

Computer Databases: Forced Production versus Shared Enterprise

by Michael Owen Miller and Brenden J. Griffin

It starts with an innocent case of computer envy. During a deposition, one of your high-tech associates retrieves a document on her laptop. The opposing attorney is more than impressed; he wants the same document on a computer disc for his own computer. You soon receive a request for production of CD-imaged documents and the related database, together with a privilege log.

The computerized database is the newest form of plunder in the discovery wars. If you have gone to the expense of creating one in a document-intensive lawsuit, you may be asked to produce it. And depending on the circumstances in your particular case, you may be forced to share the virtual fruits of your labor.

How can this be? Isn't this a request for attorney work product? Doesn't Rule 34 permit production of documents "as they are kept in the usual course of business"? With the confidence of a professional who grew up in the pre-laptop age, you draft a response in opposition to the request for imaged documents on CD and invite your opponent to do what you did: Search the boxes and photocopy whatever you like. In the strongest possible language, you make clear that your litigation support database is protected under the work product doctrine. You instruct your high-tech associate to copy several citations that will discourage your opponent from forcing a discovery battle. (She puts it on a disk for you.) Then she tells you the bad news that your software consultant omitted: the law shielding some of your computerized litigation support from disclosure is equivocal. You learn that you are sitting on a time bomb, which may explode if your client decides that you have spent a lot of its money to help the other side acquire its documents.

Older case law tends to prohibit the discovery of an attorney's work product that involves organizing and assimilating documents. But recently, some trial courts have become more interested in speeding up discovery and equalizing the parties' discovery burdens. It is not clear at this time whether the reported decisions ordering disclosure of computerized litigation support represent a new trend unique to these tech-

niques or the beginning of a discussion that awaits a full policy analysis, particularly in light of prior law. The recent cases have limited precedential effect because many are interlocutory trial court orders. Most jurisdictions have no law at all. Until this area of law is clarified with procedural rules that address disclosure of computerized litigation support or the case law develops on something more than an ad hoc basis, litigators using cutting-edge computer techniques must also acknowledge the possibility that they are working with "bleeding-edge" legal issues. Fortunately, there are safe harbors against forced disclosure, and agreements between counsel at the beginning of the process will go far in minimizing the likelihood of adverse discovery rulings in those areas for which there is scant authority supporting either side.

For any case involving computerized litigation support, you first need to protect yourself. Before undertaking the task of creating a database, consider whether all or part of it will be ruled discoverable. You may decide to approach the opposing attorneys very early in the case about discovery issues that are bound to come up later. It is unsettling for any attorney to think that his work in organizing documents may be discovered. It may be much less troubling, then, to settle the matter with an agreement on shared document management. You may even convince opposing counsel to agree on sharing the costs of a computerized database. In this way, you reduce the odds that someone will demand production of documents which you consider outside the scope of legitimate discovery. You also lessen the likelihood that opposing counsel will seek your genuine work product after concluding that you do better pretrial preparation.

Whether the product of computerized litigation support is discoverable fundamentally involves its nature and characteristics. Does it contain the attorney's assessment of documents, or is it merely a document index, albeit a very large one? Did the client's understanding of the documents make it easier to craft the computer support? Whose documents are stored in the computer? Are the documents coded? How much effort was expended? The answers to these questions help predict whether your computer data are discoverable by your opponent.

Before addressing these questions, it is necessary to

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understand the nature of the underlying software. Computerized litigation support is a catchall term that describes anything from a sophisticated program developed exclusively for litigation support to a word processor template marketed to lawyers. There are two categories of software used by litigators that potentially pose serious disclosure problems: document imaging and database.

Document imaging software allows the user to view documents on the computer monitor. Additional processing of typewritten materials provides full-text search capability, but typically a document is stored as the electronic equivalent of a photograph of the page that can be displayed or printed if a paper copy is needed.

Although scanning documents onto CD was an expensive proposition just several years ago, the costs are now close to photocopying (approximately 10 to 30 cents per page). Litigators use document imaging software to avoid many problems associated with complex paper-based files. Documents are immediately available, eliminating the need for an army of clerks to pull them out of files. Likewise, on-site storage in expensive office space is significantly reduced. Once scanned, electronic duplication of the document images is a fraction of the cost of photocopying paper files. Most important, up to 15,000 pages can be stored on a single CD, which allows a lawyer to carry in a briefcase the equivalent of multiple boxes of documents for use at trial or in a deposition. Notwithstanding these advantages, it is the database software that provides the most benefits and presents the greatest disclosure problems.

Whether documents are stored on electronic medium or in traditional paper files, they must be organized, reviewed, and summarized based on the issues of the case. Database software allows litigators to catalogue objective and subjective information about each document. Objective coding, such as the date, author, or "Bates" number, is crucial for retrieval and organization. Subjective coding involves references to issues, strategic importance, or privileges. Both types of coding can take considerable time and cost. Database software manipulates and stores the catalogue of objective and subjective coding for thousands or millions of documents. Although we use the term "document" to describe the thing to be coded, it can refer to any kind of information, such as machines, photographs, or scientific literature. Forced disclosure of this coded information is the greatest discovery problem faced by litigators.

Creating a Database

Let's return to our case of the attorney with computer envy, to help illustrate the potential discovery issues. Your client, BioStim, is a biotechnology company that manufactures an agricultural growth stimulant for certain kinds of plants. A customer sued BioStim alleging that the product helps plants on which it is directly applied, but kills other kinds of plants growing nearby. The lawsuit is brought by a large commercial nursery in your area. This is the first lawsuit filed, although the company is aware of six similar claims by other nurseries in other states. The stimulant has become the company's financial and marketing flagship product within a very short time, although the R&D time was lengthy. The alleged damages and harm to sales, if multiplied by numerous suits, could seriously weaken the company.

BioStim was willing to pay the upfront costs to image documents and to create a database principally on the promise of



avoiding duplicative work in other jurisdictions. There are 300,000 pages of documents. The stimulant was the result of overlapping research for a variety of biological products. The documents include laboratory notes and photographs, field experiments, scientific publications, regulatory submissions, internal memoranda, manufacturing records, and sales records. Although the business papers relating to this product are relatively easy to identify, the overlap with other products defies easy categorization of the R&D documents. Unfortunately, the complaint alleges design warnings and manufacturing defects. It is necessary to understand the documents as the company used them, as well as to categorize them as they relate to claims and defenses in the lawsuit.

The possibility of multiple lawsuits in several states, or even a class action, indicated that all documents potentially relating to the product should be scanned onto CD. All the documents fit onto 25 CDs, the equivalent of 125 boxes of paper. Every document was coded for date, author, recipient, department, product, subject matter, and a one-sentence description. This objective coding was done by a team of college students under the direction of your legal assistant.

A subset of 100,000 documents was created by you and the client for detailed review after analyzing the results of the objective coding. You believe that these documents are the ones most likely to contain information relevant to the claims and defenses. Attorneys and legal assistants reviewed each of the documents for relevance, privilege, and categorization as it related to legal theories. There is also a general field for attorney comments.

Weekly reports by scientists and technicians, which record product development over five years, were scanned into a separate database by using Optical Character Recognition software (OCR). This enables the user to quickly identify what was known at any point in time. Additionally, the client

maintained a substantial scientific library as part of its research program, portions of which you copied and supplemented with recent articles on agricultural growth stimulants.

The client also maintains computer data showing its original statistical analysis of the research to develop the product, as well as QA measurements made during the manufacturing process. This data was analyzed using a generally available statistical program customized for the client's applications. Finally, you employ a consulting firm to review the client's original research and to conduct experiments testing whether it is possible to duplicate the collateral-type damage alleged by the plaintiffs. The consultant is provided only with paper copies of the client's documents.

Plaintiff's counsel was provided access to 70 boxes of documents that directly pertain to the product and his client within 40 days of filing the answer. The Rule 34 production requests are made five months before trial. Along with the

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demand for the CDs and database, plaintiff wants the client's statistical analysis tapes and your consultant's (now-expert) computer analyses. Plaintiff's expert will use the documents to determine whether the original research was appropriate to test for an iatrogenic effect. He hopes to attack your expert's methodology, as well as buttress his own rather crude experiments that justified the original filing of the lawsuits. He wants to search the QA data for existence of contaminants or other irregularities. You believe plaintiff's counsel communicates with or actually represents other nurseries. With deadlines only months away, you are reluctant to simply hand over the fruit of a half-year's work, particularly since you have built a very strong defense that there is little damage to surrounding plants and, in any event, the research at the time was state of the art and did not predict this harm.

This fact situation contains the four most commonly encountered types of computer data subject to discovery disputes: (1) information created or stored by the client, (2) litigation expert analysis, (3) imaged documents, and (4) documents created or obtained by attorneys. The first two kinds of data initially posed discovery problems for the courts and lawyers, but rulings by the courts are now relatively predictable.

A request for computer-stored information is always subject to a threshold question. Was it created by the client or the attorney? Information stored or created by a computer for the client is discoverable if it is likely to lead to the discovery of admissible evidence. The 1970 amendment to Federal Rule 34 that enlarged the definition of documents to include "other data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reasonably usable form" was directly aimed at electronic data.

In some respects, a party's computerized documents and quantitative information are even more likely to be deemed discoverable if the computer provides the most efficient means of accessing the information. For instance, in one case

where a plaintiff answered antitrust interrogatories in the form of a massive computer-generated paper printout, the court ordered it to rerun the computer program, printing the results in a computer-readable format. *National Union Electric Corp. v. Matsushita Electric Industrial Co.*, 494 F. Supp. 1257, 1260-62 (E.D. Pa. 1980). The court's reasoning highlights the emphasis on efficiency over advocacy in discovery: "While a printout might be reasonably usable within the meaning of Rule 34, the production of a party's data in a form which is directly readable by the adverse party's computers is the preferred alternative. . . . Although there may be some difference between requiring the production of existing tapes and requiring a party to so program the computer as to produce data in computer-readable as opposed to printout form, we find it to be a distinction without a difference. . . ." This view was not shared universally at first. For example, in *Williams v. Owens-Illinois, Inc.*, 665 F.2d 918, 933 (9th Cir. 1981) the court held that production of "more time-consuming, difficult, and expensive" printouts was acceptable in lieu of computer tapes. *Williams*, however, must be viewed with caution because of the increased use of computerized data in litigation over the past fifteen years, and because the court's standard of review was for abuse of discretion only. The Federal Judicial Center's *Manual for Complex Litigation*, § 21.446 (Third 1995) anticipates that not only should a discovery plan address production, inspection, preservation, and trial use of all computer information, but that the discovery requests and responses themselves should be transmitted in computer-accessible form to avoid re-entering information. There is little question that in our example fact situation, BioStim's computer research and QA statistics are discoverable in the original electronic format.

Expert computer analysis also is subject to discovery. The example consulting firm undertook an original analysis of many laboratory studies conducted by BioStim's R&D staff. It worked from the original laboratory notebooks to ensure the integrity of their work product. Its final report was based on sophisticated computer analyses derived from the client's original data that it had manually entered into their computers. Plaintiff's expert wants to skip the manual input process and work directly from the computer data files to determine whether modifications to the assumptions and statistical methods will result in different conclusions. You learn that although the other side's expert could duplicate the same analysis if he chose to do so, there is authority that such duplication is wasteful and should be avoided. *Williams v. E.I. du Pont de Nemours & Co.*, 119 F.R.D. 648, 650-51 (W.D. Ky. 1987).

You begin to wonder how far the principle of avoiding duplication of time and money will go in forcing production of your computerized data. You still dispute production of the documents on CDs, and your coded database of those documents.

A database created under the direction of an attorney in anticipation of litigation meets the classic definition of work product. *Santiago v. Miles*, 121 F.R.D. 636, 638 (W.D.N.Y. 1988) ("There can be little doubt that the printouts produced from a computer program developed by counsel . . . in response to the filing of this lawsuit are documents and tangible things . . . prepared in anticipation of litigation or for trial."); see also *Manual for Complex Litigation*, § 21.446 at 79, (computerized data compiled in anticipation of or for use in litigation may be entitled to protection as trial preparation

materials). There are no reported decisions of any court rejecting a work product claim. The contested analysis is whether the work product doctrine is overcome.

The work product doctrine is more of a qualified immunity than a privilege. The party seeking discovery can obtain discovery of certain work product upon a showing of substantial need of the materials in the preparation of the case, and inability to obtain the substantial equivalent of the materials by other means without undue hardship. Fed. R. Civ. P., Rule 26(b)(3). Even if the propounding party satisfies these pre-conditions, Rule 26(b)(3) directs the court ordering discovery of the work product to "protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning litigation." This leads to an analysis of whether the databases and their indices are "fact" or "opinion" work product. The rule meticulously protects against revealing the latter. *Santiago*, 121 F.R.D. at 639 ("Access to mental impressions, if ever to be permitted, may occur only on a strong showing of necessity and unavailability by other means").

"Substantial Need" and "Undue Hardship"

To demonstrate "substantial need," the party seeking discovery of database need only show that such production will save significant time and money in preparation of its case. *Washington Bancorporation v. Said*, 145 F.R.D. 274, 279 (D.D.C. 1992); *In re Chrysler Motors Corp. Overnight Evaluation Program Litigation*, 860 F.2d 844, 846 (8th Cir. 1988).

"Undue hardship" is a relative term. A party with ample resources, personnel, and time can duplicate computer databases created by other parties without going broke. But if significant costs would be expended in a simple duplication of effort, the argument regarding undue hardship almost inevitably tips in favor of disclosure of an extant database.

A recent, highly publicized order illustrates this emerging trend. In *State of Minnesota v. Phillip Morris, Inc.* (Case No. C1-94-8465, pending in Ramsey County District Court, dated 11/1/95), the plaintiffs State of Minnesota and Blue Cross and Blue Shield of Minnesota sought certain information in databases created by tobacco industry defendants. Although it is difficult to overestimate the legal resources available to the seven tobacco company defendants, the plaintiffs were not without their teams of attorneys. The trial court ordered production of indices containing objective information in a battle that was fought to the United States Supreme Court. See *R. J. Reynolds Tobacco v. Minnesota*, 134 L. Ed. 2d 952, 116 S. Ct. 1852 (1996). The trial court found that there were millions of documents to be reviewed, which could be selected, accessed, and located more quickly and accurately by computer, and even a team of five attorneys would require years to review the documents. The last finding is probably a red herring because a coded database, however extensive, never replaces an attorney actually reading the document. The dispositive factor appeared to be the inescapable conclusion that the creation of a new and separate database would be duplicative, time-consuming, and costly. In other words, undue hardship may be synonymous with any extensive effort and cost, which the opponent ironically proves up by making objections based on how much work went into creating the database.

Phillip Morris does not stand on detailed legal analysis, particularly consideration of precedent. For instance, there is authority that the "undue burden" prong cannot be met if the

documents referenced in the database are available through a usual discovery request. *IBM Peripherals*, 5 Computer Law Ser. Rptr. 878, 879 (N.D. Ca. 1975) ("All documents and other materials referenced by the trial support system of IBM's counsel are available through normal discovery to plaintiffs"); *United States v. American Telephone and Telegraph Co.*, 642 F.2d 1285 (D.C. Cir. 1980); Friedman, *Computer Discovery in Federal Litigation Playing by the Rules*, 69 Georgetown L.J. 1465, 1486-89 (1981). We can only assume that the *Phillip Morris* court decided that the meaning of "undue burden" had subtly shifted. For instance, *IBM Peripherals* and *U.S. v. AT&T* predate the appearance of mandatory disclosure rules and "rocket docket" experiments. Presumably, the influence of these cases has diminished, particularly for databases created after 1994, because of the shift in discovery practice in many jurisdictions from advocacy to a kind of joint investigation.

General availability of the documents to the movant can have very little influence in determining whether the database itself should be produced. In *Scovish v. Upjohn Company*, 1995 Conn. Super. Lexis 3288, the plaintiff sought the defendant pharmaceutical company's index and database, which included independent studies of the drug at issue. The defendant objected, but offered plaintiff the opportunity to visit its document depository to review the original documents. In granting plaintiff's request the court observed: "Merely offering the plaintiff [the opportunity] to search a warehouse in order to retrieve relevant documents is unrealistic and needlessly time consuming given the fact that an index and database exists that can expedite discovery and level the playing field." *Scovish* also suggests that a party is likely to know its documents best and is thereby able to construct a more accurate, useful database.

The insignificance of document availability compared to hardship caused by the lack of a database even includes the requesting party's documents. In *Williams*, movant DuPont had produced years of employment records to plaintiff Equal Employment Opportunity Commission. The EEOC then converted the records into computer readable data for use by its expert. DuPont demanded the database. The EEOC argued that it would be unfair and "would allow DuPont to benefit from the Commission's better trial preparation." The court found that it was necessary for DuPont to be fully prepared on cross-examination and that the time and expense to



duplicate DuPont's own records on computer constituted undue hardship. The role of the expert contributed to the court's order, but there can be no doubt that avoiding duplication of effort was a principal factor. *See also, City Consumer Services, Inc. v. Horne*, 100 F.R.D. 740, 746 (D. Utah 1983) (after each side was given the opportunity to review 80,000 business records, the defendant successfully sought to discover the 40 file cabinets of documents plaintiff's counsel copied and compiled to "avoid duplication, surprise, and prejudice").

If the substantial burden and undue hardship tests are met, the only query left is whether a particular portion of the database is "fact" or "opinion." Opinion work product should not be disclosed absent extraordinary circumstances. Opinion work product includes the mental impressions, conclusions, opinions, or legal theories of an attorney. The more sophisticated the database and the coding scheme, the more likely disputes will arise about the distinction between "fact" and "opinion" work product.

Codes that contain objective information easily gleaned from the document, such as date and author, are easily characterized as factual. Similarly, at the other end of the continuum, direct attorney comments or an assessment concerning whether the document is privileged, easily qualify as opinion

Should paper documents be used at all? Scanning these documents is cheaper and clearer.

work product. Coding that captures some aspect of the document on an objective basis, but which relates to the claims and defenses in the case, provokes the most spirited disputes.

The particular configuration of a database also prompts arguments over work product. The database is generally organized by categories or, in computer terms, fields. The field is the general description, such as product, and the code is the individual entry. The choice of fields and codes is very important in building a useful database because it affects the quality of the analysis. Of course, it also reflects a litigator's judgment of what is important, which is probably of interest to opposing counsel. In the BioStim example, a decision to code any discussion of particular adverse findings in the stimulant product development records could inform the plaintiff that the coded topics are sensitive. If the coded information is objective, however, the fact that the field signals particular information as strategically significant will not bar disclosure of the field. The selection and compilation of particular documents may constitute work product. Attempts to force disclosure of documents compiled for depositions have been rejected. *Sporck v. Peil*, 759 F.2d 312 (3d Cir. 1985); *Shelton v. American Motors Corp.*, 805 F.2d 1323 (8th Cir. 1986). In our example, one-third of the universe of potentially relevant documents was selected for detailed legal review. By definition, this subset of documents reflects an attorney's opinion and strategy about important issues and information. However, the work product claims

have been rejected when applied to a database containing many thousands of documents because their sheer number reduces the possibility that an attorney's mental impressions and legal theories could be divined from so large a group. *Philip Morris, Inc.*

Knowing what is discoverable, particularly work product, is very important to the lawyers and to the clients. Litigants are concerned that their opponents will attempt to get a free ride by waiting until the costly drudge work is completed before propounding detailed discovery requests or outright demanding computerized databases. Tellingly, all the reported database cases involve situations in which the database had been created independently. In light of the dramatic changes in discovery attitudes, it is now more important than ever to consider consulting with opposing counsel before creating elaborate databases.

Consultation with opposing counsel does not necessarily require any creation of a database as an ultimate goal. Recent advances in scanning technology, which are important in their own right, indicate that some form of computerization of the documents should be a required part of any case that involves more than 10,000 pages.

The initial question is whether paper documents should be used at all. The cost of scanning documents into computer media, such as a CD, is now functionally equivalent to the cost of making a paper copy. Copies printed from a CD cost the same as from a copying machine. More important, there are numerous advantages to copies stored on a computer. First, the image is as good as, and in some cases better than, a paper copy. Next, the image can be easily transferred to multiple recipients without the degradation in quality that always accompanies the photocopy process. That is, a photocopy of a copy is never as good as the original. Such is not the case with a digital image that is transferred exactly from one computer to another. The cost of transfer from one computer to another is very low, usually just the cost of the computer media itself.

From the perspective of databases, scanned document images provide an immediate benefit: an identifying code (i.e., the index or Bates label) is automatically generated. It does not require teams of paralegals with sticky labels or stamping tools to hand mark each page.

Opposing counsel may be unwilling to accept a CD with digital images of the documents. Your opponent may claim that she does not have the necessary hardware or software to read it. The former is a \$100 expense and the latter is generally provided free of charge with the CD. An opponent who objects to incurring very minor startup costs relating to computer-stored documents will be at a serious disadvantage well into the case when she demands your sophisticated database. Whether the documents should be scanned as images or by OCR should also be a joint decision with your opponent.

An agreement to exchange digitized documents sets the stage for a joint effort to develop the database. Companies that can scan your documents onto CDs usually provide at least elementary coding and database creation services. For a small cost per page and field, these computer support agencies have coders on staff who can easily code basic objective data.

The most important point is to contact your opponents and co-parties as soon as you have made the decision to store documents on computer or to create a database. Federal

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A Lawyer's Letter to His Son

by Peter D. Baird

Dear Tom:

On Saturday, October 19, 1996, you will be sworn in as a member of the State Bar of Arizona. You may wish to remember that date in the years to come. It will be the anniversary of your entrance into a great profession.

You have been blessed with intelligence, diligence, education and opportunity. And, you will have, I am sure, an interesting and rewarding career in the law.

Nobody may have told you this and, if they have, it probably did not sink in because it is something most of us have forgotten or have never even stopped to think about: Lawyers have power. Consequently, you, as of Saturday, will have power.

Please understand that your power will be very real. It will be officially vested in you by the state and federal governments and it will be unofficially accorded to you by society in general. Indeed, the reason why lawyers are so often scorned and made the butt of hostile jokes is not that some of us are bad or unethical because there are bad and unethical people in all professions. Rather, it is because we have significantly more power than most other citizens and we sometimes abuse that uncommon power.

Just think, after you are sworn in on Saturday, you could draft a complaint; fill it with destructive blather; name anybody or

any institution as a defendant; file it next Monday with the court without anybody's consent; trigger toxic publicity; and destroy a reputation, marriage, business, savings or future that took a lifetime or many lifetimes to build. You, single-handedly, could do all that before the judicial system could finally get around to dealing with what you had filed and before the media eventually would report the outcome in a back-page squib hidden away among ads for trusses and dating services.

Next Monday, you could also have a subpoena issued from the court to anybody within range. You could force the person you subpoenaed to appear at your convenience in your office or at court where you could cross-examine the daylight out of him or her without their permission. It happens all the time.

Although your power could be extreme if you become a criminal prosecutor who indicts or a judge who extinguishes life itself, the power I'm talking about can be far more subtle than that and it is not restricted to lawyers or judges who handle litigation. For example, transactional lawyers can cut corners in their due diligence, withhold vital information, undermine public markets and fleece investors out of their hard-earned savings. Moreover, all lawyers, whether litigators or non-litigators, hold the power that comes from knowing client secrets which, if divulged,

could create incalculable problems.

Given all this new power that you are about to have, I commend to you a negative exhortation which new physicians have been hearing for centuries and which new lawyers should hear as well. In Latin, the negative exhortation is, "Primum non nocere." Translated into English, it is, "First, do no harm!"

For lawyers this commandment does not mean that we should be timid or wishy-washy or shrink from ethically and zealously representing our clients just because there may be pain or loss or controversy ahead. Rather, it means that we should never abuse our power or use it mindlessly or for purely destructive purposes no matter what the personal, financial or professional incentives might be.

If you make this commandment your credo and if, before you take any precipitous legal step, you ask yourself whether you are doing harm, then you will care well for your clients. At the same time, you will elevate your profession and ennoble yourself.

Congratulations, I am very proud of you.

Love,
Dad

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Computer Databases

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Rules of Civil Procedure 16(c) and 26(f) anticipate that the parties will discuss document exchange within several months after the defendant has appeared. State courts adopting mandatory disclosure may have similar requirements. *See, e.g.,* Ariz. R. Civ. P., Rule 26.1. Of course, your opponent may not wish to create a database or even exchange documents on CD. Nothing in the rules will compel coop-

eration, although Rule 16(c)(12) permits the court to adopt "special procedures for managing potentially difficult or protracted actions . . ." If your opponent declines an invitation to collaborate on creating a database, you will want it documented clearly. If an opponent agrees to create a limited database, but decides against anything more extensive, that too should be established before you embark on a unilateral database project.

Joint efforts usually result in cost sharing on a pro-rata basis. This limits the likelihood that your opponent will resist sharing computer-related costs after the client has paid the bills. Most important, attempting to obtain your opponent's assistance at the beginning will establish clear lines of discovery against which any subsequent demands

for work product will be measured.

The willingness of a party to undertake its own pretrial preparation is a recognized factor that the court considers when deciding whether the substantial need and undue burden requirements have been met. Certainly, as a practical matter it will be more difficult for an opponent to argue that she absolutely needs your database when she declined an earlier opportunity to jointly create it. Likewise, there is little chance that she can make a persuasive undue burden argument based on time or cost. A late demand in a record bereft of prior effort or cooperation will be seen for what it is: your opponent's envy for your thorough pretrial preparation.

Any computer database unilaterally created for a case in a jurisdiction adopting some form of mandatory pro-