Corporate Cooperation through Cost-Sharing

Nicola Faith Sharpe
University of Illinois College of Law

Follow this and additional works at: http://repository.law.umich.edu/mttlr

Part of the Civil Procedure Commons, Litigation Commons, and the Science and Technology Law Commons

Recommended Citation
Available at: http://repository.law.umich.edu/mttlr/vol16/iss1/3

This Article is brought to you for free and open access by the Journals at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in Michigan Telecommunications and Technology Law Review by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.
CORPORATE COOPERATION THROUGH COST-SHARING

Nicola Faith Sharpe


INTRODUCTION ...................................................................................... 110

I. CORPORATE COSTS: THE DISCOVERY DILEMMA .................................................. 115
   A. Pre-Electronic Discovery: Cost Explosion .................................................. 115
      1. Producing Electronic Information ............................................. 119
      2. Document Review .............................................................. 121

II. RECENT REFORMS TO REDUCE COSTS HAVE FAILED .................................... 123
   A. Increased Judicial Involvement Does Not Decrease Costs .............................. 126
      1. Federal Rules of Civil Procedure ........................................ 126
      2. Judicial Intervention .......................................................... 130
      3. Sanctions Distort Incentives ............................................... 132
   B. Meet-and-Confer Will Not Lead to Cooperation ......................................... 133
   C. Status Quo Bias ..................................................................... 135

III. RESTRUCTURING THE DISCOVERY GAME: PROMOTING COOPERATION ....... 136
   A. Discovery Abuse ..................................................................... 137
   B. A Game-Theoretic Approach to Discovery Cost-Sharing ............................... 141
      1. The Prisoners’ Dilemma ................................................. 142
      2. The Discovery Dilemma .................................................. 144
      3. Discovery Cost-Sharing .................................................. 148

CONCLUSION ...................................................................................... 149

© 2009 Nicola F. Sharpe. All rights reserved.
* Assistant Professor of Law and Richard W. and Marie L. Corman Scholar, University of Illinois College of Law. J.D., Yale University, M.B.A., Yale University, B.A. Cornell University. Email: nsharpe@illinois.edu. I am grateful for the comments of or discussions with the following individuals: Olufunmilayo B. Arewa, Amitai Aviram, David Dana, Jide Nzelibe, James Pfander, Martin Redish, Max Schanzenbach, Jamelle C. Sharpe, Suja Thomas, and the participants in the Chicago Kent-Illinois Faculty Colloquium. Any errors are, of course, my own. Denitta Arnaud Germann and Denise Ware provided excellent research assistance.
INTRODUCTION

Corporations are well aware that “the primary source of delays and cost in civil litigation” is discovery. Discovery accounts for about 50% of all litigation costs and up to 90% of the costs in the top 5% of the most expensive cases. With the advent and rapid growth of electronic document discovery, the corporate expense attributable to discovery costs has risen dramatically. Reports of complex civil cases in which document counts number in the tens of millions are more than litigation lore; they are now part of the expensive reality confronting corporate litigants. One estimate suggests that a complex suit between corporate adversaries can result in the discovery of more than one hundred million pages of documents. In one case, a defendant spent more than three million dollars complying with a discovery request. In another, a corporate defendant in an antitrust class action bore the cost of producing over 30 million pages of email. Given the staggering volume of production in such cases, corporations already facing tremendous discovery burdens in a paper-based world now even face more extensive and expensive abuse.

5. In re Brand Name Prescription Drugs Antitrust Litig., No. 94 C 897, MDL 997, 1995 WL 360526, at *1–3 (N.D. Ill. June 15, 1995). The court found that the cost of production was a foreseeable risk of choosing a particular electronic storage method:

On the one hand, it seems unfair to force a party to bear the lofty expense attendant to creating a special computer program for extracting data responsive to a discovery request. On the other hand, if a party chooses an electronic storage method, the necessity for a retrieval program or method is an ordinary and foreseeable risk . . . . The normal and reasonable translation of electronic data into a form usable by the discovering party should be the ordinary and foreseeable burden of a respondent in the absence of a showing of extraordinary hardship . . . . Class Plaintiffs should not be forced to bear a burden caused by CIBA’s choice of electronic storage.

Id. at 2.
6. Martin H. Redish, Electronic Discovery and the Litigation Matrix, 51 DUKE L.J. 561, 566 (2001). Id. at 589 (“As a result of these differences, one is able to predict that the costs and burdens that electronic discovery imposes are likely to be substantially greater than the costs and burdens imposed by traditional discovery.”); Thomas Y. Allman, The Need for Federal Standards Regarding Electronic Discovery, 68 DEF. COUNS. J. 206, 206 (2001) (noting that “the discovery of electronic records” should be treated “differently from traditional
As a result of increasing litigation costs, corporations are often forced into a Hobson's choice: either they incur the expense of litigating their cases all the way to a verdict, or they settle for an amount that does not approximate the value of their legal entitlements in order to avoid the expense of discovery. The Supreme Court has explicitly noted that discovery expenses may push defendants to settle cases not on the merits, but to avoid costly discovery. This is especially true for corporations, for which initiating litigation can be a strategic decision, the goal of which is often to use the threat of costly discovery to extract some level of value from settlement, rather than to go to trial. In situations such as these, the party imposing the costs on its opponent receives a settlement premium (or discount) that is unrelated to the legal strength of its position. Instead, this gain or loss represents the cost of avoiding lengthy discovery involving voluminous document productions and time-consuming reviews.

Even if we accept that the brinksmanship associated with discovery is inescapable, we are left with another, more practical problem. While corporate managers must assume that the risks associated with trial increase with their document production obligations, current discovery rules provide a poor check against the peculiar excesses of discovery in general, and e-discovery in particular. It is widely recognized that the rules of civil procedure "provide strong incentives" for parties to abuse documents" as it is "an area of the law that is both unpredictable and increasingly subject to abuse.

7. For examples of how expensive discovery costs can be, see Geoff Howard & Andrew Tran, Electronic Discovery Cost Containment Under the New Federal Rules and Beyond, in ELECTRONIC DISCOVERY AND RETENTION GUIDANCE FOR CORPORATE COUNSEL 2006, at 371, 375 (PLI Litig. & Admin. Practice, Course Handbook Series No. 9006, 2006) ("Companies spent almost $4.6 billion on electronic information in 2005. $1.3 billion of that focused on electronic discovery and that figure is expected to more than double by 2007."); Willging, supra note 2 at 548 ("Among attorneys reporting any discovery expenses, the proportion of litigation expenses attributable to discovery is typically fairly close to 50% . . . . Half estimated that discovery accounted for 25% to 70% of litigation expenses. Both the mean and the median were about 50% . . . .").

8. Stephen J. Snyder & Abigail E. Crouse, Applying Rule 1 in the Information Age, 4 SEDONA CONF. J. 165, 168 (2003) ("Some companies argue that electronic discovery is potentially so expensive that the costs of production may outstrip the value of even large cases such that the defendants would be forced to settle rather than litigate.").


10. Frank H. Easterbrook, Discovery as Abuse, 69 B.U. L. REV. 635, 636–37 (1989) ("The party in a position to threaten exhaustive discovery can claim for itself in settlement a portion of the costs that should not have been imposed in the first place.").

11. See discussion infra Part I.B.
discovery. The rules permit parties to seek a broad range of information. "Parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense." In the event that the court deems the request to be one that imposes an "undue burden or expense," it has discretion to shift discovery costs. However, in practice, this discretion has failed to reduce discovery costs. Under the current rules, in which the party responding to a discovery request bears the cost of compliance, corporate litigants are subjected to potentially frivolous and overly broad requests by opportunistic opponents because the party requesting discovery is able to externalize the cost of compliance. Such opponents may then extract settlement values that exceed the expected value of a judgment in their favor. Conversely, responding parties are able to retaliate by producing large quantities of data, a significant portion of which may be irrelevant or produced with the intent to force requesting parties into an early settlement. The cost of a delayed and burdensome adjudication is often too much for the responding party to bear. Outmoded and inconsistently applied discovery rules impede not only judicial decision-making but also managers' ability to make rational decisions.

15. Id. 26(c).
16. See discussion infra Part III.A.
18. The discovery dilemma is not unique to disputes between corporate adversaries. Congress recognized that many companies were unfairly burdened by discovery initiated during frivolous securities fraud actions. See H.R. REP. No. 104-369, at 37 (1995) ("The House and Senate heard testimony that discovery in securities class actions often resembles a fishing expedition. As one witness noted, 'once the suit is filed, the plaintiff's law firm proceeds to search through all of the company's documents and take endless depositions for the slightest positive comment which they can claim induced the plaintiff to invest and any shred of evidence that the company knew a downturn was coming.'" (quoting testimony of Richard J. Egan, Chairman of EMC Corp.)). Consequently, Congress in 1995 adopted the Private Securities Litigation Reform Act ("PSLRA"), which was intended to reduce the number of frivolous securities fraud actions by raising pleading standards. Additionally, some proponents of the so-called "English Rule," under which litigation costs are shifted to the losing party, also argue that an ex-post system of cost sharing will alter the choices of the parties so as to reduce litigation abuses. See Snyder & Crouse, supra note 8, at 170. Nevertheless, high-stakes litigation between corporations is different than the private securities litigation context where there are obvious asymmetries between the plaintiff and defendant that would preclude many meritorious lawsuits if the plaintiffs were forced to internalize the costs. In corporate on corporate litigation, both parties are typically sizable entities with ready access to capital to finance the costs of litigation. In this scenario, symmetrically situated opponents are best influenced by an ex-ante change to electronic discovery cost allocation.
19. See discussion infra Part II analyzing problems with e-discovery cost shifting cases and rules.
cost-benefit determinations regarding the course of litigation. By adopting an innovative approach to the discovery dilemma, this Article provides a more responsive alternative.

Applying a game-theoretic approach based on the classic prisoners' dilemma provides valuable insights into corporate managers' decision-making incentives under existing discovery rules.\(^2\) It demonstrates that the fee structure imposed by current discovery rules leads to inefficiency and motivates corporate litigants on either side of a controversy to employ abusive discovery practices, although each party would benefit from cooperation.\(^21\) Using this framework, this Article shows how a cost-sharing regime can motivate litigants to engage in cooperative discovery and, as a consequence, facilitate more efficient and less abusive discovery practices. To date, scholars, who have posited that cooperative behavior in the discovery process will ultimately reduce abuse and concomitantly lower costs, have proposed such solutions as completely shifting the cost from the responding party to the requesting party.\(^22\) This will not resolve the problem.\(^23\) Accordingly, this Article argues that a default-rule of equal cost-sharing would realign the strategic incentives of corporate litigants to encourage cooperation as opposed to abuse in discovery. Although the parties currently have the ability to contract around the responder-pay-all default, research has shown that a party who suggests a departure from a default rule is negatively perceived by her opponent.\(^24\) However, a 50/50 cost-sharing rule changes the default and allows corporate parties to more effectively bargain because their starting positions are better aligned with their incentives. Evenly dividing the

---

20. For more on how the Prisoners' Dilemma illustrates patterns of cooperation and conflict see, e.g., ROBERT AXELROD, THE EVOLUTION OF COOPERATION passim (1984) (discussing the logical outcomes of a repeated play Prisoners' Dilemma game).

21. Redish, supra note 6, at 569 ("Because litigants do not bear the costs created by their discovery requests, their incentive to confine those requests in a procedurally efficient manner is significantly distorted. The inescapable result is substantial waste and inefficiency in the conduct of discovery.").


23. A solution such as complete cost-shifting changes the type of abuse as opposed to reducing it. Instead of requesting parties abusing responding parties through abusive requests, responding parties now have incentives to abuse in the process of complying. For example, the responding party no longer has an incentive to use the most cost effective means of collecting, reviewing, and producing documents as all of her costs are now externalized. For more on the problems associated with cost-shifting approaches, see, e.g., Edward H. Cooper, Discovery Cost Allocation: Comment on Cooter and Rubinfeld, 23 J. LEGAL STUD. 465 passim (1994).

24. See discussion on status-quo bias infra Part II.C.
cost of document discovery alters the underlying assumptions of the decision-making process and makes mutual cooperation the only economically advantageous alternative. Tying the cost borne by a requesting party to the cost incurred by the responding party creates, in the language of game theory, a dominant strategy of cooperation. Consequently, it would reduce exposure to uncapped litigation costs, discourage useless discovery requests, reduce overly broad or inappropriately narrow discovery responses, and avoid potential sanctions that may be imposed on corporate litigants for discovery misconduct.

The cost and uncertainty that result from increasingly expensive discovery demand a reexamination of the incentives underlying the current rules and the impact on corporate litigants. Part I of this Article considers how document discovery has changed litigation practice. It briefly focuses on the initial change in traditional “paper document” discovery with the evolution of the photocopier and then turns to the electronic discovery revolution. Discovery, even in its paper-based form, has always been prone to excess and abuse. However, advances in information storage have magnified the incentives and opportunities for abuse that flow from a cost-allocation structure that allows parties to externalize discovery costs. Specifically, Part I identifies how modern discovery provides the means by which adversaries may impose expensive and burdensome requests or responses on their opponents, leveraging these tactics to induce premature and misvalued settlements.

Part II briefly discusses attempts to ameliorate the discovery dilemma such as the December 2006 amendments to the Federal Rules of Civil Procedure (“FRCP”). As amended, FRCP 26(b)(2)(C) enumerates the factors that courts must weigh when deciding whether to use their discretion to shift discovery costs. This Article argues that FRCP 26(b)(2)(C) does not adequately address the cost of discovery or the ways in which current incentives lead a rational actor to abuse the discovery process. Part III proposes a novel cost-sharing legal regime, based on the prisoners’ dilemma, which would restructure litigant incentives to encourage cost-lowering cooperation. The switch to a cost-sharing default rule would reduce abusive discovery tactics and in turn

25. Scott Moss, Litigation Discovery Cannot be Optimal but Could be Better: The Economics of Improving Discovery Timing in a Digital Age, 58 DUKE L.J. 889, 895 (2009) (observing that “e-discovery is just a new instance of an old problem” and that technology facilitates more discovery, increasing existing controversy costs).

26. FED. R. CIV. P. 26(b)(2)(C); See also JAMES WM. MOORE, 1-V MOORE’S FEDERAL RULES PAMPHLET § 26.5[2][b] (Matthew Bender 2007).

27. Under Fed. R. CIV. P. 26(c), the court may shift the costs of discovery, in whole or in part, to the requesting party. Id.
would improve the ability of corporate managers to assess risks when making litigation and settlement decisions.

I. CORPORATE COSTS: THE DISCOVERY DILEMMA

Corporations have long faced the problem of costly discovery. Courts have also confronted the challenge of determining the boundaries of proper requests and responses. This balancing of the parameters of an appropriate request and the interests of the requesting and responding parties is not a new challenge. However, recent technological advances, specifically the development of electronically stored information ("ESI"), have exacerbated the problem. First, this section briefly addresses how improvements in technology, such as the photocopier, have historically raised discovery concerns. The section then analyzes the manner in which ESI has resulted in formerly inconceivable volumes of documents and exploding discovery costs. As the volume and corresponding costs have increased, so has the potential for discovery abuse. Thus, discovery has potentially become the most potent weapon in the corporate litigant's arsenal.

A. Pre-Electronic Discovery: Cost Explosion

The modern outcry over discovery costs and the corresponding demands for change are not new. In the 1960s, the photocopier began to supplant the mimeograph machine and revolutionize discovery in the process. Rapid mass production of documents became less expensive and simpler than at any time in the past. Consequently, the volume of paper documents available for discovery multiplied. Not surprisingly,
discovery costs rose exponentially, and discovery occupied a greater portion of "the litigation timeline." The increase in volume and costs was accompanied by a rise in discovery disputes. Additionally, reform proposals indicated that concerns over escalating discovery costs prompted criticism and review of the discovery rules. An ABA Special Committee was established for the "Study of Discovery Abuse." Both the ABA Special Committee and a Judicial Conference's Advisory Committee on Civil Rules proposed changes to the federal rules. Their suggestions indicated that the two committees were "interested primarily in curbing the cost of discovery and reducing the ways discovery [could] be abused for purposes of harassment and delay."

The 1960s and early 1970s saw technological changes that led to an increase in discovery volume, burden, and costs, and has since "been characterized by some as a 'litigation explosion.'" The widespread use of computers and digital communication has spawned a similar escalation. It should therefore come as no surprise that electronic document discovery, especially in high-stakes corporate litigation, comprises the bulk of any discovery conducted by the litigants.

35. Id.
37. Id.
38. Id.
39. Id.
40. Cf. Robert G. Bone, Who Decides? A Critical Look at Procedural Discretion, 28 CARDOZO L. REV. 1961, 2010 (2007) ("For example, if, as the data suggests, the most serious discovery problems are in high stakes, complex cases, one might consider adjusting the rules according to the number of parties and claims or the amount of the damages at stake, all of which are reasonably clear criteria that could be applied relatively easily."); Linda S. Mullenix, The Pervasive Myth of Discovery Abuse: The Sequel, 39 B.C. L. REV. 683, 685–86 (1998) ("[T]he studies reaffirm common sense notions about discovery: that complex, high stakes litigation, handled by big firms with corporate clients, are the cases most likely to involve the kind of problematic discovery that skews the discovery debate. As the FJC concludes: 'Both the likelihood of problems and the total incidence of problems increased as stakes, factual complexity, and contentiousness increased.' "); Willging et. al., supra note 2, at 574 ("Document production problems were far more likely to be reported by attorneys whose cases involved high stakes, but even in low-to-medium stakes cases ($4000 to $500,000), 36% of the attorneys reported problems with document production. In medium-to-high stakes cases ($500,000 to $2 million), 56% of attorneys reported such problems . . . .")

The evolution and proliferation of electronic communication tools and data storage has expanded the scope of discovery and increased the potential for discovery abuse by significantly increasing the costs, both monetary and non-monetary, associated with discovery. Estimates suggest that over 90% of corporate communications and documents are stored electronically. Additionally, the volume of information that can be retained has risen drastically.

The intrinsic characteristics of information created and maintained in electronic form have had a transformative effect on the nature of discovery practice. All corporations will “almost certainly” have to respond to an electronic discovery request, which “can be an incredibly costly problem.” ESI is exponentially more voluminous than its paper predecessor. Storage was once limited to the amount of paper a person could hold in a particular physical space. Now, a hard drive or magnetic computer tape may store the equivalent of millions of printed pages, while occupying just a few square inches of space. Improvements in information storage technologies (such as CD-ROMs, DVDs, flash memory drives, increased hard drive capacities, etc.) increase the volumes of

---

42. Mia Mazza, Emmalena K. Quesada & Ashley L. Sternberg, In Pursuit of FRCP 1: Creative Approaches to Cutting and Shifting the Costs of Discovery of Electronically Stored Information, 13 RICH. J.L. & TECH. 11, ¶ 3 (2007) (noting that “[i]t is an accepted fact that ‘the discovery of computer-based information [can] cost more, take more time and create more headaches than conventional paper based discovery.’”) (citation omitted).

43. Harvey L. Kaplan, Electronic Media Discovery in the 21st Century, in ELECTRONIC DISCOVERY AND RETENTION GUIDANCE FOR CORPORATE COUNSEL 2005, at 65, 67 (PLI Litig. & Admin. Practice, Course Handbook Series No. 6634, 2005); THE SEDONA CONFERENCE WORKING GROUP, THE SEDONA PRINCIPLES: BEST PRACTICES RECOMMENDATIONS & PRINCIPLES FOR ADDRESSING ELECTRONIC DOCUMENT PRODUCTION 2 (Jonathan M. Redgrave et al. eds., 2nd ed. 2007), available at http://www.thesedonaconference.org/content/miscFiles/TSC_PRINCP_2nd_ed_607.pdf [hereinafter THE SEDONA PRINCIPLES]; Snyder & Crouse, supra note 8, at 167 (“Studies have estimated that more than 90% of all information generated in the business world is electronic and as much as 30% of that information may never be converted into paper form.”).


47. Rothstein et al., supra note 45, at 2.
retained data and simultaneously decrease the physical space occupied by such storage. "The sheer volume of [electronic] data, when compared with conventional paper documentation, can be staggering." Hence, physical space is no longer a meaningful limitation on document storage since electronic storage has become the ubiquitous means of maintaining the massive volumes of newly-created information.

Additionally, ESI has zombie-like qualities. Although one may believe it to be destroyed, it invariably rises from its grave. Replication and subsequent storage of electronic documents are often automated processes, occurring without the end-user’s knowledge. Consequently, when an end-user creates, alters, or deletes an electronic document, multiple additional forms of data are automatically generated as a byproduct. ESI is comprised of many other types of data which include metadata, system data, residual data, and possibly shadowed copies of deleted files. Metadata (information about the document) includes “the file creation date, when it was last accessed or edited, by whom, and sometimes previous versions or editorial changes.” For example, email metadata may reveal “such information as the dates the mail was sent, received, replied to or forwarded, blind carbon copy (‘bcc’) information, and sender address book information.” System data includes higher

---


A floppy disk, with 1.44 megabytes, is the equivalent of 720 typewritten pages of plain text. A CD-ROM, with 650 megabytes, can hold up to 325,000 typewritten pages. One gigabyte is the equivalent of 500,000 typewritten pages. Large corporate computer networks create backup data measured in terabytes, or 1,000,000 megabytes; each terabyte represents the equivalent of 500 billion typewritten pages of plain text.

Id.


50. The Sedona Principles, supra note 43, at 2 (“[O]ther business applications are designed to periodically and automatically make copies of data. Examples of these include web pages that are automatically saved as cache files and file data that is routinely backed up to protect against inadvertent deletion or system failure.”).

51. Id. at 2–3; see also Manual for Complex Litigation (Fourth) § 11.446 (2004).

52. See Manual for Complex Litigation (Fourth) § 11.446 (2004) (“Residual data that exist in bits and pieces throughout a computer hard drive. Analogous to the data on crumpled newspapers used to pack shipping boxes, these data are also recoverable with expert intervention.”) (emphasis omitted).

53. Id. For a more in-depth discussion of the various forms of additional data, see The Sedona Principles, supra note 43; see also Giacobbe, supra note 4; Redish, supra note 6.


55. The Sedona Principles, supra note 43, at 3; Discovery of metadata can lead to more discovery requests of the underlying physical documents, because the requesting party
level information, such as records of routine transactions like printing, deleting, or creating files. Another form of data that many corporations automatically generate for the purpose of disaster recovery is backup data. Backup data is often stored off-line on magnetic tapes and is not designed to be utilized in the ordinary course of business. If a company needs to access this data, such as in the event of an emergency, the data would have to be restored to the same network by which it was generated, usually in a time-intensive and expensive process.

1. Producing Electronic Information

The production of ESI raises distinct challenges for corporations and results in unique costs. Other than volume, typical problems are locating ESI, the scope of discovery (including issues of deleted files and backup data), the form of production, the need for technical expertise, and screening for relevance and privilege. For a larger corporation, the challenge of identifying target locations and persons and then searching each location and person for responsive information can be far more time-consuming and expensive than it was in a conventional paper-based system. An ambitious party that seeks to burden her opponent may easily request that documents be produced from all potential locations and persons. Conversely, a less than cooperative respondent may argue that searching particular locations imposes an undue burden or expense and force the rapid and costly volley of motions to shift costs, compel discovery, or issue protective orders. Alternatively, the respondent may make an overly broad response, inundating the other party with so much data that a meaningful or comprehensive review is impossible.

In many corporations ESI resides in a wide range of places, many of which are not obvious. Electronic files may be kept on many types of media, such as floppy disks, computer hard drives, CD-ROMs, DVDs, would be alerted to the existence of documents of which she would have otherwise been unaware.

56. Redish, supra note 6, at 585.
57. Id.
58. Giacobbe, supra note 4, at 264. See also Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 572 (N.D. Ill. 2004); Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309, 316 (S.D.N.Y. 2003); Byers v. Ill. State Police, No. 99 C 8105, 2002 WL 1264004, at *10 (N.D. Ill. June 3, 2002). Depending on how the electronic data is stored, it can be difficult, and hence expensive, to retrieve the data and search it for relevant documents. Theoretically, as technology improves, retrieving and searching data will become more standard and less costly. See, e.g., Steven C. Bennett, E-Discovery By Keyword Search, 15 No. 3 PRAC. LIT. 7 (2004).
59. Michael R. Arkfeld, Electronic Discovery and Evidence § 6.01, 6-3 (2004 ed.).
60. See discussion infra notes 45–57.
61. Arkfeld, supra note 59, at § 6.01, 6-3.
flash cards, zip disks, memory sticks, thumb drives, and PC cards. ESI can also be found on a vast number of devices including laptops, personal data assistants, network servers, cellular phones, smart and magnetic stripe cards, and printers. The larger the entity, the greater the number of storage locations. Documents can also be created in a proprietary or obsolete application, making it difficult for the requesting party to access the data. Additionally, encryption and password protections may present barriers that render the information useless to the receiving party unless additional steps are taken. Providing access to proprietary or outdated applications often raises significant issues related to trade secrets and other “sensitive information that is not directly relevant to the controversy.” This concern reveals novel avenues of abuse for litigants on either side of a dispute.

As a result of the array of choices available, many companies are easily able to store large amounts of data without the constraint of physical space limitations. Additionally, individual employees are able to remove, create, and store data on their computers, personal data assistants, and other removable storage devices. A document can instantly be emailed to countless recipients anywhere in the world, meaning thousands of individuals can receive a document in a matter of seconds. Along with the immeasurable storage options, this “rapid movement” and broad dissemination of ESI is a major electronic discovery difficulty. Because the information is easily moved from one person to the next, parties must identify and attempt to agree upon the individuals from whom documents may be discovered. Likewise, identifying the universe of documents that may contain discoverable information is a

63. ARKFELD, supra note 59, § 2.04, 2-17 to 2-25.
64. Cellular phones may have the capability to send and receive emails, text messages, faxes, pictures, document files, and can contain call history, name and address books, as well as recorded memos and even conversations. Id. at § 2.05, 2-35.
65. Id. at § 2.05, 2-25 to 2-52.
67. Id. at 1631–32.
68. Scott Sher & Daryl Teshima, e-Normous: The Increasing Burden Associated with Electronic Document Production in Second Request Investigations, The Antitrust Source (Nov. 2005), available at http://www.abanet.org/antitrust/at-source/05/11/Nov05-Sher11=29.pdf (“Because the cost of electronic document storage has declined so dramatically in recent years, companies tend to allow electronic data to reside on their underutilized storage systems for a very long time [and] there is the equivalent of tens of thousands of boxes of documents located in a company’s electronic repositories.”).
69. ARKFELD, supra note 59, at § 2.06, 2-54.
70. Id. at § 2.06, 2-53.
71. Id.
72. Finkelthal, supra note 66, at 1610–12.
crucial aspect of cost and time management. The broader the scope of a request, the more costly compliance will be.

Because the process of collecting and producing ESI involves so many locations, formats, and individuals, it “is often a highly technical process that can require special expertise, software, and computer infrastructure that law firms typically do not possess.” If responding parties fail to employ expert assistance, they risk making costly mistakes such as damaging, losing, or omitting ESI.

Expert assistance is extremely expensive, with some experts charging $265 per hour. The necessity and success of expert assistance is evidenced by an electronic production cottage industry that has quickly grown and was expected to almost triple in size from $1.3 billion in 2005, to more than $3 billion in 2008. The growing obligation to obtain expert assistance is one of the most obvious ways in which this new world imposes costs on litigants.

2. Document Review

After the producing party gathers electronic documents from all relevant sources, both parties must decide whether to review the documents in paper or electronic format. In complex, high-stakes litigation, where large volumes of data are common, the cost of printing typically precludes paper review. The alternative, electronic review, can occur in three ways: (1) viewing electronic files in their “native” format; (2) using


74. Zubulake v. UBS Warburg LLC (Zubulake II), 216 F.R.D. 280, 282–83 (S.D.N.Y. 2003) (noting that Pinkerton Consulting & Investigations charged their client $245 per hour for restoration services as well as for “development, refinement and execution of a search script”).


77. Paper review requires printing all of the electronic documents, and depending on the scope of the request, it may include printing any relevant metadata for those documents. Id.
a local, searchable database; or (3) using an online document review repository.\textsuperscript{78}

Although electronic documents offer time-saving review techniques, these approaches can increase the risk of excluding a substantial number of potentially relevant documents.\textsuperscript{79} For example, in the case of keyword searching, the chosen search terms control the identification of relevant documents.\textsuperscript{80} Due to the error rate and possibility of sanctions associated with incomplete keyword searching, the review process remains cumbersome, costly, and subject to inadvertent disclosures even though an initial keyword search can reduce the amount of data that the producing party has to review for relevant and privileged information.

The review of electronic documents for relevance and privilege is extremely expensive;\textsuperscript{81} it is often completed by attorneys at substantial hourly rates. Inadvertent revelations of privileged information may result in a waiver of any privilege claims over the disclosed information or, even worse, waiver of the entire subject matter to which that information reaches.\textsuperscript{82} Metadata further complicates the matter. Because some courts have held that metadata must be produced,\textsuperscript{83} the cost of producing ESI continues to increase when the producing party must meticulously search all electronic information and metadata for privileged information before producing it to opposing counsel.\textsuperscript{84} Because the vast amounts of data impose tremendous costs that preclude detailed review of each document, the likelihood of revealing privileged information increases.\textsuperscript{85}

When document review costs approach the amount in controversy, a party may be forced to settle an otherwise credible claim or defense to avoid the expense.\textsuperscript{86} Thus, electronic discovery burdens must be allocated differently, or the costs of discovery may prevent fair resolution of high-stakes civil disputes.

\textsuperscript{78} Id.
\textsuperscript{79} Mazza et al., supra note 42, ¶ 21, ¶ 46.
\textsuperscript{80} Id.
\textsuperscript{84} Fed. R. Civ. P. 34 advisory committee’s notes.
\textsuperscript{85} Rosenthal, supra note 82, at 167.
\textsuperscript{86} Leigh Jones, The Surging Evolution of E-Discovery, NAT’L L.J., Aug. 2, 2004 at 1 (remarking that Gelbmann Associates, a technology investment firm in Minnesota, estimated that e-discovery preservation, production, and collection costs would come close to $700 million in 2004 and approach $1.8 billion by 2006).
II. RECENT REFORMS TO REDUCE COSTS HAVE FAILED

The current cost allocation structure in civil discovery, with the requesting party receiving the benefits and the responding party incurring the costs, creates strong incentives for corporate litigants to abuse each other. A system like the one adopted by the United States, in which discovery costs are externalized, creates optimal conditions for abuse. Like an unsupervised child in a candy store toting an unlimited credit card, the requesting party may ask for whatever it likes as there is no incentive to limit a request to one that is narrowly tailored to the party’s legal entitlements.\(^87\) In fact, the incentives flow in the opposite direction. It may be almost costless\(^88\) for a requesting party to issue an overly broad and unduly burdensome request, which, in turn, can be highly beneficial to the requesting party. Furthermore, in a state like Delaware where almost half of the incorporated entities have 250 or more employees, the problem is more pronounced because there are more individuals from whom a requesting party can seek documents.\(^89\)

The increased cost associated with ESI, as a result of its massive volume and complexity, makes it a very powerful weapon. In the information age, a party can impose tremendous costs on its adversary by “cast[ing] their discovery nets wider to search for relevant information.”\(^90\) Instead of seeking a relevant document that spans a few sheets of paper, litigants may seek multiple copies of documents in various forms. After all, archived data and metadata are discoverable and may contain information relevant to the parties’ legal claims or defenses. Contemporary document discovery, which is primarily electronic, places a significant burden on the responding party while simultaneously providing benefits to

\(^{87}\) For the requesting parties, receiving more documents than can be sifted through is not a deterrent as there is no requirement that the requesting party review everything received. The requesting party is able to sort and chose among the documents received in accordance to their time and financial limitations.

\(^{88}\) Mazza et al., supra note 42, ¶ 167 (“It costs almost nothing for a requesting party to put together and issue an extremely broad, highly burdensome request for production of documents. Even a ‘small’ requesting party can gain a significant strategic advantage by sending out a boilerplate request, which then effectively puts the onus on the responding party to either spend time and money preserving, collecting, processing, reviewing, and producing enormous volumes of ESI early on in the case or spend time and money litigating discovery disputes.”).


\(^{90}\) Shira A. Scheindlin & Jeffrey Rabkin, *Electronic Discovery in Federal Civil Litigation: Is Rule 34 Up to the Task?*, 41 B.C. L. REV. 327, 370-71 (2000) ("[B]ecause computerized information tends to exist in duplicate form in various locations, litigants may legitimately cast their discovery nets wider to search for relevant information.").
the requesting party. For instance, it "enable[s] the requesting party to more easily review, organize, and manage information." Conversely, the exponential increase in volume due to electronic creation and storage combined with nascent data management systems can place tremendous cost on the responding party as it locates and reviews data for relevance and privilege before production.

These production costs are potentially so severe that even in high-value cases, many defendants may have no choice but to settle because the cost of production is greater than the value of litigating the case. However, totally shifting the costs of discovery to the requesting party, thereby making them responsible for the cost of the entire request, may determine the outcome of the litigation based on the resources of the requesting party instead of the merits of the case. "Litigants with limited means [may be] effectively barred from discovering highly relevant information for use at trial." A solution where costs are borne by the requesting party ameliorates the incentive distortions associated with externalized costs for the requesting party; however, it replaces these with new incentive distortions, where responding parties are able to externalize their costs to the requesting party. As a result of these misaligned incentives, responding parties would no longer have an incentive to minimize collection, review, and production costs as they know that all of these costs are now borne by their opponent. Consequently, sophisticated responders may increase the volume and complexity of their production.

The proliferation of ESI has made the cost concerns associated with discovery more pronounced. Just as the Judicial Conference’s Advisory Committee on Civil Rules examined the cost increases associated with the photocopier, the December 2006 amendments to the Federal Rules of Civil Procedure have attempted to address the emergent issues associated

92. Rothstein et al., supra note 45, at 4. Note, however, that many of these benefits can be undermined by an overly inclusive response that provides hordes of unnecessary information increasing the burden of sorting through the materials.
94. Snyder & Crouse, supra note 8, at 168.
95. Id. See also Laura Inglis, Kevin McCabe, Steve Rassenti, Daniel Simmons & Erik Tallroth, Experiments on the Effects of Cost-Shifting, Court Costs, and Discovery on the Efficient Settlement of Tort Claims, 33 Fla. St. U. L. Rev. 89, 91 (2005) ("Cost-shifting regimes come in two varieties: one-way and two-way. Both are intended to promote efficiency by encouraging settlements and keeping inefficient cases out of court. However, previous research indicates that one-way cost-shifting rules are less effective in promoting efficiency than two-way rules because of their asymmetrical impact.").
96. See Cooper, supra note 23.
Corporate Cooperation Through Cost-Sharing

The amendments expand the role of judges in managing some of the pitfalls of the discovery process. The amendments also encourage cooperation among the parties through more substantial meet-and-confer obligations, which is consistent with the opinions of many scholars and practitioners. These changes do not adequately address the incentive distortions endemic to discovery. This section will address the manner in which two of these changes—the augmented role of judges and explicit obligations to confer—fail to promote a less expensive and more cooperative discovery process by maintaining the same problematic incentive structure, in which the party receiving the benefit from discovery externalizes her costs. The section continues with an analysis of how discovery is an ideal candidate for a strategic realignment that supplies incentives for cooperation among litigants, as opposed to abusive adversarial tactics. It concludes by examining why corporations

98. Id.
99. FED. R. CIV. P. 26(f). The notes to the rule clearly indicate that electronic discovery is unique and the meet-and-confer obligations contemplated by FED. R. CIV. P. 26(f) hope to facilitate cooperative behavior among the parties, which in turn will reduce costs. Specifically, the 2006 Amendments to FED. R. CIV. P. 26(f), advisory committee notes state:

Subdivision (f). Rule 26(f) is amended to direct the parties to discuss discovery of electronically stored information during their discovery-planning conference. The rule focuses on "issues relating to disclosure or discovery of electronically stored information"; the discussion is not required in cases not involving electronic discovery, and the amendment imposes no additional requirements in those cases. When the parties do anticipate disclosure or discovery of electronically stored information, discussion at the outset may avoid later difficulties or ease their resolution.

... In appropriate cases identification of, and early discovery from, individuals with special knowledge of a party's computer systems may be helpful.

... Rule 26(f)(3) explicitly directs the parties to discuss the form or forms in which electronically stored information might be produced. The parties may be able to reach agreement on the forms of production, making discovery more efficient .... Early discussion of the forms of production may facilitate the application of Rule 34(b) by allowing the parties to determine what forms of production will meet both parties' needs. Early identification of disputes over the forms of production may help avoid the expense and delay of searches or productions using inappropriate forms.

Rule 26(f) is also amended to direct the parties to discuss any issues regarding preservation of discoverable information during their conference as they develop a discovery plan .... The volume and dynamic nature of electronically stored information may complicate preservation obligations .... Failure to address preservation issues early in the litigation increases uncertainty and raises a risk of disputes.
have not chosen to contract around the current cost allocation rules, and instead need an explicit change to a cost-sharing regime.

A. Increased Judicial Involvement Does Not Decrease Costs

Judges and lawmakers have recognized that traditional discovery principles, such as the default rule that parties bear the cost of complying with a discovery request, do not adequately resolve document production disputes, particularly in light of ESI.

1. Federal Rules of Civil Procedure

The December 2006 amendments to the Federal Rules adopt solutions that enable judges to perform a more active function in addressing discovery issues. The solutions fall victim to the same drawbacks that were present under the pre-amendment rules. Although some commentators have posited that these rules give judges the discretion and tools to address discovery abuse, significant dis-
agreement continues. In a study by Magistrate Judge Wayne D. Brazil, a majority of lawyers felt that they did not receive "adequate and efficient help from the courts in resolving discovery disputes and problems." The group expressing this dissatisfaction include ninety percent of the lawyers who handled larger, more complex cases. In comparison, only about half of the attorneys who handled smaller cases or cases filed in state court fell into this dissatisfied group. Furthermore, "[a] large number of attorneys reported that many judges respond[ed] to discovery conflicts with an air of undisguised condescension, impatience, or open hostility." When judges did address discovery conflicts, lawyers described the handling as naïve or incompetent. Moreover, in response to an open-ended question about problems in the discovery process, the lawyers responded more often with criticisms regarding the role of courts than to any other problem (71%).

The courts have acknowledged the difficulties inherent in electronic document production and have tried to address the issue through a multifactored test designed to determine when to shift costs. Most notable is Judge Shira A. Scheindlin's holding in Zubulake v. UBS Warburg LLC. Judge Scheindlin wrote:

> Although "the presumption is that the responding party must bear the expense of complying with discovery requests," requests that run afoul of the Rule 26(b)(2) proportionality test may subject the requesting party to protective orders under Rule 26(c), "including orders conditioning discovery on the requesting party's payment of the burden in advance." 16(b), but insisted that it require the judge to exercise direct control over the discovery process, precluding local rules that permit magistrate control. This provision remains the rule's internal weakness.

102. See Beckerman, supra note 29, at 518.

It is well known that judges dislike discovery disputes and that some resent the time that resolving them takes from other judicial activities. Not infrequently, judges neglect lawsuits in which the lawyers are engaged in discovery battles, allowing them to languish unattended on their dockets while the lawyers founder ever deeper into non-cooperation, confrontation and impasse, a result also predictable by game theorists.

104. Id. at 863.
105. Id.
107. Id. at 246.
108. Id. at n.47.
of the costs of discovery.” A court will order such a cost-shifting protective order only upon motion of the responding party to a discovery request, and “for good cause shown.” Thus, the responding party has the burden of proof on a motion for cost-shifting.\textsuperscript{109}

In determining whether cost-shifting was appropriate, Judge Scheindlin considered seven factors, which were “designed to simplify application of the Rule 26(b)(2) proportionality test in the context of electronic data and to reinforce the traditional presumptive allocation of costs.”\textsuperscript{110} The factors, which were very similar to those incorporated in the advisory committee notes to the December 2006 amendments to Rule 26(b)(2),\textsuperscript{111} are a commendable effort to provide some objective factors by which judges can then subjectively determine cost-allocation in a 26(b)(2) challenge. Numerous courts have followed Zubulake but have, understandably, arrived at different divisions of cost depending on

\begin{itemize}
  \item the specificity of the discovery request;
  \item the quantity of information available from other and more easily accessed sources;
  \item the failure to produce relevant information that seems likely to have existed but is no longer available on more easily accessed sources;
  \item the likelihood of finding relevant, response information that cannot be obtained from other, more easily accessed sources;
  \item predictions as to the importance and usefulness of the further information;
  \item the importance of the issues at stake in litigation; and
  \item the parties’ resources.
\end{itemize}

\textit{Id.}


\textsuperscript{110} \textit{Id.}

\textsuperscript{111} See Fed. R. Civ. P. 26(b)(2), advisory committee’s note, stating that appropriate considerations may include:
their analysis of the factors.\textsuperscript{112} And in some instances, courts have articulated additional factors that influence the outcome.\textsuperscript{113}

The parties can potentially manipulate any of these factors to their advantage. For instance, the party claiming that the information requested is inaccessible, such that the cost of production should be borne by her opponent, has an incentive to inflate the alleged inaccessibility and the cost estimate. By contrast, the requesting party has an incentive to argue that the costs are low and the information is easily accessible. The availability of the information from other sources is susceptible to similar gamesmanship, as the description of the resources available to each party will vary to suit the party’s self-interest. The likelihood of incorrect cost allocation—a division based on the party who most convincingly argues their position as opposed to the actual position of the parties—is extremely high. Despite the multiple factors, the rule is vague and poses substantial enforcement challenges. It is yet another instance where a judge or magistrate is not the best party to make an accurate determination of cost allocation since it is difficult, if not impossible, to verify the parties’ arguments. This solution, which relies on a third-party with imperfect information, is far less optimal than one in which the incentives of the parties are properly aligned to encourage cooperation in the form of narrowly-directed, cost-effective discovery requests.

\textsuperscript{112} See Semsroth v. City of Wichita, 239 F.R.D. 630 (Dist. Kan. Nov. 15, 2006) (deciding that cost shifting was not justified); Quinby v. WestLB AG, 245 F.R.D. 94 (S.D.N.Y. Sept. 5, 2006) (granting defendants motion for cost shifting and requiring the plaintiff to pay 30% of the costs for searching the backup tapes for one employee); Hagemeyer N. Am., Inc. v. Gateway Data Sci. Corp., 222 F.R.D. 594 (E.D. Wis. Aug. 12, 2004) (requiring the plaintiff to modify its discovery request and the defendant to respond to the modified request before further addressing the discovery issues); Multitechnology Serv., L.P v. Verizon Sw., No. 4:02-cv-702-Y, 2004 WL 1553480, at *2, (N.D. Tex. July 12, 2004) (dividing the expenses evenly between the two parties “because it balances the benefit of the discovery for MTS and provides Verizon with incentive to manage the costs it incurs in answering MTS’ interrogatories”).

\textsuperscript{113} Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 572–73 (N.D. Ill. Aug. 9, 2004). The court noted that:

\begin{quote}
We agree with both the Rowe court and the Zubulake court that the marginal utility test is the most important factor. Furthermore, while we are guided by the remainder of the Rowe and Zubulake factors, we find that the proportionality test set forth in Rule 26(b)(2)(iii) must shape the test. Thus, we modify the Zubulake rules by adding a factor that considers the importance of the requested discovery in resolving the issues of the litigation.
\end{quote}

\textit{Id.}
2. Judicial Intervention

Despite the latitude offered by the FRCP, resorting to judicial intervention in discovery matters does not effectively discourage or cure discovery abuse. Judicial intervention is an inefficient solution because the judicial system is already overburdened. But primarily, judicial discretion is a poor substitute for the ex-ante intent of the parties who possess more information about the relevance of the materials in dispute than the judge. Secondarily, discretion varies from judge to judge and district to district, which makes it difficult for parties to assess the risks associated with discovery motions and practices. Consequently, parties often fail to avail themselves of the courts when confronted with abusive discovery tactics from their adversaries.

Despite a long and robust record of the bar encouraging the courts to regulate discovery, problems continue to abound. Trial courts are overextended and understaffed. District court dockets are more overburdened than ever. Between 1997 and 2006, U.S. district courts experienced an 11% increase in the number of pending cases. Consequently, judges have less time to manage discovery issues. In contrast to the actual litigation, where a significant percentage of the parties’ time is spent on document discovery, as opposed to trial or settlement negotiations,
judges "dedicate only five percent of case-related time" to addressing discovery issues.\textsuperscript{119}

While resource constraints may reduce the efficacy of judicial management as a solution, information asymmetries present even greater challenges to judges attempting to resolve discovery disputes.\textsuperscript{120} Because judges are not privy to the glut of information shared between the parties, judges are even less equipped to identify instances of discovery abuse than are the litigating parties. Accordingly, it is difficult, if not impossible, for judges to address the problem of discovery abuse \textit{ex-ante}. A judge is more likely to rule erroneously on a motion to compel discovery or a motion for a protective order because the relevance of a particular request or document "might not be obvious to adversaries or to [the] court."\textsuperscript{121} As Judge Easterbrook writes, it is impossible to tell "a dry hole (common in litigation as well as in the oil business) from a request that was not justified at the time."\textsuperscript{122} As a result, judges may consciously defer to attorneys and "assume[e] these attorneys will know what information they need and will aggressively seek this information."\textsuperscript{123}

The information asymmetries are not eliminated after a party responds to a request. If a legitimate request yields nothing, or if an intentionally abusive request happens to strike gold (after all, even a broken clock is right twice a day), the courts, when dealing with these issues \textit{ex-post}, have to infer the intent of the parties (an inaccurate science at best). Additionally, a party seeking the court's aid must invest significant resources when presenting her case. As one commentator has written "[i]f the responding party were to produce fully the information sought and display it to the judge, the responding party would already have incurred all the costs that [she] was trying to avoid."\textsuperscript{124} As a result, a

\begin{footnotesize}
\begin{enumerate}
\item[119.] Beckerman, \textit{supra} note 29, at 566.
\item[120.] Robert J. Gilson & Robert H. Mnookin, \textit{Disputing Through Agents: Cooperation and Conflict Between Lawyers in Litigation}, 94 COLUM. L. REV. 509, 518 (1994) ("Discovery disputes in contentious cases reveal the severity of these problems. If one party claims that the other party has breached an agreement by engaging in abusive discovery practices a judge often faces substantial evidentiary difficulties. Typically, the judge knows little about the information available to either the responding or requesting party.").
\item[121.] Beckerman, \textit{supra} note 29, at 541.
\item[122.] Easterbrook, \textit{supra} note 10, at 639.
\end{enumerate}
\end{footnotesize}
self-regulatory regime is better than one requiring a third-party to evaluate whether a request was abusive or made in bad faith.

3. Sanctions Distort Incentives

The destruction or inadequate production of ESI has been outcome determinative in several recent high-profile cases,\(^\text{125}\) and many companies are reflecting the unique challenges of ESI in their record storage and production polices. In \textit{Zubulake}, Judge Scheindlin imposed sanctions on the defendant for willful spoliation.\(^\text{126}\) Specifically, she gave adverse inference instructions as to lost and deleted email and imposed significant costs on the defendant.\(^\text{127}\) The plaintiff ultimately prevailed to the tune of a $29.2 million damages award. Morgan Stanley fared far worse after its case ended in an approximately $1.5 billion verdict. The judge gave the jury adverse inference instructions after she found that Morgan Stanley had failed to disclose the existence of or adequately review ESI.\(^\text{128}\) Additionally, the court revoked the pro hac vice admission of Morgan Stanley's counsel.\(^\text{129}\)

The stakes have been raised by awards like these. The risk to clients and attorneys of failing to properly preserve, collect, review, or produce ESI can be astronomical. Consequently, clients now have an incentive to retain, collect, review, and ultimately turn over much larger amounts of data. Accordingly, the sanctions have distorted the incentives of the parties for efficient, narrow responses to responses approaching an avalanche of information produced to protect the client from sanctions. This misalignment of incentives is contrary to the interests of all involved—requester, responder, and judge.


\(^{127}\) Id. at 437-40.


\(^{129}\) See id. at *10.
B. Meet-and-Confer Will Not Lead to Cooperation

The unique and complex nature of electronic information indicates a need for a significant paradigm shift in the way litigants approach discovery. As one commentator has written:

The first defect in the [discovery] process is that the cooperative ethos of discovery clashes directly and irreconcilably with the oppositional character and partisan norms of all other phases and attributes of adversarial litigation. If the parties had been capable of cooperation, chances are they would not have come (or continued) to litigate in the first place.130

Although cooperation may not be the natural default for litigants in an adversarial process, the need for cooperation among the parties has been recognized by scholars, judges, and lawyers alike.131 For instance, the Sedona Conference, a leading authority on electronic discovery practices, has unanimously concluded that “dialogue between and among litigants [is] a prerequisite to resolving (or avoiding) potentially costly and disruptive electronic discovery disputes.”132 With modern discovery, in addition to defining the scope of discoverable material, the parties also must agree upon the manner in which that material will be searched (such as sampling, keyword searching, etc.) and the form in which it will be produced. In accordance with the FRCP 1 “rule of reasonableness,”

130. Beckerman, supra note 29, at 517.
131. THE SEDONA PRINCIPLES, supra note 43, at v. See also AD HOC COMMITTEE FOR ELECTRONIC DISCOVERY OF THE U.S. DISTRICT COURT FOR THE DISTRICT OF DELAWARE, DEFAULT STANDARD FOR DISCOVERY OF ELECTRONIC DOCUMENTS (2007), http://ww.ded.uscourts.gov/SLR/Misc/EDiscov.pdf (“E-discovery liaison. In order to promote communication and cooperation between the parties, each party to a case shall designate an e-discovery liaison through which all e-discovery requests and responses shall be made.”); CONFERENCE OF CHIEF JUSTICES, GUIDELINES FOR STATE TRIAL COURTS REGARDING DISCOVERY OF ELECTRONICALLY-STORED INFORMATION 1, 2-3 (2006), http://www.nesconline.org/mages/DiscCCJGuidelinesFinal.pdf. See also Brownstone, supra note 3, ¶ 5 (“Judges have been increasingly focused on developing a growing body of e-[d]iscovery case law, which will ultimately propound a tried and true process. To be efficient and effective, that process must mandate and enforce cooperation among the litigants as to search terms and other selection criteria needed to narrow down huge data sets into manageable subsets.”); George L. Paul & Jason R. Baron, Information Inflation: Can the Legal System Adapt?, 13 RICH. J.L. & TECH. 10, ¶ 27 (2007), available at http://law.richmond.edu/jolt/v13i3/article10.pdf.

Quite simply, as courts and commentators have increasingly come to expressly recognize, the volume and complexity of electronically stored information demand new forms of collaboration. In turn, in many such instances, a tipping point can be said to have been reached where the game theoretical aspects of litigation practice, dictating what is in one's self-interest, have necessarily changed. Without greater cooperation among adversaries, parties are doomed to any number of defeating consequences, not the least of which will be a real or perceived information 'gap' in ferreting out evidence. Id.

which states that courts should interpret and apply the rules "to secure the just, speedy, and inexpensive determination of every action," discovery should be used as a tool in furthering dispute resolution and not as "a strategic weapon to coerce unjust, delayed, or expensive results."

The December 2006 amendments to FRCP 26 recognize a need for cooperation between the litigants. FRCP 26(f) requires the parties to conduct an early "meet-and-confer" conference that addresses discovery issues:

In conferring, the parties must consider the nature and basis of their claims . . . and the possibilities for promptly settling or resolving the case; make or arrange for the disclosures required by Rule 26(a)(1); discuss any issues about preserving discoverable information; and develop a proposed discovery plan. Cooperation has the potential to greatly reduce the costs both parties incur from discovery. Despite the obvious wish for cooperation expressed in the rules, the question remains, how do we get the parties to cooperate? Assuming that litigants will actually cooperate as part of the meet-and-confer conference presupposes a shift in attitudes based solely on the requirement that the parties share more information with one another. This method of achieving cooperation does not address the most fundamental manner in which corporate managers decide upon strategic actions: risk versus reward. The augmented meet-and-confer obligation changes neither risk nor reward.

The current risks and associated penalties are inconsistent, inadequate, and incomplete ways of handling the problem. Currently, if the two parties cannot come to a mutual agreement to constrain the scope and volume of discovery, abuse will continue to be a cost-efficient and even lucrative choice for litigants. Simply put, the incentives of the game have not been altered; hence, the meet-and-confer requirement will simply play out as the rest of the game does. The incentives must be transformed in order for the parties to cooperate during these sessions. The best way to meet the goals of reasonableness espoused in FRCP 1 is to overhaul the underlying incentives of the rules governing discovery to make way for rules that support cooperation as a favorable strategy as

133. FED. R. CIV. P. 1.
134. THE SEDONA PRINCIPLES, supra note 43, at v.
135. See FED. R. CIV. P. 26(f)(3) (requiring the parties to address "any issues about disclosure or discovery of electronically stored information, including the form or forms in which it should be produced").
136. FED. R. CIV. P. 26(f).
137. Cooter & Rubinfeld, Economic Model, supra note 22, at 452.
opposed to a strategy of abuse. This is also the best way to ensure that the meet-and-confer conference yields cooperative as opposed to merely perfunctory attendance. In other words, cooperation between the parties is crucial to lessening the costs of discovery, narrowing the focus of requests and responses to more accurately mirror the substantive legal issues in dispute, and reducing the burdens on the judiciary.

C. Status Quo Bias

The cost allocation rules function as default discovery rules. In other words, parties may contract around the rules and agree to apportion costs in a manner that is more aligned with their incentives. An extensive literature exists on default rules and how effectively they guide private conduct. 138 Several of the underlying principles of default rules persuasively account for why corporate litigants have not bargained around the current rule of responder-pay-all to establish a rule that better accounts for the benefits received by the requesting party.

An acknowledged drawback is that it is often difficult for a party to suggest a departure from that rule because the counterparty will suspect the suggestion to be a “trick.” 139 In other words, the counterparty perceives the proposing party as attempting to secure an advantage at its (the counterparty’s) expense. Distrust is highly probable during discovery so the parties may be very reluctant to suggest or accept an agreement that deviates from the default cost allocation rules. 140 On the flip side, Professor Bernstein suggests that parties may avoid proposing an alternative to a default rule due to the possibility that the counterparty will draw an adverse inference based on the suggested deviation. 141 Finally, as Professors Ben-Shahar and Pottow suggest, parties may determine that the efficiencies gained through suggesting a deviation from the default rule are offset by the risk of exploitation that stems from the “revelation of valuable private information.” 142

---

140. Id. at 665.
141. Id. at 656 (citing Bernstein, supra note 138). See also Kathryn E. Spier, Incomplete Contracts and Signalling, 23 RAND J. ECON. 432 (1992). Spier uses the example of an athlete who avoids proposing an injury clause during negotiations for fear that the team may infer that he is injury prone as a consequence. Id. at 433.
142. Ben-Shahar & Pottow, supra note 138, at 657 (citing Spier, supra note 141).
This tendency is sometimes referred to as "status quo bias."\textsuperscript{143} The inclination is to abide by a default rule even when a deviation, such as an equal division of discovery costs, is favorable to both parties.\textsuperscript{144} Status quo bias helps to explain why corporate litigants have not arrived at the cost sharing solution through pre-trial bargaining. The adversarial nature of litigation, often characterized as distrustful, exacerbates the potential that a negative inference would be drawn from such a proposal and that the proposal will likely reveal some amount of private information. The ingrained practice of following the responder-pay-all rule makes it even more difficult for parties to suggest efficient alternatives to the current strategically misaligned regime.\textsuperscript{145}

III. Restructuring The Discovery Game: Promoting Cooperation

Any alterations to the discovery rules should modify the incentive structure to achieve an effective \textit{ex-ante} solution that does not require a third-party, such as a judge, to apply the rule. Private self-regulation would provide better outcomes than third party monitoring\textsuperscript{146} or what the rules currently allow. The current regime fails to properly align the parties' incentives to encourage self-regulating cooperation and, therefore, does not lend itself to cost-reducing discovery practices. The goal of this

\textsuperscript{143} See Korobkin, supra note 138.
\textsuperscript{144} Ben-Shahar & Pottow, supra note 138, at 651.
\textsuperscript{145} Id. at 653 (arguing that a default rule may be more "sticky" in situations "where the background rules and templates are well entrenched and commonly employed.").
\textsuperscript{146} Gilson & Mnookin, supra note 120, at 518–19.

This problem also suggests why a judge may be no more able to ensure cooperation by enforcing general rules of procedure than by enforcing a general contract between the parties. A vague or nonspecific rule that requires litigators to "conduct a lawsuit cooperatively" or "to disclose voluntarily all material information" is easy to write, but poses potentially severe enforcement difficulties. In our game, for example, if the judge could identify defection, then the judge could punish defection severely enough so as to deter it from ever occurring. Relying on the judge, the parties could then avoid the prisoners' dilemma. Unfortunately, breaches of general rules of procedure—e.g., "do not engage in burdensome discovery"—are no easier to verify than are breaches of contract of similar specificity. In other words, a judge may have grave difficulty verifying defection even when both parties know it has occurred.

\textit{Id.} The other benefits of discovery, such as more efficient enforcement of legal rules are beyond the scope of this Article. For more on these benefits, see Louis Kaplow & Steven Shavell, \textit{Legal Advice About Information to Present in Litigation: Its Effects and Social Desirability}, 102 \textsc{Harv. L. Rev.} 567, 594 (1989).
Article, therefore, is to provide corporate parties engaged in civil litigation with better incentives for an *ex-ante* solution.

This section first analyzes the nature of discovery abuse. Next, it introduces the prisoners' dilemma game and subsequently uses the game to model and analyze the current problems of discovery. It then develops a more effective solution that transforms the choices of the parties through structural changes which provide the proper incentives for cooperation among the litigants by implementing a discovery cost-sharing rule.  

**A. Discovery Abuse**

A party will issue a discovery request whenever the increase in the expected value of the suit tied to the request exceeds the costs of making the request. Scholars have divided the incentives behind these requests into two broad groups, "informational benefits" and "impositional benefits." An "informational benefit" occurs when the requesting party obtains information directly related to the strength or weakness of its claims, i.e., its legal entitlement. For instance, a plaintiff may believe that the value of her case is $1,000. She anticipates that a discovery request which costs $100 to prepare and execute will increase the probability of prevailing from 50 percent to 75 percent, an increase of $250, with a net payoff of $150. The request is therefore both cost-effective and directly connected to her legal entitlement.

---

147. NICHOLAS MERCURO & STEVEN G. MEDEMA, ECONOMICS AND THE LAW 33 (2nd ed. 2006) ("[O]ne must understand that a change in the law will alter the incentive structure confronting individuals and groups in society. This change in incentives will alter behavior, and that new behavior will ultimately and systematically affect economic performance.").


149. Setear, supra note 124, at 581–84; Cooter & Rubinfeld, Economic Model, supra note 22, at 453 ("[R]equests for facts whose expected value to the requesting party is less than the transaction cost of producing them . . . can be called 'informational abuse.' In contrast, 'impositional abuse' is a request for facts in order to impose compliance costs on the other party.").

150. Setear, supra note 124, at 581–82.

Informational benefits are benefits that the requesting party expects to gain from the information that she receives from the responding party. Factual statements from the responding party can increase the requesting party's ability to hone the legal basis for her case, or help her estimate the value of the stakes in the case and her chances of prevailing on the merits.

**Id.**

151. Here plaintiff starts with a 50% chance of winning $1,000, so her predicted value of going to trial is $500. To increase her chance of winning to 75% she must spend $100. This means that her net return is the predicted value of the verdict ($1000 * .75 = $750) minus the cost of the discovery request ($100). Thus, her net return of filing the discovery request is $150 ($750 - $100 - $500).
Alternatively, a requesting party may benefit from a request by imposing costs on the responding party. This “impositional benefit” is one “that the requesting party expects to gain because her request imposes costs” on the responding party. This can increase the overall cost of litigation, thereby devaluing the responding party’s settlement position. For instance, a plaintiff may prepare and execute a $100 discovery request that will impose a $500 cost on the defendant although it will not improve her probability of prevailing on the merits; in other words, it has no connection to the strength of the legal claims she has asserted. As a result, the plaintiff anticipates that the defendant will be willing to settle for some amount lower than $500 (the cost to the defendant of responding) plus the expected value of her anticipated loss. As long as that increase is greater than the $100 the plaintiff spent formulating and issuing the request, it is cost-effective even though it is not connected to the validity of her legal claims. Accordingly, an impositional request may be “justified by the costs it imposes on one’s adversary rather than by gains

---

152. Setear, supra note 124, at 582.
153. Easterbrook, supra note 10, at 636–37; see also Setear, supra note 124, at 582–83.

[S]uppose that the defendant repeats the $700,000 offer and also surprises you with a discovery request that you estimate will cost you another $150,000 in legal fees incurred in responding to the statement. (Assume you also believe that seeking a protective order against the request would be fruitless.) You should rationally cave in with respect to the case as a whole, and accept your opponent’s settlement offer. Going to trial, after all, will net you only $650,000—the cool million from the verdict minus the $200,000 in fees that you originally expected and the additional $150,000 in fees from responding to the discovery request. From your opponent’s point of view, her discovery request has impositional benefits, because that request has forced you to accept a lower settlement offer than you would have accepted in the absence of the impositional request.

Id.; see also Cooter & Rubinfeld, Reforming, supra note 12, at 74.

A settlement will correspond to the expected trial judgment when the costs of resolving the dispute—commonly called transaction costs—are equal for the two parties. Conversely, asymmetrical transaction costs distort the terms of settlement so that they do not correspond to the expected trial judgment. For example, if the plaintiff faces lower trial costs than the defendant, the plaintiff can demand more than the expected judgment to settle the case. Similarly, if the plaintiff faces lower discovery costs than the defendant, the plaintiff can demand more than the expected judgment to settle the case before discovery commences. Conversely, if the defendant faces lower discovery and trial costs than the plaintiff, the defendant can insist on settling for less than the expected judgment.

Id.; see also Cooter & Rubinfeld, Economic Model, supra note 22, at 437 (“[A]symmetrical transaction costs distort the terms of settlement so that they do not correspond to the expected trial judgment. For example, if the plaintiff faces lower trial costs than the defendant, then the plaintiff can demand more than the expected judgment to settle the case.”).

154. Her anticipated loss is her assessment of her risk which is her predicted probability of losing multiplied by her assessment of the liability involved.
to the requester derived from the contribution the information will make to the accuracy of the judicial process.\textsuperscript{155}

Thus, a requesting party can, broadly speaking, issue two categories of discovery requests: those directly related to their legal entitlements and those that are not.\textsuperscript{156} While one category is clearly abusive and the other more readily comports with the aims of fairness and expediency intended by the FRCP,\textsuperscript{157} both categories may impose a significant and material burden on the responding party. Although both may include a burdensome response, both are not automatically abusive. If the burden is the purpose of the request, the request can be categorized as abusive. If the burden, however, is a mere byproduct of a request related to the requester’s legal entitlement, the request is non-abusive. Put another way, a request intentionally calculated to produce a benefit not related to the requesting party’s legal entitlements can be described as abusive. On the other hand, a request intended to produce a benefit related to the requesting party’s legal entitlements can be described as non-abusive.

Requests, however, are rarely susceptible to stark, binary categorizations. Consequently, labels of “non-abusive” and “abusive” more closely resemble the opposing end points of an “abuse” continuum than exclusive divisions of discovery practices. A discovery request may have a legitimate connection to the requesting party’s legal entitlements; however, that connection may be so tenuous or the expected gain so slight that the requesting party’s primary motivation in issuing the request is to obtain a benefit unrelated to her legal entitlement.\textsuperscript{158} For instance, the above-mentioned $100 discovery request may increase the plaintiff’s probability of winning the $1,000 judgment from 50% to 55%, which represents a loss to the plaintiff of $50.\textsuperscript{159} A rational plaintiff will not

\begin{itemize}
\item \textsuperscript{155} Easterbrook, supra note 10, at 637–38.
\item \textsuperscript{156} Setear, supra note 124, at 581–82.
\item \textsuperscript{157} See supra Part II.A.1.
\item \textsuperscript{158} Some scholars have classified this as discovery misuse, which is separate than abuse. Cooter & Rubinfeld, Economic Model, supra note 22, at 450. The authors note:

\begin{quote}
We want to define discovery misuse and abuse in a way that clarifies current law and practice. From this perspective, misuse or abuse occurs when the gain to the requesting party is out of proportion relative to the cost of compliance. In general, we can define discovery misuse as discovery whose compliance costs more than the expected increase in value to the requesting party’s claim. Discovery misuse is defined as knowing misuse.
\end{quote}
\textit{Id.}; see also Cooper, supra note 23, at 466.
\item \textsuperscript{159} Here plaintiff starts with a 50% chance of winning $1,000, so her predicted value of going to trial is $500. To increase her chance of winning to 55% she must spend $100. This means that her net return is the predicted value of the verdict ($1000 \times .55 = $550) minus the cost of the discovery request ($100). Thus, she suffers a net loss of $50 by filing the discovery request ($550 - $100 -$500).
\end{itemize}
make this request unless there is a benefit, such as one that comes from imposing costs on her opponent. If that benefit is greater than $50, the proposition is justified as cost-efficient. While this request may still be an impositional request, it comports with the positive qualities associated with non-abusive requests.

As impositional costs can be a component of any discovery request, it is difficult to detect whether abuse has occurred. Accordingly, the bright-line definition of a non-abusive request is not a sufficient criterion for reducing burdensome effects on the responding party. To a responding party, the burden of responding in either case can be high. Hence, this overlapping element in abusive and non-abusive requests makes them difficult to distinguish. Likewise, as long as costs are imposed, the requesting party receives the same settlement benefit from either type of request. The standard of abuse is thus a subjective standard because it is the requesting party's valuation of the expected benefit from the request that determines whether or not it is truly abusive. Additionally, despite good-faith on the part of the requesting party, the responding party may still suffer an abusive effect due to the burden imposed on it. From the requesting party's point of view, it follows that the difference in the substantive content of the request is immaterial because the impositional consequence of each request, regardless of abusive intent, is identical. As such, the benefits that flow from these impositional consequences, as much as the information necessary to determine the merits of a case, drive whether a discovery request is issued. The burden to the responding party places no constraint on the content of the requesting party's demand, and the more burdensome the request, the greater the benefit to the requesting party.

Consequently, the current rules governing discovery practice not only fail to identify and curtail discovery abuse but actually lead a rational actor to select abuse over cooperation. The current rules promote abuse since the requesting party who receives the benefit incurs none of the costs the receiving party incurs in responding. This incentive struc-

160. Easterbrook, supra note 10, at 638.

From the perspective of the producing party, normal and impositional requests are hard to distinguish—and for the producing party's purposes the difference is immaterial, because they have identical effects. So both categories may be effectively impositional (that is, they may yield an increase in the settlement offer out of proportion to the value of the information in improving accuracy).

Id.

161. Id.

162. See discussion supra Part II.A.3 (concluding that sanctions and similar measures are not effective in disciplining the behavior of corporate parties engaged in discovery).
tecture produces optimal conditions for abuse. A rational actor maximizes her potential benefit by disadvantaging her opponent as much as possible. When a request is issued, any costs that are borne by the respondent translate into some level of benefit for the issuer. As a result, the most efficient request, strictly from the requester’s point of view, is one that maximizes the costs imposed on an opponent. In the instance where an actor chooses to act cooperatively instead of abusively, the actor is in fact worse off if her opponent chooses to respond abusively because she will have revealed private information about the strength or weakness of her case. Her opponent, on the other hand, will have received both the benefit of the private information and the benefit that comes from an abusive response. This structure, where a party is able to benefit while imposing costs on her opponent but would in fact be better off cooperating, results in the classic prisoners’ dilemma.

B. A Game-Theoretic Approach to Discovery Cost-Sharing

Game theory consists of analytical tools that illustrate strategic interactions in the decision-making process. Two of the underlying assumptions of game theory are that the decision-makers are rational and that they “reason strategically.” In other words, they work toward a well-defined observable purpose and when making decisions, they consider what they know or expect about the other party’s behavior. By illustrating the strategic variables and outcomes that influence the players in a particular situation, game theory sheds light on the players’ interactions. The tabular representations often used to illustrate normal form games are useful for categorizing the choices and confirming the underlying intuitions of particular interactions. In the context of document discovery, a game-theoretic lens reveals the motivations informing the parties’ choices when formulating and responding to discovery requests.

164. See infra notes 182–190 and accompanying text; see also Discovery Abuse, supra note 163, at 362–64.
165. MARTIN J. OSBORNE & ARIEL RUBINSTEIN, A COURSE IN GAME THEORY I (MIT Press) (1994). To be sure, game theory, and more specifically, the prisoners’ dilemma, is an imperfect model for the behaviors and reasoning in the discovery process. While imperfect, others such as Ronald J. Gilson and Robert H. Mnookin, have used “the prisoners’ dilemma as a heuristic to understand better the circumstances of disputes locked in a legal conflict in an abstract world in which there are no lawyers—only the parties themselves and a judge.” Gilson & Mnookin, supra note 120, at 512.
166. Osborne & Rubinstein, supra note 165, at 1.
167. Id.
This section first describes the prisoners’ dilemma game, then argues that discovery shares the general overarching structure of the prisoners’ dilemma, and, finally, it analyzes how the dilemma is eliminated through structural changes to the cost obligations of each party. It effectively reveals that once the parties’ incentives are structurally altered, by changing the distribution of costs in document discovery, parties will be more willing to cooperate because cooperation is aligned with their self-interest. This supports the intuition that if one rule in discovery is changed, the result will alter the behaviors of the parties. As the parties’ preferences and subsequent decisions will be to cooperate with their opponent, both sides will have lower costs and a more efficient process, thereby aligning the parties’ choices with the purported meta-goal of FRCP 1.

1. The Prisoners’ Dilemma

The prisoners’ dilemma is a normal form game, in which the two players (“prisoners”) may make one of two “moves.” They may either “cooperate” with or “defect” from the other. Like other models of strategic behavior, each player is only concerned with maximizing her own payoff and is indifferent to the payoff of the other player. In the language of the prisoners’ dilemma, the exclusive goal of each prisoner is to spend as little time in prison as possible, and “each is indifferent to how much time the other spends in prison.”

The term “prisoners’ dilemma” is derived from a tale involving two prisoners. Both prisoners have been arrested and are in police custody for committing a serious crime with a maximum sentence of twelve years of imprisonment. In order for the State to successfully prosecute the alleged crime, it needs a confession from at least one of the prisoners. If neither prisoner confesses, however, the State has enough evidence to prosecute and convict both for a lesser offense, which carries

---


A change in rules may alter not only the costs that each party bears but also when during the course of the litigation each cost must be incurred. Both kinds of changes can have powerful effects on the dynamics of litigation . . . Altering the sequence or the number of moves in a game has a dramatic effect on the likely course of play. Hence, the effects of even small changes in the rules of civil procedure are often significant.

Id.

169. See discussion supra Part II.B.

170. Baird et al., supra note 168, at 6–49.

171. Id. at 33.

172. Gilson & Mnookin, supra note 120, at 514 n.15 (“The game, with its characteristic payoff structure, was devised in 1950 by two RAND researchers, Merrill Flood and Melvin Dresher.”) (citations omitted).
a lighter five-year sentence. To secure their cooperation, the police offer each prisoner a deal. Either prisoner may betray the other and confess, thereby receiving a suspended sentence in exchange for cooperating. Alternatively, they can reject the deal and remain silent. If Prisoner A chooses to remain silent, and Prisoner B confesses, Prisoner A will be convicted of the more serious crime and receive the maximum twelve year sentence. If Prisoner A confesses, and Prisoner B does not, Prisoner A will go free. In the event that both prisoners confess, the state will be able to successfully try them for the more serious crime, but will seek a lenient seven-year sentence in exchange for their cooperation.

Each prisoner is held in a separate room so as to prevent contact with the other prisoner and, therefore, no means of communication or collaboration. Thus, each prisoner is faced with a dilemma: should she defect and betray the other prisoner or should she remain silent? Each prisoner’s jail sentence is dependent on what the other prisoner decides. However, each prisoner must make her decision without knowing the other’s choice. The game and the possible payoffs are modeled in the payoff matrix below. This tabular representation illustrates the payoffs and strategies of the two prisoners in the game. It does not describe the players’ decision-making process or underlying reasoning, but simply shows the numerical value associated with each strategy: cooperate or defect. A payoff matrix for a two-player game lists the strategies for one player in the rows (Prisoner A) and for the other in the columns (Prisoner B). In the cells where the two strategies intersect, the first number is the row player’s payoff, and the second number is the column player’s payoff.

### Payoff Matrix

<table>
<thead>
<tr>
<th></th>
<th>Cooperate</th>
<th>Defect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate</td>
<td>(5), (5)</td>
<td>(12)/(0)</td>
</tr>
<tr>
<td>Defect</td>
<td>(0),(12)</td>
<td>(7)/(7)</td>
</tr>
</tbody>
</table>

In the event that Prisoner B betrays Prisoner A and confesses, Prisoner A is better off confessing as well. By doing so, she will receive the seven-year sentence as opposed to the twelve-year sentence she would receive if she remained silent. Similarly, if Prisoner A remains silent,
Prisoner B is still better off confessing because she will then go free rather than suffering a five-year prison term. Regardless of Prisoner A’s choice, Prisoner B is better off confessing every time. As this is always the case, all rational players will confess, making Confess-Confess the dominant strategy. This strategy leaves both players worse off than if they had cooperated with the other and both remained silent.

2. The Discovery Dilemma

The two parties to a lawsuit face choices that are similar to the prisoners’ dilemma as part of the discovery process. The assumptions and rules of the game that framed the choices of the prisoners also apply to the interactions between the two parties in discovery. As the prisoners’ only goal in sentencing was to minimize their time in jail without regard to the other, each party in discovery is only interested in optimal self-positioning and has no concern for the opposing party’s position. Each party (defendant or plaintiff) can choose to either abuse or cooperate in making and responding to discovery requests. The matrix below contains the payoff structure of the potential combinations of abusive or cooperative moves by the plaintiff and defendant. It illustrates why dis-

178. BAIRD ET AL., supra note 168, at 34.
179. "A dominant strategy is a best choice for a player for every possible choice by the other player. One strategy is ‘dominated by’ another strategy when it is never better than that strategy and is sometimes worse." Id. at 11. For further discussion on dominant strategies, see ERIC RASMUSEN, GAMES AND INFORMATION: AN INTRODUCTION TO GAME THEORY (1989).
180. BAIRD ET AL., supra note 168, at 34.
181. Although discovery may have many rounds, parties generally do not know how many rounds will be played and whether a round will be played after the current one. In other words, at any point during discovery the controversy may end either due to the parties settling, a successful summary judgment motion, or motion to dismiss. As such, each round is played as a single round game. Additionally, as it is difficult to detect whether an opponent cooperated or defected in a previous round, and to what degree, there is too much noise for it to be modeled as a multi-round game.
182. Note that while the choices are similar they are not identical. See discussion supra Part III.B.1.
183. For a plaintiff cooperation means making a discovery request where the anticipated value of the request to the plaintiff (VPR) is greater than the cost the plaintiff imposes on the defendant (CD). Cooperation exists where VPR > CD; whereas abuse exists where VPR < CD. This request is likely one that is narrowly tailored to the plaintiff’s informational needs and claims as opposed to an overly broad fishing expedition. The defendant can respond to requests in a cooperative or abusive (retaliatory) manner. This means a defendant can either engage in a variety of abusive practices such as refusing to turn over relevant information, hiding that information in unlikely places in the documents they do turn over, and providing the other side with far more information than is necessary to respond to the initial request, thereby increasing the plaintiffs cost to uncover the relevant information. Conversely, the defendant may respond cooperatively in a manner that provides the plaintiff with the information requested in a useable and straightforward format.
covery presents a situation analogous to the prisoners’ dilemma for the two parties involved. As the payoffs demonstrate, discovery is not a zero-sum game, which means gains by one player do not necessarily result in a loss to the other player.\(^{184}\) As a result, the parties are able to reduce their combined overall discovery expenditures through cooperation which leaves them better off than if they abused one another.\(^{185}\) With each side limited to two moves (cooperate or abuse), there are four possible payoffs:

<table>
<thead>
<tr>
<th></th>
<th>Plaintiff</th>
<th>Defendant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate</td>
<td>(3),(3)</td>
<td>(6)/(1)</td>
</tr>
<tr>
<td>Defect</td>
<td>(1)/(6)</td>
<td>(4)/(4)</td>
</tr>
</tbody>
</table>

When both the plaintiff and the defendant cooperate, each side will lose approximately $3 million. This assumes that both parties have revealed some private information, but also gained some information from the cooperative actions of their opponents. Additionally, each party has expended resources to submit its request or response. Conversely, if the two sides choose to defect, neither side readily reveals private information. Each party has to expend greater effort than in a mutually cooperative scenario to cull any discernable private information about her opponent. Additionally, the requesting party (here, the plaintiff) will have to expend additional effort to either sort through mountains of unresponsive materials or to file a motion to compel\(^{186}\) to force the responding party (here, the defendant) to produce any responsive

---

184. Setear, supra note 124, at 572.
185. Gilson & Mnookin, supra note 120, at 516 ("Mutual cooperation involves lower total litigation costs than mutual defection.").
186. Beckerman, supra note 29, at 525.

Lawyers endeavor to achieve this end in many ways including: propounding wide-ranging, penetrating and comprehensive discovery requests; pursuing them if necessary through motions to compel discovery; simultaneously asserting all possible objections in response to adversaries’ requests, including those of irrelevance, excessive scope and undue burden; constraining all of the opponents’ requests narrowly and excluding everything not directly responsive to them; asserting on the client’s behalf all available privileges as excuses for non-production of documents, failure to answer interrogatories or instructions not to answer questions on depositions; and seeking protective orders to validate any decisions not to answer or produce.

*Id.*
information wrongly withheld. They each defect or abuse at a cost of $4 million. In the final two scenarios, one party cooperates while the other abuses. This leaves the cooperative party in the most disadvantaged position. “In many disputes, because of the adversarial nature of litigation, cooperative moves by one litigant, if not reciprocated by the other, can lead to exploitation and something akin to a sucker’s payoff.”

The “sucker’s payoff” describes an outcome in which the cooperative party has revealed its private information whereas the abusing party has not. Thus, the abusing party has benefited at the expense of the cooperating party. Additionally, if the cooperating party is the requesting party (here, the plaintiff), she must spend additional time, money, and effort to either force the responding party (here, the defendant) to produce the remaining information or to cull through an over-inclusive response. Thus, if the plaintiff cooperates and the defendant abuses, the plaintiff loses $6 million, whereas the net loss to the defendant is only $1 million. Conversely, if the defendant is the cooperative party, the defendant must expend significant effort to comply with an overly broad, low expected-value request and/or file a protective order, and will gain little insight into the plaintiff’s case. In this scenario, the plaintiff learns a great deal about the defendant’s case, reveals very little of its own information, and imposes tremendous cost on its opponent. Hence, the defendant finds itself out $6 million compared to only $1 million for the plaintiff.

One reason for this result is the asymmetry of private information. Each side has information about its legal claims, defenses, and corresponding information, but does not have reliable information regarding its opponent’s position. Both discovery requests and the corresponding responses reveal private information to or conceal private information from the previously uninformed opponent. The more narrow and cooperative a request, the more information will be revealed. For instance, a plaintiff’s cooperative request will reveal something about the strength of its own case, including the claims for which it believes there is a higher likelihood of prevailing and perhaps even litigation tactics. The defendant can then use this to strengthen its defense, thereby reducing the plaintiff’s chance of victory and corresponding settlement value. Conversely, a broader request may serve to distract a defendant from the plaintiff’s strongest claims by forcing a defendant to devote resources to claims that are nothing more than red herrings. Additionally, such broad requests may make it more difficult for a defendant to attribute a clear strategy or thought process to its opponent.

187. Gilson & Mnookin, supra note 120, at 516.
The plaintiff is worse off when its discovery request is cooperative and the defendant’s response is abusive because the plaintiff will either have less information or a more difficult time sorting through extensive data to find buried relevant information. This results in additional costs to the plaintiff: seeking a motion to compel, carrying out document review, or sending additional requests. Similarly, if a defendant responds to an abusive request in a cooperative manner, it has tipped its hand, revealing private information and thereby increasing the plaintiff’s chance of prevailing.

As is the case in the prisoners’ dilemma, neither party is able to verify whether its opponent has cooperated or abused until it’s too late. The responding party’s decision is uninformed by the requesting party’s decision because, at the time of the decision, the information on which the requesting party’s decision is made is private and thus unknown to the responding party. Accordingly, the responding party will not know whether the requesting party’s request was cooperative or abusive. Hence, each side must independently decide the best move for the given situation. Neither side can obtain a binding commitment to cooperate from its opponent. There is no coercive or cooperative mechanism by which the responding party can control or influence the behavior of its opponent; therefore, the best way for the responding party to guarantee herself some benefit is to make an abusive response. Thus, each party in the litigation discovery game has a dominant strategy of abuse. The dominant strategy equilibrium for this game is then to Abuse-Abuse.

In discovery, unlike the Prisoners’ Dilemma, the parties may be able to infer whether their opponent has cooperated or abused based on the breadth of the request, the amount of information withheld or produced, and/or the substance of the objections made. Any inference however, may be inaccurate, as the basis upon which a request or a response was made is unknown to the recipient of said request or response. While there are signals that may indicate whether a move was abusive or cooperative, the signals are noisy at best. Additionally, even when a party is confident that the other side has abused, the available third-party (i.e. judicial) remedies are limited, as judicial intervention is problematic at best. See supra notes 101–124 and accompanying text; see also Gilson & Mnookin, supra note 120, at 517–18 (“Even where a breach of [a cooperative discovery contract] is observable by the parties, a violation may be difficult to verify to a judge, thus making enforcement problematic.”). For more on the distinction between observable and verifiable information, see Baird et al., supra note 168, at 246.

Gilson & Mnookin, supra note 120, at 517 (“The rules of the game for a prisoners’ dilemma also require that each player remains ignorant of what the other player will do before making a move: enforceable commitments or contracts are not possible and thus the parties cannot credibly bind themselves to cooperate.”); see also Baird et al., supra note 168, at 32 (“The game-theoretic problems involving simultaneous decisionmaking extend to a broader class of cases, however. They include any situation in which players must act without knowing what the other player has done.”).
3. Discovery Cost-Sharing

Introducing an element to the game whereby each participant diminishes its own value through its own abusive action changes the dominant strategy of the game. For example, if the prisoners in the prisoners’ dilemma were forced to serve half of the combined sentence with the other prisoner, they would always prefer to keep silent and force the state to prosecute it for the lesser crime. This scenario is always the most favorable to the prisoners and maximizes their personal payoffs by minimizing the amount of time they spend in jail. It connects Prisoner A’s payoff maximization to the jail sentence served by Prisoner B, eliminating the classic dilemma and encouraging cooperative behavior.

Similarly, if discovery costs are shared equally (50/50 cost-sharing), the plaintiff’s best response, regardless of what the defendant does, is to cooperate. The same is true for the defendant. As opposed to the prisoners’ dilemma illustrated above, this change in the default rule creates a new dominant strategy equilibrium of Cooperate-Coproperate, which is illustrated in the new payoff matrix below.

**Payoff Matrix**

<table>
<thead>
<tr>
<th>Plaintiff</th>
<th>Cooperate</th>
<th>Defect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate</td>
<td>(3),(3)</td>
<td>(3.5)/(3.5)</td>
</tr>
<tr>
<td>Defect</td>
<td>(3.5)/(3.5)</td>
<td>(4)/(4)</td>
</tr>
</tbody>
</table>

Like the prisoners’ dilemma, in the event that both plaintiff and defendant act cooperatively, each side will minimize discovery expenditures, reduce the time for dispute resolution, and reveal the information necessary for each party to make a better and more accurate assessment of the strength of its case. This division provides a more efficient default rule for a large number of corporate litigants. Parties would still be free to contract their own cost allocation rules; however, such a default rule will situate most parties in a more economically optimal po-

---

190. Gilson & Mnookin, supra note 120, at 516.
191. This is half of the sum of the sentences received by Prisoner A and Prisoner B.
192. The prisoners’ dilemma is very useful for modeling the incentives of two equally sized corporations engaged in litigation where there are symmetrical discovery requests and responses. The obvious dominant strategy equilibrium of cooperate-cooperate becomes less obvious as the size of the two parties diverge.
sition than the current responder-pay-all rule. In a model that strictly considers the cost\textsuperscript{193} of discovery expenditures, it is possible to restructure litigants' incentives to encourage cost-lowering cooperation. Reducing discovery abuse and increasing control over the cost of discovery will allow corporate managers to better assess risks when making litigation and settlement decisions.

**Conclusion**

Document discovery need not be a lose-lose proposition for litigants and courts. Despite the transformation of document production following the advent of ESI, it is nevertheless possible to reduce litigant burden and the risk of sanctions engendered by discovery. The current discovery rules require each party to bear the entire cost of its discovery response. As shown through the application of the classic prisoners' dilemma, this inefficient regime rewards abusive behavior and contributes to staggering litigation costs. Even the recent federal discovery amendments, which were intended to address the astounding cost of discovery, fail to alter the underlying incentives that inform litigants' decisions.

By viewing the discovery dilemma through a game-theoretic lens, this Article provides a novel answer to the problem of discovery abuse in complex civil litigation between corporate entities. Instituting a 50/50 cost-allocation solution would realign the strategic incentives of the litigants in a way that rewards cooperation and cost-minimizing decision-making. This approach improves upon the status quo by better utilizing the core motivations underlying the decisions of corporate managers in litigation. It places the parties in a much better position if they choose not to bargain away from the default rule, and potentially opens the door for them to allocate costs in a manner that more accurately reflects the benefits and burdens associated with discovery. When corporate parties begin litigation by sharing the cost of discovery evenly, each side's self-interest is tied to the overall cost of discovery. While still not mandating cooperation, a cost-sharing approach would lead corporate parties to conclude that the most cost-effective method of managing their discovery costs is through non-abusive, narrowly-focused requests and responses.

\textsuperscript{193} Costs here have been monetized but include more than strictly monetary values; it is a measure of money, time, effort and overall change in the strength of that side's position. See Easterbrook, supra note 10, at 640.