# E-Discovery: A Special Master's Perspective

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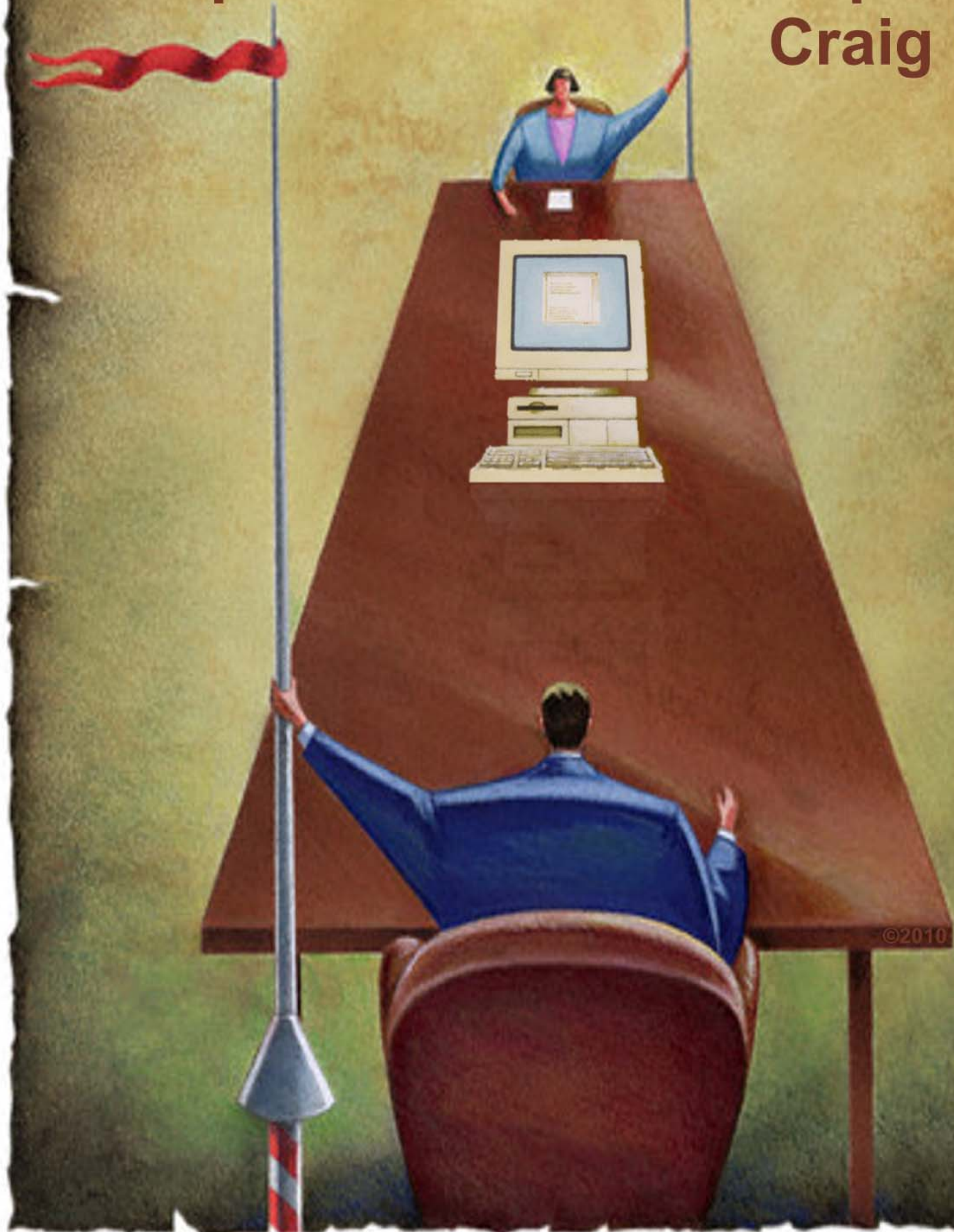

**E-Discovery: A Special Master's Perspective**

**by Craig Ball**
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I'm a Special Master. It's an amalgam of judge and expert and Oprah, with a lot of computer geek, too, because I limit my service to matters involving electronically stored information (ESI).

My role as a Special Master for ESI varies, but it's always interesting and challenging. Sometimes, I'm standing in the judge's shoes kicking rumps to get a derailed, contentious e-discovery effort back on track. Other times, I'm the Court's neutral insuring that responsive ESI is produced and privileged information is protected. Or, I'm the computer forensic examiner tasked with determining if a litigant destroyed electronic evidence and if it can be recovered. It's a solitary job with grueling hours, and I love it.

Untangling a failed e-discovery effort takes a mix of technical expertise and legal experience. It's not enough to know what litigators want. A special master for ESI must also know what it takes to get it. Masters must speak geek in order to resolve wrangling over forms of production, adequacy of search and methods of redaction.[1]

Even more geek speak is required when a party to a lawsuit suspects their opponent deleted evidence, forged an electronic document or used computers to steal or stalk. "Give us their computers," they cry. But mucking about in an opponent's systems exposes trade secrets, personal and privileged communications, financial records, medical data and all manner of sensitive and confidential data. It's all commingled--in databases and e-mail containers.

Hard drives commingle information on spinning platters of metalized glass, and e-mail systems commingle personal and business messaging. Backup systems commingle *everything*. Don't get me started on the digital bone yard called unallocated clusters, brimming with long-ago deleted files! So, it's no mean feat to segregate the discoverable from the protected, and there's no simple, mechanical means to do so. It requires a mix of technical capabilities--*tools*--aimed at systems and practical skills--*judgment*--aimed at content.

As electronic evidence is increasingly decisive in cases of every sort and size, there's a growing need for technically-fluent judges and masters to meet the demand for technically-adept resolution. It's a splendid alternate career path for tech-savvy lawyers and law-savvy techs. Unfortunately, few experienced counsel offering themselves as neutral experts possess a sufficient grounding in information technology, and fewer technically-adept IT specialists possess the adjudicative and investigative skills of a seasoned trial lawyer. Technical expertise equips a master to know what to do and how to do it, but legal training equips the master to know what's important and when enough is enough.

**Goals for this Article**

In addressing e-discovery from the special master's perspective, my goals are to acquaint readers with some of the circumstances lending themselves to appointment of a master, the advantages of using a neutral and the mechanics of appointment (including an exemplar appointment order). Next, I'll offer tips on working with special masters, in particular the questions a special master will expect litigants to

[1] For a lawyers guide to the language of data storage and networking, *see*, Ball, *Geek Speak* (2009), available at http://www.craigball.com/GeekSpeak.pdf.

be able to answer. Finally, I'll hop up on my soapbox about lawyer education and competency in e-discovery, concluding with suggestions of how you might hone your ESI skills.

**Mechanics of Appointment**

In federal practice, the appointment of a special master is governed by Fed. R. Civ. P. 53, which provides that a court may appoint a master with the parties' consent, where the appointment is warranted by "some exceptional condition" or to address pretrial matters that cannot be effectively and timely addressed by an available judge. Rule 171 of the Texas Rules of Civil Procedure (TRCP) grants judges the authority to appoint a master in exceptional cases and for good cause. Additionally, Chapter 154 of the Texas Civil Practice and Remedies Code provides the court with authority to refer a case to an impartial third party.[2]

The rules governing appointment of a master set out the requirements to serve and the requisites of the appointment order, which should clearly define the role and powers of the master with a particular eye toward establishing when the master's work is concluded. Masters cost money, so it's important to insure the meter stops running once the job's done. I include an example of a federal appointment order as Appendix A. Though the example affords broad discretion, a court would be wise to consider the master's experience before granting such leeway in all cases.

**Breaking Bad Habits**

Resolving e-discovery disputes demands a mix of technical initiatives and behavioral modification. Often, problems stem from a failure to communicate, so parties must be steered to more effective communication strategies concerning ESI. It's like marriage counseling, but without happier times to hearken back to. As in ugly divorces, conflict becomes an end in itself. Reasonable requests are refused just to be obstreperous. Unreasonable demands for marginally relevant information are served simply because responding engenders hardship or expense. Each side is determined to give no quarter and perceives cooperation as complicity and weakness. A successful master helps the parties separate advocacy from discovery and works to end peripheral battles over ESI, refocusing the parties on the merits.

The first thing I seek to instill in the parties is a clear understanding of what must stop. Data destruction, dissembling, sniping at opponents and gross speculation are verboten. Where feasible, each side must designate a technical liaison equipped to answer questions about systems, applications and capabilities. Introducing players without a history of animus and shifting the focus to technical issues (where lawyers tend to be more guarded and less combative) helps establish a culture of cooperation.

**Pros and Cons of Special Masters**

When I'm approached to consult on e-discovery, I often ask, "Are you sure you want a partisan consultant? Wouldn't a neutral special master be more effective and less costly?" The first response is always, "I never thought about it." The second is usually, "I don't know if the other side will go for it.

Both sides benefit from a neutral. A master enjoys greater access to the producing parties' systems and data, helping to insure that responsive, non-privileged material will see the light of day. Producing parties benefit because a neutral has no incentive to pursue overbroad or unduly expensive discovery, and by doing what the neutral directs, they're insulated from criticism for doing too much or too little.

[2] Section 154.052(c) affords the court discretion to appoint an impartial third party without formal ADR training if the appointee possesses "legal or other professional training or experience in particular dispute resolution processes."

While most producing parties recognize that they will have to devote resources to e-discovery, what they despise most is expending those resources only to find they're vulnerable to sanctions or obliged to start over again because something was mishandled.

A skilled special master is better able to "right size" e-discovery, striking the optimum balance between avoiding unnecessary expense and the right to receive information. A careful neutral has no incentive to spend more or find less. Further, a neutral's right to see information withheld on claims of privilege or confidentiality without triggering a waiver is a powerful hedge against abuse.

An effective neutral finds consensus; but when consensus fails, the special master must possess the technical skill to fashion a sensible protocol and the legal ability to memorialize and enforce it.

The principal objection to use of a master is cost. Going before a judge on e-discovery disputes feels "free" to lawyers because the judge doesn't charge by the hour and is paid from public coffers. In fact, discovery disputes are very costly. Issues must be briefed in formal submissions, witnesses must attend court and the delay pending a ruling introduces still more costs, such as idling a large review team of contract lawyers. But the biggest expense flows from the very real potential that the court, hampered by a lack of technical insight, will decide the issues in ways that seem equitable on their face but prove unjust, ineffective or unduly expensive in practice.

**Working with the Master**

Because every case implicates different evidence, there's no universal checklist lawyers can look to for e-discovery anymore than there's one for, say, taking a deposition. But in most cases, there are questions lawyers should be able to answer about their client's information systems--and their own capabilities. For example:

1. **What e-mail system does your client use?**
   Today, all U.S. e-mail systems come in one of five flavors. The most prevalent among individuals and small business users is **Webmail**, like Gmail, Yahoo! Mail, Hotmail and AOL Mail. The second most common, and the most popular with midsize to larger businesses, is called **Exchange Mail**, a system generally pairing an e-mail server running Microsoft's Exchange Server software with the Microsoft Outlook e-mail client application running on user desktops and laptops. Some very large enterprises run an IBM application called **Lotus Notes** mail, which mates the IBM Lotus Domino server software with a local mail client application called Notes. A few stragglers among business and government still run a once-popular e-mail tool called **Novell GroupWise**, and finally, there's a motley crew of approaches I'll just call **All the Rest**, comprised of, e.g., Outlook Express, Windows LiveMail, Thunderbird and AppleMail. There may be some crossover among these five approaches (e.g., running Outlook with a Lotus Domino Server or setting up an Exchange server in the cloud for webmail).[3]

2. **What is your client's e-mail retention policy and practice?**
   There are two things you should know about e-mail retention policies. The first is what the policy requires in terms of compulsory deletion of messages. The second is what users actually do. Never presume the convergence of policy and practice where e-mail is concerned. Better still, forget the policy and find out how people *really* handle their messaging. Are users set up to store counterparts of their e-mail locally in so-called PST or OST files? Is journaling or archiving

[3] For an in depth discussion of e-mail systems, *see*, Ball, *Meeting the Challenge of E-Mail in Civil Discovery* (2008), available at http://www.craigball.com/em2008.pdf.

enabled? What mechanisms are available to the IT staff to recover deleted messages? What becomes of former employees' messaging?

3. **What are your client's backup practices?**
Sooner or later, all hard drives fail; accordingly, prudent users duplicate important data to other storage media so they can bring their systems "back up" after failure. These duplicates are written to other hard drives or magnetic tape so critical data can be stored out of harm's way.

Since most companies don't backup information on the hard drives of every desktop and laptop machine, each user's work product may be redirected to an area of the company file server called a "**share**." These "network shares" are often mapped to each user's desktop or laptop machine as a drive letter, e.g., M: or H:, such that when a user saves something to what appears to be hard drive M: on their computer, the data actually resides on a server in another room or building. When the server is periodically backed up, the users work product is copied and protected.

These copies or "backups" occur at intervals and often incrementally, i.e., backup everything on Friday night, then back up only new and changed items Monday through Thursday nights. Backups made to guard against catastrophic system failure are said to be for disaster recovery or "DR," and grow stale very quickly; after all, no one wants to recreate the company's systems as they were six weeks prior to failure--something more like *six seconds* is desired. Accordingly, IT departments typically reuse or "rotate" backup media, overwriting old data with the latest information. Knowing the company's rotation schedule sheds light on how far the IT staff can reach into the past to recover deleted or altered information.[4]

4. **What devices and applications do the key players use that might implicate relevant ESI?**
If financial data is evidence, you'll want to know if the finance folks used spreadsheets or specialized accounting programs. Which key players worked in the field with laptops? Who worked at home? What databases drove implicated decision making? What important communications were faxed, e-mailed, instant messaged, posted online or printed to paper?

5. **What forms of ESI do you seek, and what forms will you furnish?**
Lawyers frequently forget to specify the form of production sought for electronic evidence, though both the Texas and Federal Rules of Civil Procedure provide for it.[5] Counsel often don't grasp the importance of specifying the forms of production sought or mistakenly assume that they must select *one* form to be applied to *all* production. One size doesn't fit all.

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[4] For in depth discussion of backup systems, *see*, Ball, *Technology Primer: Backups in Civil Discovery* (2009), available at http:/www.craigball.com/backups.pdf.

[5] Texas Rule of Civil Procedure Rule 196.4 states: "To obtain discovery of data or information that exists in electronic or magnetic form, the requesting party must specifically request production of electronic or magnetic data and specify the form in which the requesting party wants it produced." Federal Rule 26(f)(3)(c), requires the parties' discovery plan to state the parties' views and proposals on the form or forms in which electronically stored information should be produced, and Rule 34(b)(1)(C) states that the party requesting production of ESI may specify the form or forms in which it is to be produced. Federal Rule 34(b)(2)(D) provides that, "[i]f the responding party objects to a requested form—or if no form was specified in the request—the party must state the form or forms it intends to use." This last requirement may be the most overlooked provision of the FRCP.

The form you'll seek for e-mail production will likely be different than that you'll want for spreadsheets or database extractions. Some ESI lends itself to paperlike forms. For example, e-mail remains reasonably usable when produced as searchable images (i.e., Adobe PDF files or TIFF images accompanied by load files holding searchable text and metadata). But other ESI, such as formulae underlying spreadsheet cells, animated presentations or contents of databases, require forms of production closer or identical to the native forms used by the producing party. Another critical concern is getting information produced in forms compatible with the tools you'll use to do your review.[6] Though native production is the most utile and least expensive form of production, not all parties have the tools or experience to conduct a successful native review.

6. **What data are at greatest risk of alteration or destruction?**
   Absent quick action, data on handheld devices, backup tape slated for rotation and e-mail subject to automatic deletion may all be precariously close to being lost or made much more costly to recover. Counsel should be prepared to detail what's been done to guard against unwarranted tape rotation, disposal of legacy systems (e.g., obsolete systems headed for the junk heap) and re-tasking of machines of departing employees.

7. **How do you plan to filter, search and redact ESI?**
   As the growing volume of ESI made page-by-page review infeasible, automated search came to replace brute force in culling ESI. But law firms have very different capabilities when it comes to automated search, and even familiar technologies like keyword search are more challenging than most lawyers appreciate when thrown against a hodgepodge of client data. Counsel needs to understand the capabilities and, as importantly, the limitations of the tools and techniques they'll use to cull and search ESI.[7]

   A special master will want to know if the parties can agree upon file types to be excluded by filtering and search terms and variations to be employed. The master will want both sides to be clear on what data is amenable to keyword search and what data will be troublesome (e.g., imaged documents that haven't undergone optical character recognition, compressed and encrypted data, spreadsheets, databases and stop words excluded from indices). Finally, a

[6] The buzzword for the tool used to index, sort, search, view, organize and tag ESI is "review platform." Choosing the right review platform for your practice requires understanding your work flow, your people, your search needs and the forms in which the ESI will be produced. A platform geared to review of ESI in native formats must be able to open the various types of data received without corrupting its content or metadata.

There are many review platforms on the market, including the familiar Concordance and Summation applications, Internet-accessible hosted review environments and proprietary tools touting more bells and whistles than a Mardi Gras parade.

Review platforms can be cost-prohibitive for some practitioners. If you don’t currently have one in-house, your case may warrant hiring a vendor offering a hosted platform suited to the ESI. When tight budgets make even that infeasible, you may be forced to employ whatever productivity tools you can cobble together on a shoestring. For a discussion of low-cost approaches using off-the-shelf tools, see, Ball, *E-Discovery for Everybody* (2009) at http:/www.craigball.com/EDnaChallenge.pdf.

[7] For a discussion of ways to improve electronic search, *see*, Ball, *Surefire Steps to Splendid Search*, available at http://www.craigball.com/search.pdf

master will expect the parties to have discussed the disposition of privileged material that must be redacted.

8. **Are you certain it's gone?**
   If there has been one lesson I've learned again and again in e-discovery, it's that most of what people tell you is gone, isn't. "It's gone" is simply the most expedient response--the one least likely to entail further effort.

   Take backup tapes. If you ask an IT person about backup tapes, they may say, "We recycle our tapes every three months, so any backed up data older than three months is gone." If you stop there, you won't learn that they have a backup set from 2008 they pulled from the rotation for another case or for migration to a new system. You won't learn that they switched from lower capacity backup tapes about a year ago and still have six months of old tapes in a cardboard box in storage. Or you won't learn that the old server was powered off after the new server came online, and they never removed the old unit from the rack. It's all still there.

   There's an art to asking the right questions to find ESI.

   The IT folks are busy and pulled in many different directions, all "urgent." They've no spare time for your e-discovery demands. So, when you approach IT saying, "We just need to be able to tell the other side that we don't have anything," don't be surprised when the response is, "We don't have anything." If you'd approached with, "It would really help our case if we found those old messages," you're more likely to hear, "I think I know where we might look."

   E-discovery consultant Tom O'Connor likens questioning an IT staffer about ESI to asking a small child about missing cookies. A bit harsh perhaps, but Tom aptly captures the frustration lawyers feel when trying to communicate with a brainy group that speaks its own elusive but precise language. It's what lay people must experience talking to lawyers.

**Where E-Discovery Goes Wrong: The Case for Competency**
E-discovery fails from three principal causes:

1. The party seeking discovery of ESI doesn't know what they need or how to ask for it;

2. The party obliged to produce data doesn't preserve responsive information, search the right sources or employ proper selection tools, methods or criteria; and

3. The party obliged to produce data negligently or intentionally withholds, conceals, alters or destroys ESI.

It's generally accepted that patent specialists should be grounded in science or engineering. The technically illiterate know to shy away from IP matters. But despite its comparable technical complexity, litigators wade into the deep water of e-discovery imagining they can serve their clients by simply adding "ESI" to the definition of "document" in shopworn discovery requests or throwing out search terms, like they were searching Lexis or Google.

Keyword search presents a good example of the problems engendered when good intentions trump expertise. Many lawyers believe themselves adept at selecting terms for electronic search. Magistrate Judge John Facciola deflated this notion in *United States v. O'Keefe*, 537 F.Supp.2d 14, 24 (D.D.C. 2008).

Declining to evaluate the suitability of search terms, he wrote that, “for lawyers and judges to dare opine that a certain search term or terms would be more likely to produce information than the terms that were used is truly to go where angels fear to tread.” Judge Facciola acknowledged that the selection of proper search terms “is a complicated question involving the interplay, at least, of the sciences of computer technology, statistics and linguistics."

Judge Facciola enjoys a more rarefied appreciation of the complexities of electronic evidence than most judges sitting today. Still, he conceded that without special expertise in electronic discovery, he had no business deciding the issue before him. Instead, the judge would either need to be thoroughly educated on the issues by witnesses possessing the necessary expertise, with the attendant cost of dueling experts, or he could refer the dispute to a special master with the requisite expertise.

But long term, ESI cannot remain the exclusive enclave of experts. Litigators must acquire the expertise and experience to be experts on search. It's not so crazy a notion--if the profession decides to catch up.

**The Competency Conundrum**

How many times have you heard a lawyer tell a court that he or she doesn't "understand computer stuff?" Can you imagine a lawyer confiding that he or she doesn't "understand document stuff?" The single greatest problem posed by ESI isn't its volume or complexity. It's the reluctance of lawyers to exert the time and effort required to understand it.

Knowing how to identify, preserve, collect, search, review, interpret and present the predominant form of evidence in lawsuits is as much a measure of lawyer competency in this century as the ability to search the reporter system was in the last. Clients must trust that their litigation counsel possesses the same fluency and competency with electronic evidence as with paper evidence. So why is it so daunting for us?

A lawyer spends the better part of a quarter-century acquiring the skills needed to deal with paper records. Think about it: we have to master the alphabet, language, reading, writing, general and specialized vocabularies and "thinking like a lawyer." Because all but the last are routine parts of formal education, we don't credit the investment required to competently demand, find, interpret and produce paper evidence.

When we search paper records, we apply our innate understanding of how to open a file drawer, extract a folder and turn a page. We grasp what dates, page numbers and file names signify using just our knowledge of the calendar, number system and alphabetical order. We understand that the requesting party doesn't cares to know the bond weight, color or composition of the paper, its watermark or whose latent fingerprints might be lifted from the surface. We don't report the font used, the page size or what the ink smells or tastes like. A lifetime of training and experience equip us to effortlessly, unconsciously separate informational wheat from chaff.

By contrast, when information is stored electronically, we face a host of unfamiliar cues to meaning, order and relevance. Information is encoded in dozens of different ways. We're unsure what metadata matters. Date values have different meanings than we accord them in common usage. Everyone uses their own idiosyncratic foldering for e-mail, and personal messages are all mixed up with business correspondence. Because we leapt to using information technologies without learning its ABCs, we lack the training, experience or tools to readily distinguish ESI wheat from chaff.

Perhaps the profession mistakenly assumed that ESI was just another flavor of document, and that its contents could be shifted to paper (or electronic page images) to continue using the old, familiar ways.

Only lately has it dawned on the bar how different digital information is in volume and complexity. It's not only grossly inefficient and obscenely expensive to deal with ESI as paper, but content is missed, too. In the end, mass conversion is simply not feasible for terabytes of information; moreover, it's not ethical to visit the immense cost on our clients.

Another argument advanced against lawyers learning e-discovery is that it's not prudent for attorneys to grapple with e-discovery tasks at their high billing rates. "E-discovery," they say, "is work best suited to lower paid employees or contractors." The appeal of this argument is that it makes shirking sound like altruism. *"Talking is something anyone can do, so jury arguments should be handled by the lowest-paid talkers."* Nonsense. If you don't appreciate the perception, judgment, planning, preparation and skill that goes into jury argument, it's just talking. Likewise, if one doesn't appreciate that competent litigators must know where a client's ESI resides, the forms it takes and information it conveys, the cost and means to preserve and collect it, the risks of spoliation and the capabilities and limitations of automated search, then it's deceptively easy to dismiss e-discovery as a delegable responsibility. It's not.

A second argument for delegation much in vogue is that lawyers "shouldn't have to do it." They've studied hard, passed the bar and become adept at marshaling paper discovery. With all the demands lawyers face, how can they be expected to master information technology? So ESI becomes someone else's problem: a delegated task, like typing, filing or copying.

But e-discovery ***isn't*** that sort of task. It's more like reading Chinese. Imagine you don't read or speak Mandarin, yet your firm transfers you to its Beijing office to try cases before Chinese courts. Aided by translators and interpreters, you might get by. But, consider the cost, confusion, frustration and delay!

Clearly, you'd need to learn to speak and read the language. Chinese first graders do it, so how hard can it be for a talented Juris Doctor to master Mandarin?

Okay, hard; but unlike Mandarin, electronic discovery is *not* difficult to learn at any age.

**The Good News**

Again, e-discovery is *not* hard to learn.

We're all citizens of Computerland now, and we need to learn its language. The first hurdle is accepting that there is no alternative *but* to learn it, then believing that you can. Other hurdles are identifying what you need to know and the right sources to study.

You could master the essential case law of e-discovery in a day, and you'd pick up a lot of useful information about the ways e-discovery efforts fail. But you'd still be ill-equipped to lead an effective, efficient e-discovery effort. Most CLE about e-discovery is unhelpful because it's taught by lawyers teaching law. Instead, we need to learn the technology side of e-discovery from technologists.

An online computer forensics course or a community college class on networks or e-mail systems is a great way to get started. You can pick up a lot from self-study, but don't start with books on e-discovery--most of them are written by lawyers.[8] Instead, focus on the technology first, learning how computers work, how data "lives" and "dies," forms of ESI and roles of servers, networks and databases.

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[8] When you do get around to books on e-discovery, one of the best and most comprehensive is Arkfeld, Michael, *Electronic Discovery and Evidence* (2d.Ed. 2009).

A simple, deftly-illustrated volume like *How Computers Work*[9] is time well spent, and though it hasn't been updated in years, the clearest, most comprehensive free guide to everything related to personal computing remains *The PC Guide* web site.[10] Read *Law Technology News*[11] (it's free). Pick out one thing you want to understand each month, e.g., forms of production, application metadata or indexed search, and then hit Wikipedia and Google. Take one of your client's IT folks to lunch and ask how things work. Don't be afraid to ask the dumbest questions that come to mind. Listen, question, follow up and experiment.

You learned the Rule Against Perpetuities. You can learn *this* stuff.

**The Power to Win**

As lawyers and judges learn more about ESI, perhaps the role of the ESI special master will go the way of the scrivener. That's a good thing, if it signals lawyers are back in touch with the evidence. Today, lawyers learn e-discovery mostly to stay out of trouble, but the dividend that flows is power. The power to find the truth, to lower the cost of justice, to speed the resolution of disputes--the power to win.

[9] White, Ron, *How Computers Work* (9th Ed. 2007)

[10] http://www.pcguide.com

[11] http://www.lawtechnews.com

**APPENDIX A: Exemplar ESI Special Master Appointment Order**

IN THE UNITED STATES DISTRICT COURT
FOR THE ____ DISTRICT OF _____
______ DIVISION

[STYLE]

ORDER APPOINTING SPECIAL MASTER FOR ESI

1. Craig Ball of Austin, Texas, is hereby appointed as Special Master for Electronically Stored Information pursuant to Rule 53 of the Federal Rules of Civil Procedure. Mr. Ball has filed the certification required by Rule 53(b)(3).

2. The Special Master shall proceed with all reasonable diligence to *assist* and, when necessary, *direct* the parties in completing required identification, preservation, recovery and discovery of electronically stored information with reasonable dispatch and efficiency.

3. The Special Master shall review with the parties ongoing discovery requests to determine where potentially responsive information is stored and how it can most effectively be identified, accessed, preserved, sampled, searched, reviewed, redacted and produced. To the extent the parties have disputes as to these matters, the Special Master may initiate or participate in the parties' efforts to resolve same. He is authorized to resolve issues as to the scope and necessity of electronic discovery, as well as search methods, terms and protocols, means, methods and forms of preservation, restoration, production and redaction, formatting and other technical matters.

4. The Special Master is granted the full rights, powers and duties afforded by F.R.C.P. Rule 53(c) and may adopt such procedures as are not inconsistent with that Rule or with this or other Orders of the Court. The Special Master may by order impose upon a party any sanction other than contempt and may recommend a contempt sanction against a party and contempt or any other sanction against a non-party.

5. The Special Master shall be empowered to communicate on an *ex parte* basis with a party for purposes of seeking to maintain the confidentiality of privileged, trade secret or proprietary information or for routine scheduling and other matters which do not concern the merits of the parties' claims. The Special Master may communicate with the Court *ex parte* on all matters as to which the Special Master has been empowered to act. The Special Master shall enjoy the same protections from being compelled to give testimony and from liability for damages as those enjoyed by other federal judicial adjuncts performing similar functions.

6. The Special Master shall regularly file a written report, in such format he deems most helpful, identifying his activities and the status of matters within his purview. The report should identify

outstanding issues, with particular reference to matters requiring Court action. The Special Master shall maintain a record of materials and communications that form the basis for such reporting by a suitable means determined at the Special Master's discretion.

7. Each side is ordered to designate a lead attorney and a lead technical individual as contacts for the Special Master. These designees shall have sufficient authority and knowledge to make commitments and carry them out to allow the Special Master to accomplish his duties. The parties are directed to give the Special Master their full cooperation and to promptly provide the Special Master access to any and all facilities, files, documents, media, systems, databases and personnel (including technical staff and vendors) which the Special Master deems necessary to complete his duties.

8. Disclosure of privileged or protected information connected with the litigation to the Special Master shall not be a waiver of privilege or a right of protection in this cause and is also not a waiver in any other Federal or State proceeding; accordingly, a claim of privilege or protection may not be raised as a basis to resist such disclosure.

9. The Court will decide *de novo* all objections to findings of fact or conclusions of law made by the Special Master. Any order, report, or recommendation of the Special Master, unless it involves a finding of fact or conclusion of law, will be deemed a ruling on a procedural matter. The Court will set aside a ruling on a procedural matter only where it is clearly erroneous or contrary to law.

10. The Special Master's compensation, as well as reasonable and necessary expenses, will be paid by the [Plaintiff] [Defendant] [parties in equal shares]. Mr. Ball shall be compensated at his usual and customary rate of $500 per hour, including time spent in transit or otherwise in connection with this appointment, provided however that travel time will be paid at one-half (50%) of the usual and customary rate unless substantive work, research or discussions in support of the engagement are performed while traveling, in which case such activities will be paid at the usual and customary rate. The Special Master shall submit to both parties invoices for services performed according to his normal billing cycle and [Plaintiff] [Defendant] [the Plaintiff and Defendant in equal shares] shall pay such invoices within thirty (30) days of receipt.

11. In making this appointment, the Court has determined that the matters within the purview of the Special Master necessitate highly specialized technical knowledge and cannot be effectively and timely addressed by an available district judge or magistrate judge of the district.

SO ORDERED AND ADJUDGED this the _______ day of _______________ 20____.

___________________________________
UNITED STATES DISTRICT JUDGE