

Discovery Is Discovery: Does the Letter “E” Change Everything?

Rebecca James, Esq.

Discovery is an important part of the litigation process. Experienced lawyers may be experts at paper discovery, but many lack the necessary expertise to effectively manage the discovery of electronically stored information. This discussion presents the reader with (1) compelling reasons why electronic discovery is important and (2) a summary of the Electronic Discovery Reference Model, which depicts the discovery process.

INTRODUCTION

*Pennoyer v. Neff, International Shoe*¹—as 1Ls we all had in common these first-year law school Civ Pro cases. But how many of us actually thought we would become civil procedure attorneys? You may not consider yourself a civil procedure attorney. But, regardless of your substantive area of expertise, you need to know the governing procedural rules. Whether you practice in federal court or state court, you deal with discovery, which means you deal with e-discovery.

The purpose of this discussion is to help lawyers navigate discovery in the digital age by (1) providing an overview of the e-discovery industry and technologies and (2) identifying resources that can help take the fear out of the e-discovery process.

E-discovery experts and educators tend to assume that seasoned litigators are also conversant in e-discovery (arguably, they should be). They often forget that many experienced lawyers still need a primer in e-discovery basics. Many writings about e-discovery are deep explorations on a very specific issue, which is great for those who already have a solid understanding of the subject.

This discussion, on the other hand, represents an attempt to respond to a request recently made by one of the best trial lawyers out there: “Explain it to me like I’m a fourth grader.”

NATURAL LANGUAGE BARRIER

Attorneys practice law. Technology managers focus on technology. There is a natural language barrier as both professions rely substantially on industry jargon.

For nonlawyers, then, let’s begin with a note of caution: this discussion is limited to civil actions, not criminal cases. This mention is necessary because, at a recent proportionality panel discussion, an educated senior information technology (IT) director commented on how well the “prosecutor” was presenting. The “prosecutor” was actually a plaintiff’s counsel in a civil matter.

This is an important point of clarification, because in the criminal system of procedure, discovery and evidence is different than in the civil system. Although there may be some similarities between civil and criminal justice with respect to e-discovery, this discussion will address e-discovery only as it pertains to civil litigation.

Also, this discussion will introduce some IT terminology that may be foreign to practicing lawyers. These lawyers should have confidence in this new vocabulary and recall, for example, that *res ipsa loquitur* was once a new and scary term to you as a 1L. But then you learned it. In this discussion “tech talk” will be translated into “lawyer lingo.”

“I DON’T DO E-DISCOVERY!” YOU SAY?

The reality is that if you do any discovery at all, you already have—or soon will—come across e-discovery. Electronically stored information (ESI) accounts for more than 90 percent of all information (including business, financial and social data) created today. Lawyers are seeing e-discovery issues arise frequently.

Electronic evidence is showing up in all kinds of cases, from PI, IP, and employment to contract disputes and even family law matters. E-discovery is no longer limited to complex business litigation and mass tort cases; it is present everywhere.

Billions of e-mails are sent each day and, along with their attachments, are making up the majority of evidence in civil cases. Facebook posts, Twitter “tweets,” and text messages are finding their way into courts across the country.²

ESI is here to stay, and in more and more cases, discovery is now e-discovery.

WHY DO YOU NEED TO KNOW MORE ABOUT E-DISCOVERY?

Competence

“A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.”³

The level of e-discovery knowledge required of attorneys today depends on the complexity of the case and the volume of relevant data. But at the very least, a mastery of basic concepts is expected.

Evolution of Discovery Rules

The Federal Rules of Civil Procedure were established in 1938 to help secure the just, speedy, and inexpensive determination of every action or proceeding.⁴ Since 1938, the rules have undergone several revisions, but they first addressed discovery of ESI only in the 2006 Amendments. The 2006 Amendments included additions and revisions to Rules 16, 26, 33, 34, 37, and 45.

States started acting even before the federal rules changed. As early as 1999, Texas modified its procedural rules to define ESI,⁵ paving the way for more states to follow. Other states turned to external organizations to provide direction for their e-discovery rules adoption, including The

Sedona Guidelines for State Trial Courts regarding Discovery of Electronically-Stored Information.⁷

States continue to modify rules or introduce new rules, and the activity has picked up in recent years. In 2008, only 17 states had adopted procedural rules, but 36 states were on board by 2010.⁸ A few states have yet to act, either taking a “wait and see” approach or perhaps thinking their existing discovery rules suffice.

Avoiding Sanctions

From adverse jury instructions to large monetary penalties, parties and their lawyers are paying the price for mistakes made during the course of the discovery process, especially for failures to preserve or collect ESI and incomplete or delayed productions of ESI.⁹ Listed below are a few examples of penalties for ESI mistakes:

- \$8 million plus outside counsel discipline¹⁰
- Attorney’s fees of \$25,000 for failure to adequately preserve¹¹
- Prison sentence of up to two years for civil contempt¹²

Client Expectations in a Competitive Arena

In the corporate context, general counsel now demands that outside counsel be proficient in e-discovery. Although many general counsels have a good understanding of e-discovery themselves, you can be sure that when they create their short list of outside firms, they not only look for expert litigation skills but also proven expertise in e-discovery.

Private clients also want their lawyers to be conversant in e-discovery. Litigants need an attorney who is capable of dealing with ESI, whether on the plaintiff or on the defense side.

Many law firms have established official e-discovery practice groups and departments, and it is not uncommon to find career e-discovery associates and partners who dedicate their practice to e-discovery.

Also, some solo practitioners now promote themselves both as substantive experts and “e-discovery attorneys,” which gives them a competitive edge in appealing to individuals and corporations seeking representation. E-discovery professionals are in demand.

Still, many professionals are not making the conceptual shift from paper to ESI just yet. Why the delay?

PAPER IS COMFORTABLE

Printed letters, physical pieces of paper, boxes of documents have long been the kind of information we know and understand how to use as evidence. Lawyers have built careers within this medium. They know where paper documentation comes from, how it is created, where it is stored, and how to get their hands on it and review it in search of the smoking gun.

Lawyers, judges and courts still love paper, but the days of the paper lawyer are waning in a decidedly digital age.¹³ After all, where do most paper documents these days come from? A computer, of course.

In the electronic world, lawyers need to know what information to ask for and in what format. They need to be able to advise clients on how to respond to production requests involving ESI. Lawyers can solicit the help of IT professionals to accomplish these things. However, lawyers need to move beyond the expectation that the information just magically appears.

While securing resources to help navigate the technical side of discovery is an acceptable practice, lawyers need to know the basics to avoid miscommunication with those who are assisting in e-discovery efforts.

MISCOMMUNICATION STORY

This is a true story: An in-house attorney asked the company's IT department for help collecting ESI on a tight time line for review preparation. The IT director not only collected the requested data, but went above and beyond the attorney's request, preserving and restoring an extra two years' worth of old tapes that would have otherwise not been available. The IT director's well-intended extra effort actually committed at least two costly mistakes.

First, the unrequested tapes were beyond their retention policy expiration date and should have been destroyed a year ago. Second, if left undisturbed the tapes would not have been reasonably accessible, but now they would have to be processed and reviewed, adding unnecessary cost and risk to the case.¹⁴ IT sees data as data. Lawyers see data as evidence.

In this case, the mistakes could easily have been prevented. If the attorneys had been aware of the existence of the unrequested data, or if they had directed IT to strictly follow the company's retention policy, or if they had done a better job specifying what data was needed, they could have saved the IT director time and effort and avoided a costly, risky, and embarrassing mistake.

INTERSECTION OF LAW AND TECHNOLOGY

"Electronic discovery starts out the responsibility of those who don't understand the technology and winds up the responsibility of those who don't understand the law."¹⁵

While the majority of attorneys are not technology experts, there are a few technologically advanced practitioners emerging. By the same token, while most IT professionals have little legal knowledge, have not attended law school, and have limited legal background, there are some who began either as paralegals or lawyers and, over time, have acquired the expertise to become IT professionals. Or, they have made the extra effort to learn the basics.

Litigation support is often where the gap between law and technology is most effectively bridged. Today's litigation support professional is typically a "hybrid" who possesses advanced knowledge of both law and technology—a unique blend of skills and knowledge.

Competence, as defined in ABA rule 1.1, encompasses both the legal and the technical components of e-discovery. Construction defect lawyers don't take on tax controversies, a family lawyer does not do patent prosecution or trademark cases.



These lawyers may refer the matter or hire co-counsel as a resource. E-discovery is no different.

Just as nonlawyers should not practice law, technologically naive lawyers should not take on a case with heavy ESI without enlisting assistance from an e-discovery expert.

DOES THE LETTER "E" CHANGE EVERYTHING?

Discovery includes anything reasonably calculated to lead to admissible evidence, unless it is subject to attorney-client privilege or work-product protection. The types of discovery include depositions, interrogatories, medical exams (if condition is in issue), and production of documents. You know all this, right? It seems so basic, but somehow when the magic "e" is added, everything changes.¹⁶ Or does it?

Before one letter was added to discovery, lawyers knew just what to do. Now, it's different. There is a huge gap between traditional discovery know-how and new e-discovery knowledge. Conferences, CLEs and even e-discovery "boot camps" are available to help practitioners achieve competence.

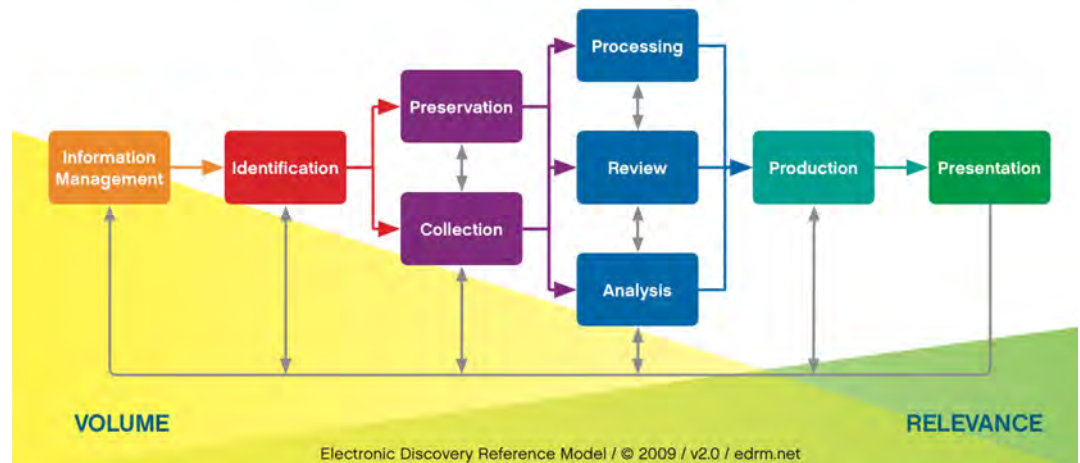
Many service providers publish white papers and provide educational webcasts. There are also a number of industry organizations that offer help, ranging from the cerebral think tanks to hands-on certification programs.¹⁷

One particularly helpful resource is the Electronic Discovery Reference Model (EDRM), which graphically represents the entire e-discovery process—beginning with a mass of data and systematically sifting through it to find your important information—in a series of interrelated and sometimes overlapping stages or phases. The EDRM¹⁸ provides a common language to discuss the many facets of e-discovery.

FROM VOLUME TO RELEVANCE: A HELPFUL MODEL

The EDRM organizes e-discovery into roughly sequential stages (information management, identi-

Electronic Discovery Reference Model



fication, preservation, collection, processing, review, analysis, production and presentation) which are now widely referred to and accepted in the industry.

The EDRM diagram represents a conceptual view of the e-discovery process, and it's important to note that practitioners may perform only some of the steps, or even perform the steps varying the sequence, depending on the project. Also keep in mind that e-discovery is an iterative process. That means that some steps or stages in the model may be repeated a number of times to refine the approach after a better understanding of the data emerges.

While one should recognize that there are alternative conceptual approaches to e-discovery, this discussion follows the stages outlined in the EDRM diagram to help organize topics in a framework that is easy to address and easy to understand. With each stage, this discussion summarizes the goal of the task, who performs it, what tools are available in the market, and any key cases or special issues to consider.

Information Management

Litigation is expensive. Review is expensive. Creating a successful, effective e-discovery plan can help you control costs and mitigate risk. The plan starts with a good information management policy.

Information management is just what it sounds like: management of electronic records through their entire lifecycle regardless of the media, from creation to maintenance and disposition. Though not directly linked to particular litigation, data planning and policy developing processes should be performed by all organizations, especially serial litigants.

Qualified outside counsel can advise clients on appropriate data retention and litigation readiness to make e-discovery for specific matters more efficient.

An effective, comprehensive records program (1) helps prepare information for subsequent phases of the EDRM where the need for discovery of ESI arises, (2) helps organizations reduce storage capacity needs by controlling volume, (3) helps prepare for disaster recovery by establishing controlled data redundancy and backup policies, and (4) helps avoid costly data losses or security breaches.

Information management plans, traditionally implemented and enforced by records managers and HR and/or the IT professionals, now include input from lawyers—both inside and outside counsel—in the process.

Developing and implementing information management policies can be an especially difficult role for lawyers to assume. Many obstacles exist. Cultural shifts within an organization require substantial changes for employees. Capital expenditure is often required and is not always in the budget.

Buy-in from corporate leadership can be difficult to get, but it is crucial for successful rollout. Consistent enforcement is also challenging, but it is important to achieve the maximum benefit.

Don't repeat the mistake of DuPont, which conducted an internal review and found that the company had produced three years' worth of data representing 75 million documents, 50 percent of which could have been lawfully and properly deleted at a cost savings of \$12 million dollars!¹⁹

Reasonable information management planning and policies can be deployed to automatically eliminate unnecessary data.

Resources for information management include the following:

- Cloud service providers: Google Apps, Rackspace, Terremark vCloud, Windows Azure
- Counseling services: Gibbons E-Discovery Task Force, Project Leadership Associates
- Industry organization's technology provider expo/exhibitor lists: ABA TECHSHOW, ARMA International Expo, International Legal Technology Association (ILTA)
- Social media compliance and archiving solutions: Smarsh, ZL Technologies

Some special kinds of data to think about when creating or modifying your own policy include social media,²⁰ cloud-based data,²¹ and pornography.²² An

information management policy should also address the use of personal computers and devices at work and the use of work computers and devices at home.

Finally, pre-discovery data mapping—which results in a visual representation of physical data locations, data types and custodian access across the entire organization—can be very useful in preparing for the identification phase of e-discovery.

Identification

The identification stage of the EDRM is where potential sources of relevant information are identified and located. Of course, if an information management program is already in place, finding your key custodians and data will be easier. A primary purpose of the identification phase is to determine how much data will need to be collected and from which sources—factors that will have a significant impact on cost.

You will need to ask: Who has the relevant data (your key custodians)? What kinds of data are there (e.g., e-mails, cell phone records, social media, text messages)? Where does the data live (e.g., on network servers, personal computers, remotely stored back-up tapes, thumb drives, a cloud-based/hosted environment)?

Representatives of human resources, IT personnel, inside counsel and outside counsel, and individual data users can help you answer these questions. And, vendors or consultants can develop an organized plan to help you identify ESI.

Data-mapping services/tools include the following:

- ESI Attorneys
- Exterro Fusion Genome
- Project Leadership Associates

Remember that some electronic evidence may reside across international borders. Such locations can require longer lead time when it comes to collection and enforcing legal holds. You will want to have a good grasp of who has your data and where it lives as you prepare for a fruitful e-discovery conference,²³ and as you enter the preservation stage of the e-discovery lifecycle.

Preservation

In the preservation stage of the EDRM, steps are taken to ensure all potentially relevant evidence, including electronic metadata, is properly retained and protected from inadvertent or deliberate destruction or deletion.²⁴ Whatever your organization's normal business policy for data destruction, when there is an event that causes reasonable

anticipation of litigation, a legal hold temporarily suspending that policy must be issued immediately.

Events that can trigger a legal hold are sometimes very obvious, such as a letter from counsel advising an organization of a potential claim or a product recall. Triggers can also be more subtle, such as informal discussions at work about harassment or employee terminations.

Proper preservation prevents the loss, damage, or destruction of evidence (spoliation) and avoids sanctions for preservation failures. As sanctions for loss of electronic evidence become more common and more severe, more people are on the hook for preservation.

Inside and outside counsel, as well as corporate CIOs,²⁵ are now being held to very high standards with regard to data preservation, and key custodians can also be held responsible for the data they control.

Some organizations still perform manual holds, but there are useful services and tools available for automating preservation efforts, including the following:

- ESI Attorneys and Gibbons P.C.—legal advising services for the litigation hold issuance
- Exterro Fusion Legal Hold—software that automatically sends and manages legal hold notices
- KazHold—software that allows corporations to quickly freeze information in place for initial assessment
- LegalHoldPro—a product for managing and tracking custodian compliance with legal holds and document preservation orders

The rising tide of sanctions for improper preservation has frightened some into saving everything, but you needn't over-preserve—just be reasonable. Instead, when a trigger event occurs, have a process in place for issuing a formal legal hold encompassing all relevant data, including off-site data and any third-party retention points.

That said, should your preservation efforts turn out to be over-broad, you still have an opportunity to reduce cost exposure by collecting narrowly.

Collection

Collection is the acquisition of potentially relevant ESI. Basically, it consists of retrieving available data from such sources as computers, tapes, cell phones and servers controlled by hosted services providers. The ESI may include e-mails, spreadsheets, Word documents, digital photographs, and so on; it also includes any metadata attached to these files.

It is important to have a clear set of goals in mind when you begin the collection process. This will help you develop the collection plan and determine who will be involved. ESI and its associated metadata should be collected in a manner that is legally defensible.

Depending on the purpose (litigation, investigation) and recipients (internal, opposing counsel, government) of the data, you may decide to use an outside service provider to perform the collection.

You can also self-collect, but beware.²⁶ Just because you can do it does not mean you should. Self-collection is risky business. There can be sanctions for negligent supervision. Employees can easily miss data, because they don't recognize relevant data or don't know where to find it.

Spoliation can occur when chain of custody is not maintained. Also, self-collection increases the risk that in-house lawyers or IT staff can be called to testify as witnesses.

An outside party or expert is often the best option. Regardless of who does the collection, it is important to create and follow a data collection plan. The plan should include a data map, which, in addition to identifying ESI and its specific locations, also classifies data that may require special handling or forensic expertise.

This will help you select among legal and electronic resources necessary to complete collection. These resources may include the following:

- Experienced processing partners who offer collections services, such as AccessData, Applied Discovery, D4, Fios, Inc., and RenewData
- Forensic experts, such as Craig Ball, Dale Beauchamp, and Karl Flusche
- Forensic collection software, such as AccessData's Forensic Toolkit, FTI Technology's Harvester, and Guidance Software's EnCase

It is good to have your processing partner on board for collection. Many vendors, as they help collect ESI, can at the same time begin to create an inventory of what's been collected and provide early notification and advice concerning any custodian- or time-related gaps in the data. Vendors can also begin processing even while you continue to collect.

Processing

Processing occurs after the collection of ESI and is essentially a means of reducing the volume of data that goes to attorney review.

Before engaging in full processing efforts, some e-discovery practitioners use a form of light processing, often called early case assessment (ECA). This procedure allows them to get an early snapshot of the data before they devote resources to full processing and review.

It is noteworthy that ECA is not full processing, and it is not intended to prepare data for a document review. Instead, it is a “data intelligence” strategy used to help understand data early in the case to make informed decisions.²⁷

ECA or light-processing tools available in the marketplace include the following:

- Clearwell
- Fios Clarify
- Nuix

Some organizations are bringing light processing in-house to maximize data visibility and control, but many of these same organizations are not equipped to do the heavy lifting of full processing. Instead, they depend on reliable service providers who are available around the clock to process their data and provide experienced project management.

At the item level, processing determines exactly what files are contained in the universe of data that will be submitted, records all metadata as it existed prior to processing, and enables defensible reduction of data by “selecting” only appropriate items to move forward to review.

All of this should happen with strict adherence to process auditing, quality control, analysis and validation, and chain-of-custody considerations.

How is the processing actually done? This is the point where lawyers may decide e-discovery is simply indecipherable and run screaming the other direction. There are several steps within full processing. It is typically an iterative process, both within the processing stage and within the entire e-discovery lifecycle.

Nonetheless, processing follows a series of logical steps that don’t require deep IT knowledge to grasp:

1. Raw physical data arrives to your service provider in various media types (backup tapes, hard drives, floppy disks, CDs, even laptops) and undergoes preparatory steps, including (a) data copying, which makes a working copy of data from all media to “ingest,” transfer to the processing machines and assign hash²⁸ values, (b) data extraction (as in unzipping files from a ZIP folder) and sorting by file type, and (c) in the case of some providers—such as Fios, Inc.—a special proprietary process to resolve “failed” data, such as encrypted, password-protected, or legacy data.

2. Once data has been prepared for processing, it undergoes a filtering process to reduce unnecessary volume.

These steps include (a) “DeNISTing” or eliminating nonuser files, files created by a computer (not by a human), and executable files; (b) culling out file types, custodians or date ranges determined to be irrelevant to the case; and (c) de-duplicating, which eliminates multiple copies of the same document.

The duplicates are identified by their hash, a unique ID analogous to an automobile’s VIN number.

3. Once filtering is complete, responsive data is selected for review: (a) data is culled for relevance by applying analytic techniques using keywords and search terms,²⁹ (b) data in the now-reduced data set is converted to TIFF or HTML, and (c) the resulting data “load file” is exported to the review platform—software designed specifically for conducting document review—and moves on to next stage of the EDRM.

There are a number of vendors who offer skilled e-discovery services and can add value at every stage of the EDRM, especially at the processing phase, to help you control cost and reduce risk. It’s a good idea to meet with several prospective service providers (vendors, consultants, and law firms) to understand their technology, staff credentials, and product offerings. Just as corporations have a short list for outside counsel firms, you should make your own short list of service providers.

Processing tools/services include the following:

- Encore Discovery Solutions
- Evolve Discovery
- Fios, Inc.
- Recommind
- RenewData

The next stage in the EDRM, document review, is a key driver of cost in e-discovery. This is why it’s so important to reduce data volume during the processing stage.

Document Review

Much like paper review, document review in e-discovery typically involves teams of lawyers looking at documents to prepare for production. In most cases, a first pass review is performed to locate documents for relevance. A second pass review is then performed to find and remove privileged documents.

Law firm associates, contract reviewers or dedicated off-shore or domestic review teams—usually supervised by a project manager or an attorney of record—conduct the document review.

While the review process in e-discovery is in some ways similar to paper review, on-line review technologies can dramatically expedite the process and achieve significant savings in time and money. Reviewers are no longer limited to a linear workflow, sorting through papers by hand and reviewing each custodian document by document. Review software now makes it possible to apply concept searching to a data set and create subsets of related data grouped by context or keyword.

Good reviewing tools should offer an intuitive graphical user interface, be capable of producing a variety of reports as review proceeds, and require minimal training. Review is the most expensive part of e-discovery. It is important to use review tools and resources that maximize velocity. Such tools/services include the following:

- Managed review services, such as Special Counsel
- Offshore providers, such as Pangea3
- Online review platforms, such as Concordance, Ringtail, Summation, Prevail, and Relativity powered by Fios

It can be especially effective to combine processing, hosted data for review, and attorney review teams to maximize cost savings and enhance your rate of review. Fios, Inc., and Special Counsel have successfully partnered together to provide this one contract/one price service option to clients. Once review is complete, or at least partially completed, productions or rolling productions can commence.

Production

When parties to litigation or investigation fulfill the discovery request to produce documents, they are required to turn over responsive nonprivileged information to the requester in a prespecified production format. In the days of paper review, this may have involved delivering cardboard boxes by truck.

Today, production can be as simple as handing over a DVD containing electronic documents in the form of TIFF or PDF image files or in “native” formats—that is, the original file type in which an electronic document was first created.

Format is important. It has been the subject of a number of prominent, high-stakes e-discovery disputes, and should be agreed upon early in the discovery process. Don’t forget that metadata is also part of what is expected in the actual production.³⁰

Finally, when productions are complete, your service provider can destroy the data at your request, return it, or continue to host the data, depending on your requirements.

The vendor who has processed your data or has conducted outside document review will actually move your data to production. You should work closely with your service provider to meet production deadlines and avoid sanctions for delays.³¹

Production timelines are often short and, with large volumes of ESI being produced, privileged documents can be produced inadvertently. Federal Rule of Evidence 502 provides a “clawback” provision to help remedy this situation.³²

SUMMARY

As one can see, there are many challenges to navigate throughout the e-discovery lifecycle. Proactive planning in the information management phase will help streamline all stages of the EDRM.

The basic “container” of information has shifted from paper to electronic files. Volumes of stored data have exploded, and new types of data are showing up in new places, giving rise to challenging new issues related to discovery. ESI and e-discovery are a reality in the digital age.

All lawyers are expected to understand the basics of e-discovery in order to implement new discovery rules, avoid sanctions, achieve competence, and provide the best possible outcome for their clients. The litigation landscape is constantly changing. Understanding the fundamentals of e-discovery will help lawyers to keep pace.

Notes:

1. *Pennoyer v. Neff*, 95 US 714 (1878); *International Shoe Co. v. Washington*, 326 U.S. 310 (1945).
2. Text messages: *City of Ontario v. Quon*, No. 08-1332, 560 U.S. __ (2010); Facebook privacy: *McCann v. Harleysville Insurance*, __ N.Y.S.2d, 2010 WL 4540599 (Nov. 12, 2010), *Ramono v. Steelcase Inc.* (2010 Slip Op 20388).
3. ABA Model Rule of Professional Conduct 1.1.
4. Fed. R. Civ. P. 1.
5. Tex. R. Civ. P. 196.4., effective Jan. 1, 1999; permits objection to production of electronic data that is “not reasonably available” and mandates payment of costs of any extraordinary steps required should its production be ordered.
6. In 2004, *The Sedona Principles Best Practices Recommendations and Principles for Addressing Electronic Document Productions* were crafted by some of the nation’s finest lawyers, judges, academics, and consultants and then updated in 2007. They include 14 “best practices” recommendations for e-discovery issues.

7. The Guidelines were developed by the Conference of Chief Justices and can be found at <http://nscsconline.org/images/EDiscCCJGuidelinesFinal.pdf>.
8. "State E-Discovery, an Important Year for Changes," webcast with Tom Allman, Esq.; (www.fiosinc.com/state).
9. *Zubulake v. UBS Warburg*, 217 F.R.D. 309 (S.D.N.Y. 2003); *Pension Comm. v. Banc of America sec. LLC*, 685 F. Supp.2d 456 (S.D. NY 2010); *Rimkus Consulting Group v. Nickie G. Cammarata et al.*, 07-cv-00405 (SDTX Feb 19, 2010). See also Judge Paul Grimm's 12-page chart summarizing spoliation sanctions by circuit at <http://ralphlosey.files.wordpress.com/2010/09/victor-stanley-spoliation-sanctions-by-circuit-090910.pdf>.
10. *Qualcomm Inc. v. Broadcom Corp.*, No. 05cv1958-B, 2008 WL 66932 (S.D. Calif. Jan. 7, 2008).
11. *Merck Eprova AG v. Gnosis* (SDNY Apr. 20, 2010).
12. *Victor Stanley v. Creative Pipe*, 2010 WL 3530097 (D. MD. Sept. 9, 2010).
13. See Ralph Losey, "Plato's Cave: Why Most Lawyers Love Paper and Hate E-discovery and What This Means to the Future of Legal Education," e-Discovery Team blog: <http://e-discoveryteam.com/2009/08/11/platos-cave-why-most-lawyers-love-paper-and-hate-e-discovery-and-what-this-means-to-the-future-of-legal-education/>.
14. *Lowering E-Discovery Costs through Enterprise Records and Retention Management*, Oracle white paper, 2007: <http://www.oracle.com/us/products/middleware/content-management/059468.pdf>.
15. Scott Cohen, quoting Craig Ball, at the ACEDS conference in Hollywood, Florida, on March 24, 2011.
16. Fed. R. Civ. Pro. 26(b)(2)(B) *Specific Limitations on Electronically Stored Information*. A party "need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost."
17. The Sedona Conference: www.thesedonaconference.org; Association of Certified E-Discovery Specialists (ACEDS): www.aceds.org.
18. See the EDRM website at: <http://www.edrm.net>. Launched in May 2005, the EDRM Project was created to address the lack of standards and guidelines in the electronic discovery market—a problem identified in the 2003 and 2004 Socha-Gelbmann Electronic Discovery surveys as a major concern for vendors and consumers alike. The completed model was placed in the public domain in May 2006.
19. *Lowering E-Discovery Costs through Enterprise Records and Retention Management*, Oracle white paper, 2007.
20. Fulbright's 7th Annual Litigation Trends Survey indicates that an increasing number of organizations have received requests to produce social media in e-discovery and have adopted official social networking policies.
21. Cloud service providers can modify the stored content form, which may limit the organization's access for e-discovery needs. See "The Trouble with Terabytes," *ABA Journal* (April 2011): 35.
22. Pornography is still an issue in corporate workplaces. This was a huge problem for corporate employers in the early days of the Internet and was partially contained by content blocking and filters, but opening up corporate connections to social networking has led to a reemergence of the problem. Employees are viewing pornography on work computers that are subject to discovery. See http://www.computerworld.com/s/article/9175948/SEC_workers_spent_hours_at_work_watching_online_porn?taxonomyId=17&pageNumber=2; http://www.msnbc.msn.com/id/5899345/ns/technology_and_science-security/.
23. Fed. R. Civ. Pro. 26(f) mandates that the parties in a matter meet to discuss e-discovery issues, and some states require "meet and confer" conferences as well.
24. Metadata is just data about data. Even paper documents often have elements analogous to metadata: the table of contents of a book, for example, or the index or the page numbers or margin notes. See *The Sedona Conference Glossary: E-Discovery & Digital Information Management*, Second Edition.
25. Brian J. Greenberg, "Seven questions your CIO should be able to answer about eDiscovery and legal holds": <http://gsysd.com/articles/what-every-cio-needs-to-know-about-legal-holds.html>.
26. Self-collection can result in sanctions. See *Green v. Blitz U.S.A., Inc.*, 2011 U.S. Dist. LEXIS 20353 (E.D. Tex. Mar. 1, 2011). See also, Joe Aakre, "To Self-Collect or Not," *The Electronic Discovery Counselor* (Oct. 21, 2010).
27. *Moody v. Turner Corp.*, Case No. 1:07-cv-692 (S.D. OH, Sept 21, 2010). ECA can be valuable in estimating costs for full processing and review. For example, if projected costs exceed the value of the case, a proportionality argument may be an appropriate and effective legal strategy.
28. Hash is a digital fingerprint defined by every file attribute including both content and metadata.
29. Inadequate search terms can result in sanctions. See *Peskoff v. Faber*, 240 F.R.D. 26 (D.D.C. 2007).
30. *Nat'l Day Laborer Org. Network v. United States Immigration and Customs Enforcement Agency*, 2011 WL 381625 (SDNY Feb 7, 2011). This was the first case to deal with metadata in Freedom of Information Act productions.
31. See *In re Fannie Mae Sec. Litig.*, 2009 WL 21528 (C.A.D.C. Jan. 6, 2009).
32. *Rajala v. McGuire Woods*, 2010 WL 2949582 (D.Kan July 22, 2010) discusses applicability of FRE 502.

Rebecca James is licensed to practice law in California. She currently serves as program manager for Fios, Inc. Rebecca holds a master's degree in organizational development and adult education. She has designed and delivered CLEs on legal technology platforms for large law firms, corporations, and government agencies including the DOD, DOJ, SEC, and IRS. You can reach Rebecca at rjames@fiosinc.com or at 562.254.3123.

