VIRTUAL REALITY, AUGMENTED REALITY, AND ARTIFICIAL INTELLIGENCE IN A REAL LAW FIRM

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Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI) are more accessible than ever. Their increasing commercial viability will fuel that trend into the foreseeable future. Clients, courts, businesses, opposing counsel, and the rest of the world are embracing both the benefits and the detriments of these technologies. Like it or not, lawyers and law firms need to understand them.

But what are VR, AR, and AI, other than LinkedIn buzzwords, and how should law firms use them? The short answer: they are tools. And unless one employs them to make the firm's life easier, they are just shiny objects that tend toward distraction, at best, and censure for the lazy, at worst.

These tools, though, can increase a firm's efficiency, productivity, and accuracy by orders of magnitude. Firms can advise their clients better, assist them more quickly, or even provide services previously unavailable or financially unfeasible.

Let's take a basic look at these three emerging trends and see what they are, how they are currently used, and what pitfalls we may need to watch out for.

VIRTUAL REALITY

Virtual Reality, according to *The WIRED Guide to Virtual Reality* is, "a technology by which computer-aided stimuli create the immersive illusion of being somewhere else…"[1] Frankly, that is about as good a definition as anything else. These immersive experiences can come in the form of special rooms with large screens (i.e., flight simulators), or the more common head-mounted displays of VR headsets.[2] They can incorporate audio stimuli, body and eye movement tracking, and even haptic feedback.[3] Some of the more advanced VR gaming systems even use a treadmill to simulate walking or running in the virtual world.[4]

The key factor, however, is the illusion of being somewhere else, no matter the depth of the experience. VR attempts to take a user to another location altogether. It can be used in evidentiary proceedings to provide a reasonable representation of actions, locations, or specific scenarios. Or it can be a place where clients meet with your firm, avatar-face to avatar-face.

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[1] Rubin, P., & Grey, J. (2020b, March 8). What is Virtual Reality (VR)? The Complete WIRED Guide. WIRED. https://www.wired.com/story/wired-guide-to-virtual-reality/.

[2] Wikipedia contributors. (2001, October 3). *Virtual reality*. Wikipedia. https://en.wikipedia.org/wiki/Virtual_reality.

[3] Id.

[4] Fisher, T. (2021, February 28). What is virtual reality? Lifewire. https://www.lifewire.com/virtual-reality-vr-definition-4155090.

AUGMENTED REALITY

Augmented Reality, on the other hand, is not immersive. It is additive or destructive, depending on the goals. It combines real-world and computer-generated content to enhance a user's perception of the physical space around them.[5] Instead of creating a virtual environment out of whole cloth, AR systems must map and track a physical environment while simultaneously displaying and tracking a companion virtual environment. It is not enough to simply display something to a viewer (i.e., running pace, or other information from a smart watch). The virtual environment must be incorporated into the user's perception of the physical world (i.e., ghost pacer leading a runner through their route).

AR requires the ingestion of data that many people would consider personal or private. An app that shows a user what a specific couch would look like in their living room will need a lot of information about the user's house. Even a product as simple as a filter that places a bird on a user's shoulder will have to gather information about its subject.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence is the most complex of these three technologies. It is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.[6] AI use-cases and technologies vary from software that can defeat the world's best chess players[7] to predictive text in iMessages.[8] One can even use AI to create remarkable headshots with products like Fotor, and Aragon.ai. Mostly, though, AI is used for much less glamorous tasks like background noise reduction or detecting fraudulent transactions.

For now, at least, these tools need to be built for purpose. So-called Artificial General Intelligence (AGI) is still hypothetical.[9] Although ChatGPT seems to know everything, it most certainly does not. And when attorneys use AI tools for purposes beyond their capabilities, they can get into trouble.[10]

This is because, at its core, the output of Artificial Intelligence is simply based on probabilities. Which can be good or bad, depending on the purpose. If doctors use AI to flag items for review, it can increase efficacy. If courts use AI to determine potential for recidivism, it can magnify bias[11].

However, to get these probabilities to something even remotely helpful, AI tools need to process a fantastic amount of data. If a judge has only ruled twice on a particular issue, even a well-trained AI tool will be hard pressed to predict the outcome of a third case with any accuracy. On the other hand,

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[5] Wikipedia contributors. (2024, January 2). Augmented reality. Wikipedia. https://en.wikipedia.org/wiki/Augmented_reality

[6] Copeland, B. (2024, January 4). Artificial intelligence (AI) | Definition, Examples, Types, Applications, Companies, & Facts. Encyclopedia Britannica. https://www.britannica.com/technology/artificial-intelligence

[7] Wikipedia contributors. (2024a, January 1). Deep Blue versus Garry Kasparov. Wikipedia. https://en.wikipedia.org/wiki/Deep_Blue_versus_Garry_Kasparov

[8] Johnson, K. (2023, September 13). The iPhone 15 opts for intuitive AI, not generative AI. WIRED. https://www.wired.com/story/apple-iphone-15-opts-for-intuitive-ai-not-generative-ai/

[9] https://en.wikipedia.org/wiki/Artificial_general_intelligence

[10] Patrice, J., (2023, May 30). For the love of all that is holy, stop blaming ChatGPT for this bad brief. Above the Law. https://abovethelaw.com/2023/05/chatgpt-bad-lawyering/

[11] Fry, H. (2018). *Hello World: Being Human in the Age of Algorithms*. W.W Norton & Company, Inc.

with decades of feedback from ReCAPTCHA users, Google has trained AI to digitize millions of books and print articles.[12]

Even built-for-purpose AI has its problems, though, especially when users rely on it to make a specific decision. When outcomes are based on massive amounts of data and years of feedback), it is hard to articulate how the tool came to that decision. This can make it next to impossible to check its accuracy. As such, regulators increasingly focus on these so-called black boxes and a user's ability to explain why a tool came to a particular decision.[13]

Since AI models require unprecedented amounts of data, these tools are often trained on information protected by copyright. Commonly, they "create" output that looks remarkably similar to the products they are trained on. A Fair Use war is already being waged in the courts by writers, visual artists, musicians, stock photo providers, and other publishers against the likes of OpenAI and Meta.[14]

Users should know how the AI tool works, even if it's built-for-purpose. For lawyers and law firms, the specific danger is confidentiality and privilege. If a lawyer trains an AI tool on client data, they must confirm the data does not make its way into a third-party's hands. This includes information provided via a chatbot's prompt and any files the lawyer loads into the tool.

A law firm should not avoid AI outright, though. There are plenty of tasks that have built-for-purpose tools waiting to increase a firm's efficiency or accuracy. And, as firms look to direct the power of AI to their own data, the above concerns can be mitigated and avoided through careful consideration. Providers like NetDocuments and CoCounsel have already addressed these concerns with some of their tools. And the firm's IT department should be able to ask the right questions—provided they are considering the appropriate dangers.

IMPLEMENTING AR, VR, AND AI IN A FIRM

Ultimately, AR, VR, and AI are simply tools a law firm can use to assist their broader purpose of serving clients. It's easy to look at these technologies and create purposes for them in the office, which can easily create more work for the firm. As with all technology implementation, the challenge is using these tools to enhance existing processes. Remember, if your office doesn't need Virtual Reality, it would be ill-advised to buy headsets for all the associates. It may be fun, but it probably won't increase productivity, or lead to more billable hours.

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[12] O'Malley, J. (2018, January 12). Captcha if you can: how you've been training AI for years without realizing it. TechRadar. https://www.techradar.com/news/captcha-if-you-can-how-youve-been-training-ai-for-years-without-realising-it

[13] Consumer Financial Protection Bureau. (2022, May 26), *Adverse action notification requirements in connection with credit decisions based on complex algorithms.* https://files.consumerfinance.gov/f/documents/cfpb_2022-03_circular_2022-05.pdf

[14] Appel, G. (2023, April 11). Generative AI has an intellectual property problem. Harvard Business Review. https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem