

A more flexible threshold test that takes care to consider the equities of the case rather than the format of the file squares with the interests of justice. One of the obvious challenges courts will face if other circuits follow the *Zubulake* decision will be defining inaccessibility. Determining accessibility will require education and training of the judiciary regarding the complicated technical topic of accessing electronic data.²⁸⁹

289. See JOHNSON ET AL., *supra* note 196, at 16-17 (suggesting education and training of judiciary regarding electronic discovery concepts and issues ranks as a key problem discovered in the study).