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REVIEW AND PRODUCTION

In large e-discovery matters, even small inefficiencies can manifest themselves as large increases in cost and time. It's only appropriate to pose serious questions about traditional discovery management practices and test "conventional wisdom" for practicality. In this article, we focus our attention on a simple question many thought was already answered: is it more advantageous to review files in their "native format" or after conversion to TIFF (basically an electronic "print" of each page)?

Native File Versus TIFF Image Review: The 'All-In' Cost

By THOMAS E. STEVENS

Electronic data is challenging. It is so challenging, the Federal Rules of Civil Procedure created a new term: Electronically Stored Information (ESI).

ESI is pervasive in corporate America. According to a 2006 study by IDC and the University of California, Berkeley, e-mail volumes are increasing at a compound annual growth rate of 17 percent, and the MER Electronics Records Management Survey of 2007 revealed that

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the majority of corporations report they have no formal policy for the retention and disposal of e-mail. Since virtually every discovery battle includes a request for production of e-mail, ESI challenges are likely to continue and grow.

In a native file review, only those documents that are deemed responsive (and not privileged) are subsequently converted to TIFF format and produced. Since the conversion to TIFF takes time and money, the assumption is that converting fewer documents (that is, only the documents to be produced) will lower costs. But it is the "all-in" cost of the whole process that must be measured. It is not sufficient to simply look at the TIFF charge.

The complexity and interactivity of discovery projects necessitates the use of measurement, empirical examination, and the use of analytics to make informed cost decisions. By analytics, we mean the extensive use of data, statistical and quantitative analysis, explanatory

and predictive models, and fact-based management to drive decisions and actions.^{1 2 3}

To quote Peter Drucker, who is often called “the father of modern management,” “If you can’t measure it, you can’t manage it.”

Discovery Cost Breakdown. Benchmarking studies substantiate that the majority of costs in large discovery litigation are attributable to attorney document review and supplier processing costs. While these are the two major costs involved, the disparity is a big one. Attorney document review, on average, contributes 75 percent to 90 percent of the discovery costs and data processing/conversion costs, on average, contribute 10 percent to 25 percent. More often than not, we are seeing a ratio of 90:10 in favor of attorney document review.

The cost distribution is an important one because speeding the review process—even at the expense of additional processing costs—can result in overall cost savings. Efforts made to cull the population as much as possible and streamline the review process limit both time and cost.

Furthermore, scale is important. In a small matter the cost differences might not be material. In a large matter there could be a considerable difference.

The Historical Argument. Historically, documents were reviewed as TIFF images because they were produced as TIFF images, which was practical for a number of reasons. TIFF files feature a uniform and standard document format, called “Group IV, 2-dimension.” Using this standard, all documents can be opened with a single standard-compliant TIFF viewer. Virtually all discovery management software supports TIFF images and many litigation support applications also support batch printing. Native files are not so uniformly supported.

Support for Bates numbering, confidentiality designations, and redactions are other reasons documents are produced in TIFF. Assigning each page of a production a unique Bates number (as opposed to a single number for a multi-page document) allows the parties to communicate more efficiently with each other and with the courts. Providing a confidentiality designation helps protect corporate and personal data.

Redacting information from view is the most common way to protect privileged and other kinds of information, while still allowing for the production of a document. In addition, because a TIFF file is really an electronic version of the “print” file, redacted information cannot be re-created after production.

So, while there is a clear rationale for producing documents in TIFF format, the question remains whether it makes sense to convert all documents to TIFF prior to review, or to convert only those documents that will be produced. For many years there was little choice; the only options for review were printed pages or TIFFs.

The rise of native-file review applications made this a contest, since the possibility of saving 5 cents to 10 cents for every page collected is appealing. However, the processing cost is not the only factor. The objective

is not to eliminate processing cost—it is to reduce *all-in* cost. Whether these decisions are mutually exclusive must be resolved based upon the data set related to the specific project.

Calculating All-In Costs. The cost of creating TIFF images is easily calculable: simply multiply the price by the number of pages that must be imaged. Compare this to the savings that a TIFF-based review process provides—in all phases—and you will know which is more cost-efficient.

Attorney document review is the most time consuming and expensive step in the document discovery process. In some cases, the cost of the review is as much as five times the cost of all other steps combined. Although it might take a couple of weeks to prepare 5 million pages for review, it might also take a couple of months to perform the review, even with a large review team.

Accordingly, the answer to the “TIFF versus Native” question lies within. All efforts should be made to streamline the review process, in order to limit both time and cost.

Evidence from review attorneys indicates that native file review takes much more time than TIFF review. Working with review teams, we observe that approximately 30 percent of the review time can be spent resetting the view and zooming and scrolling documents.

While either process requires reviewers to spend a certain amount of time with each document to make decisions regarding responsiveness, relevancy, confidentiality, and privilege, only native review requires time to organize documents for optimal viewing. Additionally, the time to open and launch a native file is often twice as long (or more) as opening a TIFF image.

Because document review can be so expensive, a few seconds here or there can really add up, especially with a large review set. For example, in a 1 million page review at \$100 per hour, each second on average spent per page reviewing documents costs \$27,777.

Consider Testing. An even better method is to eschew estimating and simply run a test. Review a random set of documents and their attachments in native format and the same random set in TIFF format. If the random sample is properly created, the results of the test will extrapolate to the entire document population, regardless of its size.

An additional cost factor related to native review is application cost: do you have all of the native applications necessary to launch every variety of native file? If not, you will need access to universal viewing programs like Quick View Plus, which create a “print view” on the fly. The downside to these universal viewing programs is losing the “native view” provided by the original native application.

While it may seem that the above calculations imply a slam dunk for TIFF-based review, it is important to note that, while TIFFing costs have come down, they can still be expensive. Let’s do a sample comparison, skipping the application and hosting costs, for the time being.

A hypothetical document set of 6 million pages must be reviewed for responsiveness and privilege. At 8 cents per page, the cost to create TIFF images would be \$480,000. In order to recoup that amount, a TIFF-based review would require a savings of a little less than three seconds per page in review time.

¹ Davenport, Thomas H. and Jeanne G. Harris, “Competing on Analytics,” The Harvard Business School Press 2007.

² Ayers, Ian, “Super Crunchers,” Bantam Books 2007.

³ Hubbard, Douglas W., “How to Measure Anything,” John Wiley & Sons Inc. 2007.

In addition, if a high percentage of the documents reviewed is relevant, any potential savings for native file review are further diminished, as responsive documents must be TIFFed anyway for production.

Other Considerations. While overall cost should be the number one factor in the selection of a review process, there are other considerations. For example, review of native files has one key advantage: documents will appear to the reviewers as they did to the original author. TIFF review on the other hand, is a print view of the document or, in the case of e-mail, a print view of fields in a database. Hidden information such as comments and spreadsheet formulas are available to the reviewer of native files without special print instructions.

Some other factors that should be taken into account:

- When reviewing in TIFF format, control numbers can be printed on each page and easily shared among parties. This allows the legal team to refer to specific pages when preparing deposition notebooks and interviewing custodians, and facilitates inputting information back into the review database.

- Even in a native review, the TIFFing of the production set still takes time to review, redact, subset for production, burn redactions, Bates and confidentiality designations, quality control, and burn to media—and these steps typically take place close to the production deadline. Additional time must be allowed late in the process for these conversions.

- In a native review the legal team will encounter documents that will not open for one reason or another (corrupt, password protected, zero byte files, proprietary software, etc.). With a TIFF review, any documents that could not be opened at processing time will be “excepted,” with a printed exception page bearing a Bates number inserted to denote that the file could not be converted to TIFF. A reference to that page is typically entered into an exception report for the legal team. There will also be some documents that can be viewed natively but will not convert to TIFF for technical reasons.

- If the case is an internal investigation with no court-imposed production deadlines or involves a large population of files that are best viewed in native file format (such as spreadsheets), a native file review may make more sense.

- Native files can be altered and present a potential spoliation risk. Attorneys must know how they behave/how transitory they are. TIFF images permanently preserve information at the time they are created.

- The initial file view for most native applications is how the author saved the file. For example, in Excel, the author not only has choices as to what portions of a document are viewable, he also can decide the view that first comes up. This means the reviewer must be knowledgeable enough about each application to re-fashion the file view to perform a thorough review.

Seeing Double. Many review software applications today support the simultaneous loading of both images and native files. By doing so, you can provide an efficient TIFF view to the reviewers for the majority of the documents, but allow them to look at a native file view for those documents that either didn’t print well or may have more information only available in the native view.

If you are paying for storage of the review documents on a per gigabyte basis, this will likely increase the cost. However, it may be worth the increased cost to get the best of both worlds. And since the document review costs likely dwarf that of document processing anyway, the key is doing whatever possible to streamline the review step. Creating efficiency for the review process is almost always the most effective way to a faster and less expensive discovery project.

Some Good News. For many years, almost all electronic discovery projects were TIFF-based, largely because this is closest to the paper-based review that attorneys had historically used. A few years ago, native-based review became popular, as more organizations saw the benefits of not paying for the expensive conversion process. More recently, two considerations have changed the analysis once again. Competitive pressure and improved technology have driven down the cost of conversion. And the extraordinary cost of document review has become more apparent.

Currently, the decision is not a “slam-dunk” either way. But the good news is that a metrics-based analysis of the overall cost in both environments, combined with a careful consideration of some other factors, makes the decision relatively easy to determine on a case-by-case basis.