# CHAPTER 13

# DISCOVERY IN THE DIGITAL AGE

## 13.1 OVERVIEW

**13.101 Electronic Information and the Legal Profession.** Electronic information has invaded every aspect of business. Communications are transmitted and stored on computers, mobile, and wearable devices, in the cloud, and in the near future will be transmitted using methods not yet invented.

Computers, servers, and databases store and analyze data critical to business operations. This includes data for production and sales, payroll and accounting, employee performance and evaluation, market and product research, competitive intelligence, and more. More recently, companies have emerged whose entire business model uses big data applications to aggregate data from a variety of sources for analysis.[1] The rapid evolution of computer technology has spurred an exponential growth of data.[2] In the span of a decade, we moved to discussing data volumes in terms of "bytes" to "kilobytes" to "megabytes" to "gigabytes" to "terabytes" to "petabytes" to "exabytes" to "zetabytes," each step a thousand-fold increase over the previous level. The ever increasing volume of data also increases the complexity of issues related to data awareness, retention, preservation, collection, and analysis.

As these complexities and costs grow, so does the need for effective and thoughtful handling of discovery. Today most practitioners use computers not only for word processing, time recordation, and accounting, but also for communicating with each other and with clients and for storing and retrieving source documents, pleadings, and transcripts. Documents of this nature are presumptively immune from discovery, but their immunity is increasingly

[1] Gartner defines "big data" as "high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation." Gartner, IT Glossary, www.gartner.com/it-glossary/. In the business context it typically means the aggregation and analysis of data to enable business decisions. For example, many retailers use big data techniques to make marketing and product pricing decisions.

[2] Cisco estimates that by the year 2021, more than 2.8 zetabytes (i.e., 2.8 trillion gigabyes) of data will transmit over the internet each year. Five things that are bigger than the internet: Findings from this year's Global Cloud Index, https://blogs.cisco.com/sp/five-things-that-are-bigger-than-the-internet-findings-from-this-years-global-cloud-index.

under attack. Both attorney-client-privileged and work product materials can be vulnerable to discovery if their confidentiality is not maintained.[3]

This chapter addresses the unique aspects of digital information that must be considered in pursuing and responding to discovery. A lawyer who does not understand the role of electronic information today, or who does not thoroughly investigate his client's information systems and applications, cannot effectively pursue or respond to discovery requests. A search for information cannot be effective without appreciating how technology creates, manipulates, stores, and leaves traces of that information.

Helpful resources on this topic abound. Electronic discovery vendors, law firms, and independent commentators electronically publish white papers, compilations of recent case law, and a wealth of other materials. Many conferences and seminars focus on this topic alone. Independent, unbiased authorities are useful sources of information. One such authority, the Sedona Conference, is a non-profit research and educational institute dedicated to the advanced study of law and policy in complex litigation.[4]

Sedona Conference publications are often cited as highly regarded authority by many in the legal field, including the judiciary.[5]

### 13.102 ABA Model Rules of Professional Conduct.

**A. In General.** Since August 2012, the American Bar Association Model Rules of Professional Conduct explicitly require lawyers to keep abreast with evolving technology that impacts law practice. Though the ABA Model Rules are not binding on lawyers, they do serve as models for the ethics rules in most states.

**B. Model Rule 1.1.** Model Rule 1.1 requires a lawyer to "provide competent representation to a client," and "competence" is defined as having the "legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation." Comment [8] to Model Rule 1.1 requires that "[t]o maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, *including the benefits and risks*

[3] *See generally* ¶¶ 12.2, 12.3 of this book.

[4] www.thesedonaconference.org/aboutus.

[5] *See, e.g.*, *Victor Stanley, Inc. v. Creative Pipe, Inc.*, 250 F.R.D. 251 (D. Md. 2008); *Cason-Merenda v. Detroit Med. Ctr.*, Civ. Action No. 06-15601, 2008 U.S. Dist. LEXIS 51962, 2008 WL 2714239 (E.D. Mich. July 7, 2008).

*associated with relevant technology . . .*"[6] This comment indicates that a lawyer advising a client should become familiar with the technology that would affect the related advice. Many technical decisions could have a direct impact on the litigation process, and exhibiting "competence" requires the lawyer to understand enough about the implicated technology to analyze those potential results.

**C. Model Rule 1.6.** Model Rule 1.6 regarding confidentiality of information includes subpart (c): "A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client." Comment [18] discusses the factors to be considered in determining "reasonable efforts" in confidentiality safeguards taken be the lawyer.[7] This increased scrutiny on securing confidential information is a natural result of the proliferation of technology to transmit information or communicate with clients and non-lawyers employed to assist in the representation.[8]

**D. Model Rule 5.3.** Model Rule 5.3 provides guidelines about a lawyer's responsibilities when engaging a non-lawyer to assist the client. Comment [3] specifically references examples of retaining a document management company to create and maintain a litigation support database and use of an internet-based service to store client information. The comment states: "When using such services outside the firm, a lawyer must make reasonable efforts to ensure that the services are provided in a manner that is compatible with the lawyer's professional obligations."

## 13.2 CATEGORIES OF POTENTIALLY DISCOVERABLE ELECTRONIC DOCUMENTS AND INFORMATION

**13.201 In General.** To conduct and respond to discovery effectively, an attorney needs to understand how events, ideas, communications, data compilations, and analyses are contemporaneously recorded and stored. For centuries, significant events and ideas have been contemporaneously recorded and communicated on paper documents. Today, paper documents constitute only a selectively composed snapshot of contemporaneously recorded events and ideas. The actual recordation increasingly occurs in digital form on computer

[6] Italicized text is the 2012 amendment to the original comment.

[7] Comment [18] references Model Rules 1.1, 5.1 and 5.3.

[8] Similarly, Model Rule 4.4 and its comment [2] reference the inadvertent transmission of electronically stored information and metadata.

storage devices, and those devices are ever evolving regarding what they can store and how the information on them can be obtained. Communications in both the personal and business world are increasingly entirely electronic. For some cases, it is not the communications that are critical to discovery, but rather the data created, received, and otherwise maintained and analyzed by various departments within a client company.

Much of a business's ESI is in the form of electronic files. Electronic files generally store information in a standardized format that can be used by one or more applications. Most businesses utilize word processing files and spreadsheet files for creating and storing business records. There are other types of proprietary software for more specialized applications. Files typically have an alphanumeric name[9] and can be stored on a computer storage device. Computer storage devices include physical or virtual computer hard drives, the flash memory inside a mobile device, remote servers, and legacy data on CD-ROM disk or digital tape.

Unless the file is simple and transitory, it will usually evolve over time. Certain collaboration channels, databases, or spreadsheets may evolve for years. Usually, as the file is revised, the new version replaces (overwrites) the last version. When this occurs, the record of the earlier version is often lost, although some computer systems have an auditing "trail" function or document management system that will store each revision separately. In this type of system, it may be possible to reconstruct the evolution of the document over time. Historical versions of electronic files are often just as relevant in discovery as current versions. Most modern cloud-based collaboration tools do not preserve versioning.

**13.202 Email.** Because of its pervasiveness,[10] email warrants special attention in any litigation by both the requesting and the responding attorney. Certain aspects of email communication are attractive not only to email users, but also to litigators. First, large numbers of people communicate by email in a candid and informal manner that would not be used in traditional written memoranda. Second, the number of users and ease of use results in email replacing much oral communication. Third, the nature of email and the manner

[9] Modern computer systems allow descriptive file names. Historically, severe limitations on creating file names often resulted in code names that were meaningless to all but the file creator. Even today, some systems used by large organizations may impose file-naming conventions that preclude descriptive names.

[10] The Radicati Group estimates that by the end of 2024, more than 361 billion business and consumer emails will be sent and received per day. The Radicati Group, Email Statistics Report 2020-2024 (February 2020), www.radicati.com/wp/wp-content/uploads/2020/01/Email_Statistics_Report,_2020-2024_Executive_Summary.pdf.

in which it can be copied and stored, even without any effort on the part of the sender or receiver, makes it a more permanent record than a conversation, a casual handwritten note, or even a typewritten note.[11] Fourth, many email users do not regularly delete messages, and even those who do attempt to delete them may not realize that copies may still exist in the mailboxes of other senders and receivers or in backup storage long after the message has been forgotten. Though the volume of retrievable email in a large company's files can be staggering and present cost concerns, the impact of email on litigation can in some cases be quite significant.

**13.203 Mobile Devices and Messaging Communications.** Messaging services have exploded in popularity both with individuals and corporate users, and, for some users, have replaced email as the default method of casual communication.[12] Historically, messaging was bifurcated between mobile device messaging services (e.g., Short Message Service (SMS) messages, Rich Communication Service (RCS) messages, BlackBerry PIN messages) and computer messaging (e.g., AOL Instant Messenger). Not only are the number of messaging services growing, but most (e.g., Apple iMessage, WhatsApp, Skype for Business, Slack, Zoom) are now cross-platform. Further, most messaging services are adopting characteristics of file-sharing services and social media at the same time that social media platforms such as LinkedIn and Instagram and collaboration platforms such as Zoom, Teams, and Google Suite have integrated private and group messaging features. All have browser and mobile app functionality. Many integrate to wearable technology or external devices such as a watch, step counter, GPS tracing device, camera, or a virtual assistant.

These brief and informal messages may be subject to a party's duty to preserve and produce relevant information. Because of the ease and perceived privacy of sending short messages instantaneously, text messages have largely replaced email as a form of brief, "chatty" communication. Regardless of its informality (often because of it), this information is potentially discoverable depending on the facts of the individual case and whether the burden of either

[11] *See* Committee on Federal Courts, *Discovery of Electronic Evidence: Considerations for Practitioners and Clients, Committee on Federal Courts*, 53 The Record 656, 663 (Sept./Oct. 1998).

[12] According to Radicati, "Email is still the most pervasive form of electronic communication for both business and consumer user . . . as an email account (i.e. email address) is required to sign up to any kind of online activity, including social networking sites, instant messaging and any other form of account or presence on the internet. Online purchases also involve an email address for confirmations, notifications and more." Radicati Group, Email Statistics Report, 2020-2024 – Executive Summary (February 2020), radicati.com/wp/wp-content/uploads/2020/01/Email_Statistics_Report,_2020-2024_Executive_Summary.pdf).

preserving or producing that information, which can be substantial, would be worth the benefit of obtaining that information.[13]

Similarly, mobile devices such as cellphones and wearables may be a source of communications and other records that are not text-based, such as voicemails, images, or location tracking, that are within the realm of potentially discoverable information. Custodians commonly create and share photos, videos, and screen captures of accident scenes, altercations, and conversations, as they are experienced in real-time. Those records are frequently backed up to cloud accounts or shared with little or no descriptive text to provide context. The informal nature of modern messaging lends itself to jargon, abbreviations, misspellings, lack of punctuation, and emojis. Litigation counsel evaluating their preservation and collection strategy should consider whether the case is one that may involve non-traditional content shared between devices with potentially key metadata about date, time, and GPS location embedded throughout—but perhaps no text or keywords to be found.

Retention is a notable challenge associated with identification, preservation, and collection of messaging and other mobile data. SMS messaging apps on various operating systems are often configured by default to periodically auto-delete messages to preserve storage space—and users are frequently unaware of this feature. Some courts have identified an obligation for litigants (or their counsel) to include clear instructions in their legal hold notices that require proactive steps to ensure that potentially responsive communications are not deleted by an automatic system process before they are preserved.[14] In contrast, messaging built into certain other platforms such as Instagram tend to linger potentially indefinitely—making filtering and unitization for discovery review and production a challenge. Consider also that many platforms are designed to send encrypted content that will be seen only one time and then completely destroyed. While public perception may accept that there are legitimate business uses for this level of privacy[15] and some of

[13] *See, e.g.*, *Paisley Park Enters., Inc. v. Boxill*, 330 F.R.D. 226, 234 (D. Minn. 2019) (holding text messages discoverable under Rule 34). *See infra* ¶ 13.301(E) (discussing the not reasonably accessible test in Federal Rule 26(b)(2)(B)). *Dalton v. Commonwealth*, 64 Va. App. 512, 521-523, 769 S.E.2d 698, 703–04 (2015) (determining text messages constitute writings for the purposes of the best evidence rule).

[14] *See, e.g., Paisley Park Enters., Inc. v. Boxill*, 330 F.R.D. 226, 233 (D. Minn. 2019) (holding that the failure to suspend auto-delete or institute a legal hold to suspend deletion of text messages was unreasonable, given the importance of the issues at stake and the amount in controversy) (citing *Steves & Sons, Inc. v. JELD-WEN, Inc.*, 327 F.R.D. 96, 108 (E.D. Va. 2018)).

[15] See the Department of Justice's 2019 revisions relaxing the stringent prohibition of any ephemeral messaging that was previously in their 2017 FCPA Corporate Enforcement Policy guidelines. The guidance now requires "Appropriate retention of business records, and prohibiting the improper destruction or deletion of business records, including implementing appropriate guidance and controls on the use of personal communications and ephemeral messaging platforms that undermine the company's ability to