



*Arkfeld's
Best Practices Guide*

INFORMATION TECHNOLOGY PRIMER FOR LEGAL PROFESSIONALS

2013-2014 EDITION



MICHAEL R. ARKFELD




LawPartner
PUBLISHING, LLC

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**INFORMATION TECHNOLOGY
PRIMER FOR
LEGAL PROFESSIONALS**

2013-2014 Edition

Michael R. Arkfeld

Member of the State Bar of Arizona



LawPartner

PUBLISHING, LLC.

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Preface

Law Partner Publishing and LexisNexis are pleased to provide you with *Arkfeld's Best Practices Guide: Information Technology Primer for Legal Professionals*, which is part of the *Arkfeld's Best Practices Series*.

The purpose of this *Best Practices Guide* is to provide a primer in understanding the “information technology infrastructure” of organizations, locating “electronically stored information” (ESI), and managing it using computer technology. Understanding the infrastructure will enable legal professionals to apply e-discovery legal mandates in order to request and produce “electronically stored information” (ESI). This primer is intended to be used as a general reference for the identification, preservation, collection and disclosure of ESI. Depending upon the unique issues of your case, the suggested practices may necessitate a different approach and should be considered on a case-by-case basis.

This Guide is meant to be used in conjunction with *Arkfeld on Electronic Discovery and Evidence* (3rd Edition) treatise also published by Law Partner Publishing, LLC. The numerous cross-references in the *Guide* are citing to the paragraph section(s) in the *Electronic Discovery and Evidence* (3rd Edition.) treatise, unless it specifically references a *Best Practices Guide*.

Below is the Table of Contents of *Arkfeld on Electronic Discovery and Evidence* treatise:

- Chapter 1: *Electronic Information in Litigation*
- Chapter 2: *Creation and Storage of Electronic Information*
- Chapter 3: *Structure and Type of Electronic Information*
- Chapter 4: *Computer Forensics, Experts and Service Bureaus*
- Chapter 5: *Search, Technology and Cost Issues in Managing ESI*
- Chapter 6: *Discovery and Production Process*
- Chapter 7: *Court Procedural Rules and Case Law*
- Chapter 7 Appendix: *State E-Discovery Procedural Rules and Case Law*
- Chapter 8: *Admissibility of Electronic Evidence*

About the Author

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Among his writings are *Arkfeld on Electronic Discovery and Evidence* (3rd ed.), *Arkfeld's Best Practices Guide for Electronic Discovery and Evidence*, *ESI Pretrial Discovery — Strategy and Tactics*, *Legal Hold*, and *IT Primer for Legal Professionals* available from LexisNexis (www.lexisnexis.com/arkfeld). Michael is a member of the State Bar of Arizona and the recipient of the national 2004 E-Evidence Thought Leading Scholar Award. His websites at www.arkfeld.com and www.elawexchange.com features additional electronic discovery and evidence materials and resources.

As a former assistant United States Attorney for the District of Arizona, Michael handled cases involving personal injury, medical malpractice, wrongful termination and a host of other tort claims. He has appeared before both federal and state appellate courts and has extensive experience in jury (over 30 trials) and bench trials. Since 1985, Michael has incorporated personal computers extensively in his legal practice. He lectures and consults throughout North America and internationally on the impact of technology on the practice of law and the discovery and admission of electronic evidence. Michael can be reached by e-mail at Michael@Arkfeld.com.

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Chapter 1

Overview of Information Technology (IT) and Electronic Discovery

§ 1.1 IN GENERAL

The purpose of the *Information Technology Primer for Legal Professionals* is to provide a basic understanding of the “information technology infrastructure” of organizations, locating “electronically stored information” (ESI), and managing it using computer technology. Understanding the infrastructure will enable legal professionals to apply e-discovery legal mandates in order to request and produce “electronically stored information” (ESI).

For most legal professionals this is information that is new to their practice. Whether your cases are small or large or whether you are a sole practitioner or a member of a large firm, you will need to gain a working knowledge of “computer technology” and communications and apply these concepts while requesting or producing “electronically stored information” (ESI).

This guide is organized into the following chapters:

Chapter 1 provides an overview of information technology in organizations and of the electronic discovery process. It sets forth the main discovery stages that are critical in producing ESI.

Chapter 2 sets forth the characteristics and different forms of ESI. It provides fundamentals of the characteristics of ESI as well as an important section on the different “form or forms” of ESI that will play a critical role in disclosure. In addition, it will examine the key legal issues in determining the “form” of disclosure, *i.e.*, “kept in the usual course of business” and other disclosure issues.

Chapter 3 discusses the IT infrastructure which includes an organization’s people, hardware, software and networks. It provides a close look at how a computer works, bits and bytes, operating software and a host of other topics.

Chapter 4 provides a discussion of file systems, concealment of ESI and a listing of the different ESI types and structure of data.

Chapter 5 provides an explanation of how ESI storage works as well as the sources and locations of ESI.

Finally, Chapter 6 discusses the computer technology available to identify, filter, review and produce ESI. This chapter reviews the different stages regarding production of ESI and technological issues that must be addressed such as online repository, deduplication, redaction, and searching. These

different stages may overlap and usually will involve an iterative approach requiring certain stages be revisited

In addition, certain sections of this Guide contain *Practice Pointers* that assist in the identification and production of ESI.

This guide also contains an appendix entitled *Information Technology Discovery Questions* that sets forth an extensive list of information technology questions that can be used for a discovery plan, client questionnaire, adversary preservation questions, meet and confer conferences, depositions, interrogatories, and requests to produce and inspect.

§ 1.2 OVERVIEW OF INFORMATION TECHNOLOGY

§ 1.2(A) From the Analog to the Digital Communications Age

The ubiquitous use of computers in creating electronic information has dramatically changed discovery and admission of case information.

The cornerstone of this transition is the change from a paper and analog based society to a digital society, together with the Internet. Analog devices, such as video and audio recording devices, record events in real time using film or audiotape. Digital is the recording of information in a binary manner as 1's and 0's for use by a computer. Once in a digital format, all forms of information — data, sound, graphics, text, and video — can be stored, accessed, retrieved, manipulated, organized and sent over the Internet using computers anytime and anywhere.



Whether in business, government or at home, information is created in an electronic format. “According to a University of California study, 93% of all information generated during 1999 was generated in digital form, on computers. Only 7% of information originated in other media, such as paper.” *In re Bristol-Myers Squibb Securities Litigation*, 205 F.R.D. 437, 440 n.2 (D.N.J. 2002). Not only is this a pervasive change, it has occurred quickly.

In a short period of time, technology, computers, and the Internet have radically changed the way we create and transmit information. In 1975 the first microcomputer was introduced which replicated the power of larger computers into a small desktop. This breakthrough was the result of the miniaturization of new microprocessor technologies called semiconductors. This was followed by the introduction of the first word processing software in 1978, which enabled people to easily write and change text and graphics. Over the next 20 years, computers have found their way into millions of households and businesses.

As we enter the 21st century, litigants and the Courts have to be concerned with discovery, production and admissibility of electronic evidence. The