The use of technology in litigation is not a new phenomenon. For more than thirty years, lawyers have used equipment such as overhead projectors, television sets, and VCRs in the courtroom to present their cases. [FN1] Today's courtroom technology, however, provides lawyers with much more sophisticated and versatile options. [FN2]

Because of the many benefits of using courtroom technology to visually present one's case, from enhancing the jury's comprehension and retention of the information presented to reducing the overall length of trials, its use will only continue to rise. [FN3] Indeed, the adversary process itself will likely lead to this result as lawyers realize that an unwillingness to take advantage of courtroom technology, especially when one's opponent does, is an unacceptable risk. [FN4] Two important questions necessarily follow. First, what ethical considerations are implicated as technology-augmented litigation becomes the norm? And second, do the current Model Rules of Professional Conduct ("Model Rules") adequately address those ethical concerns?

The ABA Commission on Ethics 20/20

In 2009, the ABA created the Commission on Ethics 20/20 ("the Commission") to assess the adequacy of the current Model Rules in light of modern technological advances and the increased globalization of the practice of law. [FN5] The Commission's work is expected to take three years, with the first year dedicated to research, and the second and third years dedicated to developing and vetting proposed policies and principles and presenting them to the ABA's House of Delegates for approval. [FN6]

The Commission has identified three focus areas:

(1) issues that arise because U.S. lawyers are regulated by states but work increasingly across state and international borders; (2) issues that arise in light of current and future advances in technology that enhance virtual cross-border access; and (3) particular ethical issues raised by changing technology. [FN7]

Though the effects of technological advances on the ethical duties of lawyers is clearly one of the Commission's primary focuses, courtroom technology is not specifically set out as an area of concern in the Commission's Preliminary Issues Outline. [FN8] The most relevant topic to courtroom technology in the Preliminary Issues Outline is “Competence: Does the rapid pace of technological evolution raise issues relating to lawyer competence.” [FN9] Because technology-augmented litigation is steadily becoming the norm for modern courtroom practice, the Com-
mission should consider, as part of its technology discussion, whether the Model Rules adequately cover the use of courtroom technology.

**Courtroom Technology under the Model Rules**

But for the mention of electronic communications in connection with lawyer advertising and solicitation of professional employment from prospective clients, the Model Rules do not specifically address technology or how technological advances affect a lawyer's ethical duties. The lack of an explicit reference notwithstanding, however, technological advances can affect a lawyer's duties even under the current Model Rules. Specifically, when it comes to technology-related issues, the duties of confidentiality, competence, and diligence are the duties most often implicated.

For example, when sending an electronic document to third-parties, lawyers may need to consider whether they are also transmitting confidential client information as metadata. Metadata, which accompanies electronic documents, can reveal information regarding the authorship of a document and changes made during drafting including, among other things, deletions. [FN10] Some state bar opinions have held that, in order to avoid violating the duties of competence and confidentiality, attorneys must take reasonable steps to safeguard against revealing such information. [FN11] Some states have also held that lawyers may not ethically attempt to “mine” for such data when receiving electronic documents. [FN12] Similarly, the duties of confidentiality, competence, and diligence have been implicated in other technology-related activities such as e-discovery, [FN13] switching to a paperless filing system, [FN14] transmitting sensitive information via email, [FN15] and conducting online research. [FN16]

When it comes to using courtroom technology to visually present one's case, maintaining confidentiality is generally not an issue, yet several other Model Rules may be implicated. Of particular relevance are Model Rule 1.1, requiring competence, Model Rule 1.3, requiring diligence, and Model Rule 1.5, requiring reasonable fees. Although all three rules could be interpreted so as to cover courtroom technology, an examination of each reveals that many questions are left unanswered.

1. The Duty of Competence

According to Model Rule 1.1, competence “requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.” [FN17] The comments indicate that in order to maintain the knowledge and skill required for competent representation, “a lawyer should keep abreast of *19 changes in the law and its practice.” [FN18] Indeed, even the ABA's own website indicates that “[c]ompetence in using a technology can be a requirement of practicing law.” [FN19] Thus, one could argue that, as using courtroom technology to visually display evidence becomes the standard, the duty of competence will require lawyers to adjust accordingly. That is, at a minimum, lawyers should have a general understanding of how to use courtroom technology in presenting their cases. [FN20]

The comments to Model Rule 1.1 also indicate that the requisite thoroughness and preparation “are determined in part by what is at stake.” [FN21] That is, major or complex litigation may require more preparation and treatment to satisfy the competency requirement. Thus, a complex patent or similar type case that requires the jury to understand a detailed scientific process may require more preparation and treatment than an uncomplicated contract dispute. If a simple graphic or chart explaining the scientific process involved would greatly improve the jury's ability to understand a pivotal issue in the case, would the duty of competent representation require the lawyer to use one?

Assuming that the duty of competence does entail an obligation to be at least minimally competent in the use of courtroom technology, further questions still arise. One example would be whether and to what extent the lawyer who does use courtroom technology to present her case must also be prepared in the event that technology fails. [FN22] If an evidence camera stops working in the middle of trial, for example, because the light bulb failed, must the “ade-
quately prepared” attorney have a spare light bulb on hand, acetate transparencies ready to place on an overhead projector instead, or paper copies of the exhibits available to pass to the jurors? [FN23] If the courtroom itself was equipped with the camera, can the attorney depend on the court to also supply a spare bulb? [FN24] If the attorney intends to use a PowerPoint presentation, would simply bringing an extra copy of the presentation on a CD or flash drive be sufficient? Or should the attorney also bring a copy of the Microsoft software program that would be necessary to view it on another computer? Should an attorney using her own laptop for presentation purposes be prepared with a second laptop in the event the first laptop crashes? In other words, even if one believes that the duty of competence requires lawyers to be capable of using courtroom technology, which is uncertain under the current Model Rules, the question of whether and to what extent the “thoroughness and preparation” element of that duty requires lawyers to be prepared for technology failures is also open for discussion.

2. The Duty of Reasonable Diligence

Whereas the Model Code of Professional Responsibility explicitly included a duty of zealous representation, the current Model Rules have reshaped that duty into a combination of the duties of competence and diligent representation. [FN25] Because of fears that the term “zealous” could slip into “overzealous,” no Model Rule contains an outright duty of zeal. [FN26] Even so, the comments do refer to an obligation of zealous representation: (1) “A lawyer must also act with ... zeal in advocacy upon the client's behalf; [FN27] (2) “[W]hen an opposing party is well represented, a lawyer can be a zealous advocate on behalf of a client and at the same time assume that justice is being done”; [FN28] and (3) “These principles include the lawyer's obligation zealously to protect and pursue a client's legitimate interests, within the bounds of the law, while maintaining a professional, courteous and civil attitude toward all persons involved in the legal system.” [FN29]

Considering all three of these comments and the many benefits to using courtroom technology, one might assume that diligent representation requires attorneys to visually present their cases using courtroom technology, especially where opposing counsel is doing so. To be sure, when surveyed, many attorneys indicate that if opposing counsel is using litigation support software, they would be inclined to do so as well. [FN30] One defense attorney, after unsuccessfully objecting to the prosecution's use of a computer slide show in closing arguments, confessed to reporters that his own arguments had appeared “slipshod in comparison.” [FN31] Indeed, many computer-savvy jurors may even expect attorneys to use technology in presenting their cases. The comments to Model Rule 1.3’s duty of reasonable diligence, however, also provide that lawyers are “not bound ... to press for every advantage that might be realized for a client.” [FN32] This statement alone makes it difficult to argue that the current diligence requirement includes a duty to use courtroom technology to present one's case, even in the situation where one's opponent is doing so.

3. The Duty to Keep Fees Reasonable

The duties of competence and diligence must be balanced against the countervailing duty to keep fees reasonable, which is set out in Model Rule 1.5. [FN33] The rule itself requires that lawyers' fees be reasonable and sets out a non-exclusive list of factors to consider. Thus, there is substantial room for discretion in determining a proper fee. [FN34]

When it comes to courtroom technology, it is a question of balancing the cost and effectiveness of a given evidence display technology or particular type of computer-generated exhibit (“CGE”). For example, because moving CGEs, such as animations and simulations, can cost upwards of $5,000 to produce, attorneys must have an adequate knowledge of when and why one would want to use such evidence. [FN35] Some potential guidelines that have been suggested by commentators include the following: (1) whether your case involves a risk of exposure in excess of $500,000; (2) whether your case creates a “story” that should be presented clearly; (3) whether your case hinges on causation; (4) whether your case involves complex expert testimony; and (5) whether your opponent is using an animation or simulation, which you should attack with one of your own. [FN36] More simple CGEs, on the other hand, such as static or enhanced images, can be used much more frequently and cost-effectively, especially where the
courtroom itself is equipped with the evidence display technology. Even if the courtroom itself is not equipped, most of the basic evidence display technologies, such as evidence cameras and digital projectors, can be purchased or even rented at a relatively low cost. \[FN37\]

**Considerations for the ABA Commission on Ethics 20/20**

There are numerous benefits to using courtroom technology to visually present one's case: increased juror comprehension and retention of the information presented, increased persuasive power, increased efficiency, the appearance of competence and preparedness, and the ability to control the room. As such, using courtroom technology will soon be, if it is not already, standard practice in modern litigation. Therefore, as part of its technology discussions, the Commission should consider the use of courtroom technology specifically and whether the Model Rules themselves, or at least their comments, need to be amended to better address it.

Of the three rules discussed that might relate to courtroom technology, the fee issue is probably the most sufficiently addressed under the current Model Rules. This is so simply because the rule itself does not impose a “bright line” fee structure, but rather leaves room for discretion. Thus, whether the effectiveness of using a particular type of courtroom technology is valid justification for the potential increase in the attorney's fee is also subject to discretion. The duties of competent and diligent representation, on the other hand, could be read either way. That is, perhaps a lawyer's duties of competent and diligent representation require that she be familiar with how to use courtroom technology and when and why one should do so, but perhaps not. Because of the clear message of the comments to Model Rule 1.3 on diligence-- that lawyers do not have an ethical obligation to “press for every advantage that might be realized for a client” \[FN38\] --it is unlikely that courtroom technology can be addressed under that rule, short of deleting that comment altogether, which would have a broader unintended effect. Thus, the real issue here lies in the duty of competence and its effect on the use of courtroom technology.

Specifically, as part of its technology discussion, the Commission should consider, first, whether lawyers have an ethical obligation to be minimally competent in the use of courtroom technology when advocating for their clients, which this author would suggest they do, and second, whether the current Model Rule on competence adequately expresses that duty, which this author would suggest it does not. It is not necessary, however, to drastically reword Model Rule 1.1 to make the duty clear. Indeed, an additional comment to the rule would be more than sufficient. A possible starting point for discussion is the following:

Maintaining the requisite knowledge and skill necessary for competent representation includes a duty to keep abreast of technological advances that significantly affect the practice of law. For example, in certain circumstances, lawyers may have an ethical obligation to use courtroom technology in advocating for their clients and to be competent in the use of technology when doing so.

The structure of a comment like this allows not only for courtroom technology to be addressed, but other areas in which technology has affected the practice of law as well. That is, other “for example” sentences could follow, further clarifying how and in what circumstances technology shapes the duty of competence.

Finally, regardless of whether the Commission modifies the Model Rules to address courtroom technology, trial lawyers must still consider this issue in light of the rules as they are today. That is, trial lawyers need to apply their current understanding of the duties of competence, diligence, and reasonable fees when deciding whether and how to take advantage of courtroom technology. Only those lawyers who have done so will be adequately prepared to defend themselves in the event their compliance with these obligations, as they relate to the use of courtroom technology, is ever challenged. \[FN39\]

**Conclusion**

As more trial attorneys become aware of the many benefits of using courtroom technology in presenting their
cases, technology-augmented litigation will become standard practice. As such, the Model Rules should address the ethical duties of attorneys with regard to the use of courtroom technology, even if only to clarify that a minimal competence in the use of courtroom technology is, in fact, an ethical obligation for all trial attorneys. Courtroom technology should, therefore, be considered by the Commission as part of its discussions on modern technology and the practice of law.

[FNa1]. Michelle L. Quigley is a law clerk for the Honorable Gordon J. Quist of the United States District Court for the Western District of Michigan.

[FN1]. See DEANNE C. SIEMER ET AL., NAT'L ASSOC. FOR TRIAL ADVOCACY, EFFECTIVE USE OF COURTROOM TECHNOLOGY: A LAWYER'S GUIDE TO PRETRIAL AND TRIAL 20-21 (2002) [hereinafter LAWYER'S GUIDE] (describing the “legacy equipment” (i.e. older equipment) available in courtrooms).

[FN2]. Available technologies include the following: (1) evidence cameras; (2) laptop computers equipped with presentation software, such as Trial Director, Sanction, Trial Pro, or Microsoft's PowerPoint; (3) electronic whiteboards; (4) digital monitors, which vary in size and can be located anywhere in the courtroom including the bench, behind the witness stand, and in the jury box; (5) digital projectors and projection screens; (6) annotation equipment; (7) integrated lecterns; and (8) kill switch and control systems. See Elizabeth C. Wiggins, The Courtroom of the Future is Here: Introduction to Emerging Technologies in the Legal System, 28 LAW & POL'Y 182 (2006) and LAWYER'S GUIDE, supra note 1, at 6-20.


[FN4]. Lederer, supra note 3. at 830.


[FN7]. PRELIMINARY ISSUES OUTLINE, supra note 5, at 2.

[FN8]. See id. at 3-9.

[FN9]. Id. at 8.


[FN11]. See, e.g., id.; N.Y. State Bar Ass'n, Ethics Op. 782 (2004) (holding that a lawyer must take reasonable care to ensure that confidential information is not disclosed when sending electronic documents and that “[r]easonable care may, in some circumstances, call for the lawyer to stay abreast of technological advances and the potential risks of transmission in order to make an appropriate decision with respect to the mode of transmission”).


[FN14]. See, e.g., VSB Comm. on Legal Ethics, Ethics Op. 1818 (2005) (“[W]hen making decisions as to what to keep in the file and in what form, while an attorney may consider storage expediency, those decisions must be made such that the attorney's duties of competence, diligence, and communication are not compromised.”); N.J. Sup. Ct. Advisory Comm. on Prof'l Ethics, Ethics Op. 701 (2006).


[FN16]. PAUL W. VAPNEK ET AL., CAL. PRAC. GUIDE: PROF'L RESP. § 6:93-94 (“Performing Services “diligently” may require certain resources and capabilities beyond legal knowledge and skill .... Lawyers cannot ignore technological advancements such as computerized legal research and computer-accessible libraries.”).


[FN18]. Id. at R. 1.1 cmt. 6 (emphasis added).


[FN20]. Frederic I. Lederer, High-Tech Trial Lawyers and the Court: Responsibilities, Problems, and Opportunities, 52 FED. LAW. 41, 44 (2005) (“Lawyers have a general professional ethical duty to provide competent representation. If that duty were to extend to competence in the use of courtroom technology--and this author would urge that it does--counsel would have an affirmative duty to learn how to be at least an adequately competent high-tech trial lawyer when attempting to use that technology.”).

[FN21]. MODEL RULES OF PROF'L CONDUCT R. 1.1 cmt. 5.

[FN22]. See LAWYER'S GUIDE, supra note 1, at 164 (“Lawyers should focus on what will happen if the equipment fails. Equipment failures are not usually a problem once the equipment is running .... Almost all failures occur on the first day the equipment is used, generally because someone failed to connect cabling properly.”).

[FN23]. See id. at 59, 164 (describing both transparencies and paper copies as possible backup arrangements for evidence camera failures and suggesting that “the prudent lawyer will have a spare bulb within reach” if she supplied the evidence camera herself).

[FN24]. See id. at 59.


[FN26]. Id.


[FN29] MODEL RULES OF PROF'L CONDUCT PMBL. cmt. 9 (2010).

[FN30] Lynn A. Epstein, The Technology Challenge: Lawyers have Finally Entered the Race But Will Ethical Hur- 

[FN31] Lederer, supra note 4, at 833.


[FN36] Id.

[FN37] LAWYER'S GUIDE, supra note 1, at 53.


[FN39] Cf. DALE M. CENDALI ET AL., PRACTISING LAW INST., POTENTIAL ETHICAL PITFALL IN ELECTRONIC DISCOVERY 109 (2007) (explaining that lawyers should apply the well-established ethical rules to the area of e-discovery, for which there isn't explicit ethical guidance, “as parties who are prepared and take reasonable steps to comply with their [ethical] obligations will be in a better position to defend their efforts” with regard to e-data than parties who fail to do so).