

NEGOTIATING BUSINESS CONTRACTS

INDEMNIFICATION, REPRESENTATIONS, WARRANTIES AND MORE

CONTINUING LEGAL EDUCATION SEMINAR

PRESENTED BY

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1. INTRODUCTION

The negotiation of business contracts is a critical early phase of the contracting process. Effective contract negotiations can lay a solid foundation for future business dealings that extend far beyond a business transaction that is the subject of a contract being negotiated. Ineffective negotiations can promote a false sense of a meeting of minds. Such a false sense creates an illusory foundation for the contract. A contract built upon an illusory foundation can leave the contract unstable, and the business transaction likely to fail. Litigation often results from a transaction that fails due to an unstable foundation produced by ineffective negotiations. The interests of all parties to a business contract are best served by negotiations that are clear and unambiguous.

Contract negotiations can serve to reveal unresolved issues that warrant further negotiation before a final written memorialization is prepared for execution. After consensus is reached regarding the main terms of a business transaction, then the iterative contract drafting process can begin. It is often during this iterative drafting process that contract provisions addressing more complex legal issues such as indemnification, representations, and warranties move to the fore. The exchange of proposed versions of contract documents is a crucial component of negotiations. This is often when attorneys are most directly involved in contract negotiations. Well negotiated business contracts can help keep the interests of the contracting parties in alignment over time. The negotiators and drafters skill, when applied well, can facilitate mutually beneficial business relationships that endure.

2. PRELIMINARY BUSINESS CONTRACT NEGOTIATION NECESSITIES, TIPS AND TRICKS

A fundamental prerequisite to effective and successful business contract negotiations is a well developed and shared understanding of the relevant history, context, and goals of a proposed transaction. Metaphorically, the current location and the intended destination of a trip must be known before the possible routes can be planned, and before likely obstacles can be anticipated and possibly avoided. Attorneys can have multiple roles during the preliminary phase of business contract negotiations. The metaphor can be extended to describe the roles of attorneys at this phase as being those of the navigator and lookout. These roles are always important, yet are often less important than the role of counselor. Counseling contracting clients is typically both the most important and

the most difficult role for attorneys to fulfill. This role is highly nuanced, and regularly governed by difficult ethical considerations.

A. INITIAL COMMUNICATION AND CONSULTATION WITH CONTRACTING CLIENTS

Initial communications with clients in business contract matters are particularly prone to misunderstandings. This is mainly because clients, and especially new clients, tend to use and interpret legal terminology incorrectly. The vast amount of information available via the Internet about virtually every area of the law has both improved and worsened this problem. More experienced clients may have long held misunderstandings about the meaning of legal terminology. This can cause them to confidently misapply terms. That misplaced confidence can mislead attorneys about the extent of a client's knowledge and understanding.

The best approach is usually to allow clients to freely explain their proposed transactions while trying to perceive the true meaning and intent behind the words. Initially assuming that legal terminology is being used inaccurately often promotes a more accurate initial understanding. Once an initial understanding has been developed that seems substantially accurate, then the correct meaning of the legal terminology used by a client can be diplomatically explained without throttling the flow of communication. Early explanations can be expanded upon during initial consultations. This process is one of an evolving mutual education that helps the lawyer-client relationship develop.

B. ASSESSING THE NATURE AND PURPOSE OF BUSINESS TRANSACTIONS

Similar to the problem of misused legal terminology, an additional problem is that clients in business contract matters tend to misidentify the types of contract documents they need. Rather than describing the nature and purpose of the business transactions that must be memorialized by contract documents, contracting clients tend to ask whether an attorney can prepare particular contract documents. This is often motivated by a misguided attempt to compare and possibly negotiate fees for document drafting.¹

The contract documents that should memorialize a business transaction commonly cannot be identified until the nature and purpose of a business transaction is clearly understood, and until the structure of the proposed transaction has been agreed upon. Decisions about the structure of a business transaction often are among the most important decisions that must be made. Such important decisions should be made with the benefit of legal counsel. That legal counsel can only be appropriately provided following the preliminary phases of business contracting. Therefore, attorneys should carefully avoid promoting or supporting premature determinations about the particular contract documents that will memorialize a particular business transaction. An attorney who fails in this regard risks misleading a client at best, and creating a bait-and-switch scenario at worst.

C. EVALUATING THE TYPES AND PROCLIVITIES OF CONTRACTING PARTIES

Legal counsel to clients engaged in the negotiation of business contracts should be provided with due consideration of the types and proclivities of the contracting parties. The variability of these types and proclivities is virtually unlimited, yet a few archetypes can be described. These archetypes are more appropriately thought of as caricature than actual characters. Still, the particular proclivities of negotiating parties often can be understood as a collage of these archetypes.

Better understanding of the contracting parties can substantially enhance the value legal counsel provided. Such understanding is more easily developed when working with individual contracting parties. Working with contracting business entities that are controlled by multiple individuals can be much more difficult. Nevertheless, understanding the proclivities of contracting business entities and their decision makers can be especially important. Assessing the complex interplay between different decision makers can be extremely challenging, yet any insights gained can be extremely valuable.

(1) THE OPTIMIST

The optimist archetype most often presents as the enthusiastic proponent of some new business or business venture. This enthusiasm is often fairly considered to be the “entrepreneurial spirit” that is essential to breathe new life into new enterprise. Every proposed business transaction is viewed by the optimist as an important opportunity not to be missed. Inability to reach a final agreement is considered a failure that seldom seems to be offset by the consequential latitude to pursue other opportunities without encumbrance. The optimist often believes that all could be made right if the other parties to the proposed contract could be made to understand and appreciate what are viewed as the inevitable benefits of the proposed transaction.

When negotiating business contracts with or on behalf of the optimist, it is often helpful to seek some appropriate counterweight. Someone fulfilling that role is typically already present, yet attorneys are commonly forced into service as the optimist’s counterweight. Attorneys are routinely expected to anticipate potential problems, so the role of the counterweight can seem natural. The risk for attorneys is that the optimist’s counterweight can appear to some as a needlessly pessimistic “nay-sayer.” The aim should always be to help achieve balance that promotes good decision making.

(2) THE PESSIMIST

The pessimist archetype most often presents as the battle weary cohort of the optimist. This is because the pessimist working alone is often very reluctant to hire an attorney to assist with contract negotiations that are considered too unlikely to ever be successful. The pessimist is often the creation of the optimist who is seen by the pessimist as an impulsive and reckless force that must be curtailed.

When negotiating business contracts with or on behalf of the pessimist, it is often helpful to validate legitimate and realistic concerns while offering suggestions about managing or apportioning reasonable business risk. The risk is that the inevitable tension between the optimist and the pessimist will become too polarized. Again, the aim should always be to help achieve balance that promotes good decision making.

(3) THE CONTRARIAN

The contrarian archetype is motivated by skepticism. That skepticism can be “healthy” if not overdone, yet the way the contrarian deals with skepticism can be counterproductive at times. The contrarian reflexively takes an opposing position about every issue, often with little or even no conviction. The purpose is to test validity, with the underlying presumption that the best position will win.

When negotiating business contracts with or on behalf of the contrarian, it is often helpful to explicitly address contrary positions and explain why they are less valid. This can provide assurance to the contrarian that contrary positions are being considered, which makes the position being advanced more persuasive. The risk is that the contrarian will be viewed by the other contracting parties as needlessly argumentative. Attorneys can help negotiations with or on behalf of the contrarian move forward by characterizing the negotiations as a series of [dialectic](#) processes that can produce a final synthesis which will be a foundation of the proposed business transaction.

(4) THE PUGILIST

The pugilist archetype can seem similar to the contrarian archetype, but is actually quite distinct. The pugilist is motivated by a basic belief that negotiations can produce a “good deal” for the pugilist *only* if the deal was won by combat. A fight for right is viewed as “the good fight” which is engaged in honorably. Often there is a sense that the pugilist’s opponent is only well and truly understood after blows have been exchanged.

Attorneys, by training and experience, are familiar with the difference between an adversary and an opponent. When negotiating business contracts with or on behalf of the pugilist, it may become necessary to occasionally cross the normal boundary of advocacy to serve as the pugilist’s opponent or champion. Professionalism, and even a modicum of decorum, can be maintained in such circumstances if the bouts can be viewed and characterized as “friendly.” Accomplishing this can be an indication of a high degree of professionalism so long as there is no need for an attorney serving as opponent or champion to be refereed. Depending upon the particular proclivities of the pugilist, direct engagement between parties may become necessary. In such situations, the role of an attorney is trainer and coach. The role of all attorneys involved in the negotiations, hopefully then acting in concert, should be that of the referee. Somewhat ironically, successful negotiations and fruitful future dealings with the pugilist tend to be promoted by bouts that end in a draw. The risk is that the pugilist may win bouts with the other parties easily. That tends to promote a premature end to negotiations or an unbalanced transaction that inevitably topples.

(5) THE SPY

The spy archetype can be the most difficult to identify and understand. The spy is motivated by a fundamental discomfort with advancing the spy’s own interests. The spy is often very willing and able to promote the interests of others, even at the expense of self-sacrifice. The spy often seeks legal counsel only after extensive direct negotiations with other contracting parties. Rapport that developed during those direct negotiations is often highly prized by the spy. That sense of value can induce the spy to attempt to preserve that rapport by clandestinely leaking confidential information to the other contracting parties. The spy can develop a sense that the efforts of the spy’s attorneys to zealously represent the spy’s interests may need to be offset by some self-sabotage. This can create ethical dilemmas that are addressed below.

(6) THE DELEGATOR

The delegator archetype is the most varied of the archetypes, and often shares some characteristics with one or more of the other archetypes. The delegator archetype as described here does not include those who effectively delegate appropriate authority to subordinates. Such delegation is an essential component of the operation of most business entities. The defining

characteristic of the delegator archetype is a general reluctance to personally make decisions that are necessary for business contract negotiations to progress. The delegator delegates *responsibility* to make necessary negotiation decisions while withholding some of the *authority* necessary to make those decisions. This can make the authority to negotiate unclear to the other negotiating parties. Such a lack of clear authority often impedes negotiations, and can create legal liability if the other parties can persuasively allege that all necessary authority was made apparent by the actions or inactions of the delegator. Assuming that a negotiating party actually wants negotiations to move ahead toward a final agreement, then an attorney representing that negotiating party should try to clarify negotiation authority. The ways this might be done are as varied as the diverse motivations that may be driving the delegator's reluctance to personally make decisions, therefore, general recommendations about how to deal with the delegator cannot be made. Instead, general recommendations about how *not* to deal with the delegator may be helpful.

When negotiating business contracts with or on behalf of the delegator, it is often appropriate to press for disclosure of the limits upon negotiation authority. The delegator commonly negotiates from a vantage point situated behind those to whom responsibility has been delegated, so disclosures about the limits upon negotiation authority typically reveal where full authority lies. Such increased transparency can foster trust that promotes successful negotiations. It is almost always best to make or receive such disclosures early in the negotiation process. If appropriate, negotiation in stages can be expressly planned. Early stage negotiations can develop a framework for later stage negotiations during which the decision makers with full authority will directly participate in negotiations. Such negotiation plans can prevent the other negotiating parties from feeling betrayed upon realizing that negotiations have progressed beyond the limits of authority. Such feelings of betrayal can be very toxic in the context of contract negotiations, and can kill a business transaction that might otherwise have been successful.

D. PLANNING NEGOTIATION POINTS AND STRATEGIES

The importance and benefit of planning negotiation points and strategies in advance of business contract negotiations is axiomatic. The preceding taxonomy of contracting party archetypes has addressed the importance of considering the types and proclivities of the parties. It is important to be aware that such advance planning can also have detrimental impacts if the plan developed becomes inflexible. Contracting parties tend to have a strong preference for their own ideas during negotiations. That preference can be strengthened to the point of rigidity if a party's preconceived ideas about contract negotiations have taken shape as a highly detailed plan produced by great effort. Attorneys should encourage and help clients to plan, but should also encourage planning to be appropriately flexible during negotiations. It is quite appropriate for certain elements of a proposed business transaction to be considered *sine qua non*, yet a willingness to fairly consider unexpected alternatives proposed by other parties can enable progress in circumstances where negotiations otherwise would have failed.

3. ETHICS FOR THE BUSINESS CONTRACT ATTORNEY

Attorneys navigating through business contract matters often encounter challenging ethical issues. Advance understanding of the nature of reasonably anticipated ethical issues can help attorneys representing contracting parties to avoid ethical problems. The most hazardous ethical

issues are those that lie just below the surface of perception. This section addresses several of those ethical issues.

A. IDENTIFYING CLIENTS IN BUSINESS CONTRACT MATTERS

Accurate identification of clients in business contract matters is essential for ethical compliance. Identification of clients can be straightforward when attorneys are representing or dealing with sole proprietors. That is because individual proprietors and their business entities are legally the same in those instances. If contracting parties are organized as other forms of business entities, then the identification of clients can be much less obvious.

When representing business entities other than sole proprietorships, attorneys should always remember and make clear that the business entity is the client. Such business entities are fictitious persons rather than natural persons, which can confuse natural persons who are unfamiliar with the concept of fictitious persons. Often among the confused are the natural persons who own, control, or act on behalf of the business entity. Since fictitious persons are unable to act on their own, their agents; often being their partners, members, managers, officers, or directors; must act on behalf of the business entity. Agents may forget, or choose to disregard, that they and the business entity are legally different persons. Attorneys should make reasonable efforts to educate such agents about the nature of their agency. There are regularly occurring circumstances where the interests of a business entity client and its individual agents are inconsistent. It is often appropriate to explicitly explain this to the agents, and to suggest to the agents that they might seek independent legal counsel in such circumstances. When drafting business contracts on behalf of business entities other than sole proprietorships, and when agents as individuals will also be parties to those contracts, it is recommendable to include language such as the following:

Separate Counsel

The Members acknowledge that the Company has been represented by Scaramella & Hoofnagle, Attorneys at Law with regard to this Agreement. Each of the Members has consented to this representation, and has been advised of the right to seek separate counsel about individual interests.

It is tempting to assume that other attorneys involved in business contract negotiations will already understand and appreciate how to identify their clients. Experience has taught that such assumptions can be hazardous. Any confusion about the true identity of the clients of any attorney involved in business contract negotiations can create explosive ethical and legal problems. If such problems explode, anyone nearby can be struck by the virtual shrapnel. This legitimizes efforts by more knowledgeable attorneys to educate other attorneys who may be unwittingly fashioning such virtual explosives.

There are two situations when the identification of clients in business contract matters can be particularly difficult. The first is when representing a business entity owned entirely by a legal couple. In these situations, the couple may be appropriately considered to own the business entity as tenants by the entirety, provided that there is no current or likely conflict of interest between the individuals that comprise the couple. This form of ownership is then equivalent to that of a sole proprietorship. If there is a current or likely conflict of interest between the individuals, then this situation should be considered as a form of ownership other than a sole proprietorship, with one important exception. A dispute between the individuals of the couple that implicates the ownership

of the business entity may fall within the jurisdiction of the family court. If so, then issues in dispute may be adjudicated based upon principles of equitable distribution rather than the law that would otherwise apply to unrelated individuals litigating similar disputes.

The second situation when the identification of clients in business contract matters can be particularly difficult is when attorneys are retained to represent individuals who are promoting formation of a new business entity. It is important to understand and make clear that this situation is essentially legally equivalent to other situations when attorneys represent business entities that are not sole proprietorships. Before the new business entity is formed, attorneys rendering legal services in connection with formation of the business are representing the new business entity *in formation*, and are only representing the individuals in their representative capacities as promoters of the new business entity. In the ordinary course of new business entity formation, when the new business entity comes into existence, the prior acts of the business promoters are then ratified by the new business entity, either expressly or impliedly, and the promoters commonly become express agents of the business entity.

B. AVOIDING POSSIBLE CONFLICTS OF INTEREST

When an attorney is representing a business entity through its agents, it is natural for those agents to become accustomed to seeking legal counsel from the attorney. This can induce those agents to ask the attorney for legal advice about individual interests while receiving legal advice in the agents' representative capacity as agents of the represented business entity. Attorneys should always refrain from giving such advice, except in the rare instances, and then only to the extent, that the interests of the business entity and the individual agents are completely aligned.

C. DECISION MAKING BY ATTORNEYS AND CONTRACTING CLIENTS

Especially when representing the delegator archetype, attorneys should be careful to only accept authority to make *legal* decisions. Authority to make *business* decisions should be refused. This helps avoid commingling the interests of attorneys with the interests of their clients. That promotes independence and objectivity of attorneys, which promotes good legal counsel and the avoidance of conflicts of interest. It would be inappropriate for attorneys to adjudge themselves immune to the possible influence of their own interests, then seemingly justifying the acceptance of authority to directly make business decisions for clients. It is quite appropriate for attorneys to make recommendations about business decisions, and to attempt to identify and explain the foreseeable benefits and disadvantages of possible decisions, yet attorneys should insist that clients or their authorized agents make all business decisions.

Handling decision making appropriately when representing clients in business contract matters requires identifying which decisions are business decisions, and which decisions are legal decisions. In practice, many decisions that must be made in the context of business contracting are both business and legal decisions. Decisions about the appropriate apportionment of decision making authority are legal decisions that should be made by the attorneys representing the contracting parties. The variability of decisions that must be made during contract negotiations is at least as great as the variability of business contracts, so it is not possible to describe the distinction between business and legal decisions except in the most general terms. The best approach is usually to consider whether and to what extent making a decision requires the exercise of business or legal

judgment. Since many decisions require both types of judgement, those decisions should be made jointly by attorneys and their clients.

D. ADDRESSING CONTRACTING CLIENT RECKLESS ZEAL OR DEBILITATING INERTIA

As described above, the individuals involved in business contract negotiations can have very different proclivities that greatly affect the course of negotiations. When representing or dealing with negotiating parties that exhibit reckless zeal or debilitating inertia, the role of attorneys as counselors or mediators can be most important. The polar proclivities of zeal and inertia tend to manifest in tandem, and then tend to reinforce each other. Being mindful of this can greatly assist attorneys to appropriately handle the ethical issues that tend to arise in such situations.

E. NEGOTIATIONS BETWEEN ATTORNEYS OR DIRECTLY BETWEEN CLIENTS

Especially when negotiating business contracts with or on behalf of the spy archetype, it is often necessary to develop and apply a bit of spy-craft. Reading this should cause any number of ethical dilemmas to spring to mind. The spy as an individual contracting party is free to spy against the spy's own interests, so attorneys representing the individual contracting spy in negotiations have no recourse except to counsel the spy against such spying.

The ethical issues and duties become much more complex and difficult when an attorney is representing a business entity that has multiple decision makers involved in negotiations, assuming that less than all of those decision makers are jointly spying against the business entity. The possible permutations are almost endless, yet there is a general point that warrants mention. Information compartmentalization can both mitigate the damage done by the spy, and can reveal the spy's identity when the spy remains concealed. Other contracting parties will often reveal knowledge of compartmentalized information that should have remained confidential. If the revealed information can be traced back to the spy as the source, then the spy can be identified, and hopefully, prevented or discouraged from further spying.

If it becomes clear that attorneys representing other contracting parties knowingly or intentionally used the spy as a way to clandestinely communicate directly with a negotiating party represented by an attorney, then it may be appropriate to reapportion the compartmentalization of information in a way that is expected to leak certain information that serves the legitimate interests of the negotiating party being spied upon. Such efforts should be carried out only with careful ongoing consideration of professional and ethical duties. Obviously, no attorney should knowingly or intentionally directly communicate with a represented contracting party using a spy, even a willing one, absent advance consent by the contracting party's attorney.

F. MULTI-PARTY NEGOTIATION CONSIDERATIONS

Attorneys representing or dealing with parties in multi-party business contract negotiations should be mindful of how information can morph, both intentionally and unintentionally, as that information is communicated by and between the negotiators. As the number of contracting parties and the number of negotiators increases, the potential for misinformation or misunderstanding grows exponentially. Misinformation can appear to have been intentional, with obvious ethical implications for any attorneys involved, even when reasonable efforts were made to convey only

accurate information. Misinformation that appears to have been intentional also can expose clients to liability if a contracting party claims to have been damaged by the misinformation.

Attorneys can avoid or at least mitigate such risks by vigilantly monitoring for misinformation or misunderstanding. Contemporary communication technologies have made it much easier to directly convey information from any negotiating party to all other negotiating parties simultaneously. When appropriate, communicating in this way can convey an intent to encourage transparency that fosters trust which can promote successful negotiations.

G. RETAINERS AND FEES IN BUSINESS CONTRACT MATTERS

Ethical considerations about retainers and fees in business contract matters center around the avoidance of commingling of interests of attorneys and their clients. Appropriate retainers held in trust help to insulate the interests of lawyers from those of their clients. For example, without an appropriate retainer held in trust by an attorney, the attorney may have a financial incentive to demonstrate to a client what appears to be a beneficial short-term result of contract negotiations, when that result is actually contrary to the longer-term interests of the client sought to be advanced by the proposed business transaction. This is because there is a natural tendency for an attorney to expect that a bill for legal fees and expenses is more likely to be paid by a client if that client feels that some beneficial result has already been obtained. Very few clients are able to perceive the existence or possible effects that such financial incentives can have on legal counsel received. That can make the effects of accepting representation without receipt of an appropriate retainer quite insidious. As described above, it would be inappropriate for attorneys to adjudge themselves immune to the possible influence of their own financial interests.

An exception to the ethical imperative for financial insulation provided by an appropriate retainer is when the nature of the matter naturally provides countervailing incentives. Most commonly, this is when the matter is sufficiently imbued with the public interest that *pro bono* representation of the client is appropriate.

4. DETERMINING EXPECTATIONS REGARDING THE FORM OF BUSINESS CONTRACTS

It is easily observed that readers of business contracts, especially lay readers, tacitly acquire a strong initial impression of the terms of a contract from its general appearance. That initial impression can make the reader comfortable or wary, which can greatly influence the interpretation of the language of the contract. Care should be given to the drafter's choices of layout and typefaces, including the sizes, styles, and spacings because of this effect upon interpretation. Making these typographic design choices is surely an art with multiple legitimate styles, yet there is also some science in the design of a contract document.

Different cultural and stylistic norms should be considered when selecting the design of a contract document. For example, in certain circumstances, such as when drafting a counterproposal, it may be appropriate to disregard preferred typographic and stylistic concerns to produce a document that appears familiar to the other contracting parties. A familiar design can make the modified terms of a counterproposal seem more acceptable. In other circumstances, there can be advantages to producing a counterproposal with a radically improved design. An aesthetically pleasing design can have tactical significance during negotiations. The natural tendency to avoid

disrupting pleasing aesthetics often causes lawyers representing other contracting parties to hesitate editing proposed contract language. That can encourage more efficient negotiations and lead to final contract language that is more consistently phrased and less ambiguous.

More generally, Americans usually expect to read long text set in serif typefaces, while Europeans can be more comfortable reading long text set in sans-serif typefaces. Serifs are intended to help guide readers' eyes along a line of text, therefore, longer lines are usually best set in serif typefaces. A business contract that is difficult to read may cause reader fatigue, which can have a negative impact upon the interpretation of contract terms, which then can make negotiations more difficult. These effects upon readers are typically subliminal, yet can be quite influential.

It can be tempting to think that the influence of typographic design is too unpredictable to warrant substantial attention by business contract drafters. Although it may be true that "beauty is in the eye of the beholder," universal principles of human aesthetics are generally thought to exist.²

Typography lies at the intersection of the art and science of contract negotiation and drafting. Lawyers should know the technical and grammatical rules that govern the setting of type. The "[desktop publishing revolution](#)" occurred many years ago, so business contract drafters should assume that many readers will recognize common typographic errors such as the improper use of punctuation. The recognition of such errors can degrade readers' confidence in the contract drafter and, indirectly, in the drafter's client. A good source of information about this topic is [Typography for Lawyers](#), a website and book published to help lawyers improve their typographic skills.³

5. ELECTRONIC CONTRACTING

The majority of business contracts today exist principally or exclusively in electronic form. The proportion of electronic contracts will inevitably increase while printed contracts seem progressively more anachronistic. This is an apparent consequence of the rapid advancement of computer technology including the digital communications infrastructure that links computerized devices together. Parties have traditionally used pen and ink to execute most printed business contracts which were filed with other paper business records. Electronic analogs that enable the digital equivalent of this paper based method of contracting have existed for years. However, lawyers often do not encourage electronic methods of contracting by their clients. Business contracts can be fully electronic only when there is a way to uniformly format, securely exchange, effectively execute, and reliably store, the digital files that memorialize those contracts. Technologies and laws have long existed that can make electronic contracting feasible and legally binding.

The American Bar Association Model Rules of Professional Conduct now includes with [Rule 1.1, Competence](#), a comment under the heading "[Maintaining Competence](#)" which states:

[8] To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

This comment to the Rule uses broad language that describes a sweeping and continuing professional duty. The inclusion of the duty to "keep abreast of...benefits and risks associated with relevant technology" is directly implicated in business contracting in multiple ways and at multiple levels. This duty is stated as being personal to each lawyer, and therefore, is not delegable.

A. ELECTRONIC FILES

Business contracts can remain in force and effect for many years, and may remain legally relevant many years after contract termination. That makes the choice of the digital file format and storage medium very important. The convenience and reliability of future access to electronic files is the most salient factor. Digital storage media have improved greatly in recent years, while costs have dropped precipitously. This has made long term storage and backup of digital files readily available and affordable.

(1) ELECTRONIC FILE FORMATS

The choice of electronic business contract file formats can greatly facilitate or impede the future availability of business contract documents. The basic principle that should be adhered to can be stated simply. Truly open file formats should be used that have been designed for reliable and consistent data interchange between systems. This can be very important during contract negotiations when multiple iterations of proposed contract documents are exchanged.

There are currently two trustworthy file formats for formatted text that may include other embedded content such as raster or vector based images. The first and most broadly supported is [Rich Text Format](#). The second is the [OASIS OpenDocument](#) text format, which is the native format of [LibreOffice Writer](#). All final versions of contract documents should also be stored in [Portable Document Format](#). Document files in this format can contain all the resources necessary to properly display and print the files, including all the font resources used. Care should be taken to ensure that all needed resources are embedded in a PDF file when it is created. The most reliable way to accomplish this is to use the [PDF/A](#) format. This variant of the Portable Document Format is specifically intended for reliable long term storage and retrieval.

(2) ELECTRONIC FILE RESOURCES

Word processing documents are always dependent upon external system resources. The main example of this system resource dependence is the use of “font” files in a document. Those files would be more accurately referred to as typeface files when installed in contemporary computer systems, yet the old and once apt terminology is still often used. Font system resources define the characteristics of a digital typeface, including the particular characters available, their shape, size, and spacing. A fuller discussion of digital typefaces is beyond the scope of this writing. For lawyers drafting business contracts, it is generally sufficient to know that font files with the same typeface name and style can include different character sets with different character encoding and different dimensions, even when published by the same digital typeface foundry. As a result, it is possible for a word processing document opened on different computer systems to display and print differently, even when opened by the same version of the same word processing application. The differences can include missing or altered characters, and altered line wrapping and pagination. It is left to the reader to imagine what the effect upon application of the Best Evidence Rule might be if “original” electronic contract documents can no longer be displayed or printed as they appeared when a contract at issue in litigation was negotiated and executed.

These potential problems can be avoided, or at least greatly minimized, by using only contemporary font resources that are compliant with open specifications well supported across multiple computing platforms of the past, present, and likely relatively distant future. Fortunately, the “[font wars](#)” are now little more than computing history, and international specifications

regarding digital font resources are mature and stable. An appropriate way to deal with the problem of typeface variability is to use only professionally designed digital typefaces that are compliant with the [Unicode](#) specification and are published by reputable foundries. The [OpenType](#) typeface file format is the best supported and most reliable. If given a choice, it is best to choose the PostScript version or “flavor” of an OpenType typeface file, although a TrueType version will provide nearly equivalent support and reliability. If newer versions of typeface files are installed either intentionally or automatically when upgrading operating systems or software applications, it is wise to archive prior versions that were used in previously drafted business contracts. If it is later questioned whether a contract document has become altered by use of a newer version of a typeface resource, then the new resource file can be disabled and the former resource file can be enabled making a comparison possible.

(3) ELECTRONIC FILE TRANSMITTAL AND STORAGE

The transmittal and storage of electronic business contracts implicates the lawyers’ [duty of confidentiality](#). The security of data at rest and in transit should be considered when selecting the storage and transmittal methods used. It is foreseeable that loss of important information by a lawyer could adversely affect a client’s legal interests. The broad range of the topic of electronic file storage and transmittal is beyond the scope of this writing, yet it is appropriate to note the main points of concern, which are the *physical* security of computer workstations and servers within computer systems, and the *electronic* security of those systems including the interconnecting data networks. It has been [reported](#) that only 35 percent of lawyers use email encryption, and that this percentage has remained largely consistent over years.⁴ This troubling statistic seems to confirm that a significant problem exists. A discussion of the causes would be mostly speculative.

B. AUTOMATED DOCUMENT COMPARISON

It is common for complex business contract negotiations to produce many different versions of proposed contract documents. Tracking the differences between different versions can become nearly impossible without the aid of computer technology. Fortunately, automated document comparison is now readily available. Drafting new proposed contract documents together with extra versions that highlight all proposed changes from one or more prior proposals is a courtesy that can demonstrate candor and honesty. That can greatly increase the chance that negotiations will be successful. Use of automated document comparison is an important component of representing clients engaged in complex business contracting.

C. COMPUTER ASSISTED PROOFREADING

One of the most difficult problems to combat when negotiating and drafting business contracts is drafter’s bias. The lawyer who drafted a business contract has a very strong tendency when proofreading to read what was *intended* to be written rather than what was *actually* written. That bias is caused by the lawyer’s ability to recall the drafting process. Drafter’s bias can be so strong that very obvious errors can be missed after multiple readings. Putting the contract aside until the drafter’s memory has faded sufficiently is virtually never practical due to the time that must pass. Asking another lawyer to proofread the contract is very rarely practical. The other lawyer would have to be fully familiar with the transaction, the parties, and the negotiations, to be a truly effective proofreader. This makes the contract drafter both the most qualified proofreader and the proofreader most likely to miss some obvious errors.

A good solution to this conundrum is to enable the drafter to proofread the business contract without reading it. Computers are able to read the text of a contract aloud while the drafter listens.⁵ The cognitive process of listening is sufficiently distinct from the process of reading that drafter's bias is almost entirely avoided. Computers read aloud with the absolute objectivity of a machine. Every period, comma, and em-dash causes a clearly audible pause in the speech, and every word is read exactly as it appears in the contract. No human reader can match such accuracy or objectivity. Having a personal computer read a contract aloud before transmitting it to the client or the other parties is a very helpful final step that often reveals overlooked errors or contract language that could be improved further.

D. ELECTRONIC SIGNATURES AND DIGITAL SIGNATURES

The terms "electronic signature" and "digital signature" are often used interchangeably in common parlance. In legal contexts those terms have very distinct technical meanings. Proper use of these terms is especially important because a digital signature can sometimes also be an electronic signature. Non-repudiation is used to support a determination of whether a message was actually signed by a given entity.

(1) ELECTRONIC CONTRACT EXECUTION BY ELECTRONIC SIGNATURES

In the context of electronic contracting, lawyers should understand that a contract can be executed by applying an electronic signature to an electronic contract document with the signer's intent that doing so signs the contract. The [Electronic Signatures in Global and National Commerce Act](#) provides that "[t]he term 'electronic signature' means an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." 15 USC §7006 (5). This extremely broad and inclusive definition makes it very easy to create something that constitutes a legally binding electronic signature. The most professional appearing form of an electronic signature is a digital replica of a person's hand-written signature. It is relatively easy to create such a digital replica as a raster image by optically scanning a hand-written signature. Electronically tracing such a scanned image to create a special typeface file containing the signature as a vector based drawing is far superior. An electronic signature in this form can be scaled without any loss of quality. A vector based electronic signature will always display and print at the full resolution of the output device.

(2) ELECTRONIC CONTRACT AUTHENTICATION BY DIGITAL SIGNATURES

A "digital signature" is a part of a data file that contains a cryptographic key from a [public key certificate](#) (also known as a digital certificate). When a contract or other document in electronic form is executed by affixation of a digital signature, then that signature may be used to ensure non-repudiation of the signature. "A digital signature is represented in a computer as a string of bits and is an electronic analogue of a hand-written signature that can be verified by anyone with access to the public key. The signature can be used to provide assurance of data integrity and source authentication, and to support non-repudiation." [Guideline for Using Cryptographic Standards in the Federal Government: Cryptographic Mechanisms, National Institute of Standards and Technology, United States Department of Commerce, NIST Special Publication 800-175B, March 2016, Lines 830-33.](#)

The evidential reliability of using digital signatures as the method of ensuring non-repudiation of signatures is evolving as cryptographic and biometric techniques and technologies

progress. At the time of this writing, debate continues about the relative merits of holographic and digital signatures, and both are potentially subject of claims of forgery. The reliability of holographic signatures has remained fundamentally unchanged for many years, while sophisticated biometric confirmation of identity has become commonplace. There can be little doubt that biometric based digital signatures used to execute business contracts will soon provide substantially more reliable authentication that is very difficult to repudiate.

(3) UTILIZING THE PUBLIC KEY INFRASTRUCTURE

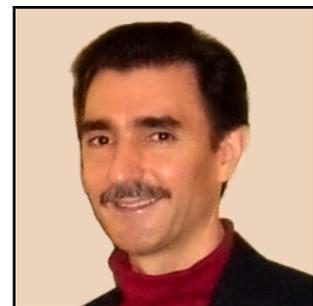
A full discussion of digital signatures that would include the complex technical details of the Public Key Infrastructure is beyond the scope of this writing. Attorneys involved in electronic contracting should understand that digital certificates are most commonly used within a “chain of trust” leading back to a [root certificate](#) issued by a [certificate authority](#). Root certificates containing the public keys of the larger commercial certificate authorities are very commonly [pre-installed in computer operating systems](#). There are always corresponding private keys maintained by the certificate authorities. The critical point is that all private keys in a chain of trust leading back to and including the private key in the root certificate can unlock anything encrypted using a subordinate key. Use of a commercial certificate authority may be appropriate where some form of verification by a third-party intermediary seems warranted.

When security is the paramount concern, it is best for a law firm to maintain its own certificate authority and issue its own digital certificates. This may be particularly appropriate when using digital certificates to encrypt email messages sent to and from clients. Software is readily available to help firms create and manage certificate authorities.⁶ When a law firm controls the certificate authority used to encrypt client communications, no one else can decrypt those communications. The issuance of digital certificates to clients is commonly facilitated by electronic publication of public keys of one or more certificate authorities. Examples are the [Scaramella & Hoofnagle Mail Certificate Authority Web Site](#), and the [Apple PKI Web Site](#).

ABOUT THE PRESENTER

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1. An exception to this is negotiation of fixed fees for relatively routine contract documents often prepared in volume. Such documents commonly memorialize contracts of adhesion when there is

little or no opportunity for negotiation. Such situations are outside the scope of this writing which addresses the negotiation of business contracts.

2. For example, the “[golden ratio](#)” has been demonstrated to be pervasive in nature, and [might ease visual perception](#).

3. This author does not endorse all typographic rules stated in the publication. For example, as shown in this writing, adding leading between paragraphs *and* indenting the first line of paragraphs at different levels is an appropriate and helpful way to identify and differentiate logical breaks of different degrees.

4. American Bar Association’s annual Legal Technology Survey Report, 2015 Edition, compiled by the American Bar Association’s Legal Technology Resource Center.

5. The ability to convert text to speech has always been a standard feature of every Macintosh® computer. This capability can be added to other types of personal computers by installing third-party software. Some of that software is intended to aid readers who are visually impaired.

6. Keychain Access included as a standard application within macOS can be used to access the [Certificate Assistant](#) application which is included as a Core Service. Certificate Assistant can be used to create certificate authorities, and to [request and issue digital certificates](#). Additional software options for managing digital certificate authorities are [XCA](#) and [EJBCA](#) which are open source projects, and [SimpleAuthority](#), which is a commercial application.