Technology and Innovation:

What Does the Next 25 Years Hold for the LSBA and the Legal Profession?

Interviewed by David M. Stein and Pete (PJ) Kee, Sr.

Let's go back 25 years ago. In 1991, CompUSA starts selling desktops at retail, running Windows 3.0, at the time a blazingly fast i486 Intel chip, 50 MHz, that was the state-of-the-art at the time, at least for retail. The Internet first gets turned on at CERN (even though there was nothing on it yet). A practicing lawyer at the time likely looked upon a computer as a glorified typewriter. Obviously, over the past 25 years, there have been some incredible advances in the ways computers and similar technologies have gone from expensive novelties to being integrated into almost every aspect of our lives.

Jeffrey E. Richardson, a partner in the New Orleans office of Adam and Reese, L.L.P., and Ernie Svenson, a New Orleans commercial litigator and founder of Small-FirmBootcam.com, discussed what may be on the technological horizon within the next 25 years.

Richardson's practice areas include appellate and complex litigation. He also publishes iPhoneJD.com, the oldest and largest website for attorneys who use iPhones and iPads.

Ernie Svenson   **Jeffrey E. Richardson**

Svenson spent 20 years practicing in a big firm until he learned the secret of paperless lawyering, which led him to create a streamlined and satisfying solo law practice. Now, he helps other lawyers learn to automate key aspects of their practices — even ones whose tech skills are limited to sending and receiving emails.

Stein: Let's talk about where we see the Bar Association in the future, about 25 years from now. What sort of technological enhancements or innovations will practicing lawyers be able to use or have to deal with? What sort of advances in computing technologies do you think lawyers will see over the next 25 years?

Richardson: I think we're going to see personal computers become even more personal. When I think back to 25 years ago, I was just starting law school and I had a little handheld Sharp organizer that stored my contact phone numbers and other info. It was ridiculously clunky, but it was the idea of assisted technology helping as an extra brain so I didn't have to remember all these arcane details. Fast forward 25 years. We have the iPhones in our pockets, which are far more powerful than the computers we were using in the past, and they can help us in so many ways. Now, I just say, "Siri, what is the phone number of Ernie Svenson" and it will tell me

without me having to reach in my pocket. I think we are going to see more of that in the future. Technology will be smart enough, using artificial intelligence, to second guess the information we'll likely need at any particular time. I don't know if the user interface will be a pair of glasses like the Google glass (hopefully, it will be far less geeky) or maybe something in your ear, but you'll walk into a room and your assisted device — the iPhone 26 — will say "that gentlemen over there, that's John Smith, remember you met him at the party 12 years ago." You won't have to memorize things, and your brain can use the assisted information more successfully. Maybe this is more of wish than a prediction, but it's certainly what I hope we will see as technology becomes more personal. Sort of like the assistant that's with you all the time.

Svenson: We're definitely going to see more automation in areas lawyers are starting now to grapple with — document automation, assembling documents based on conditions, and using the artificial intelligence.

Another area where you're going to see it is in litigation. Figuring out which documents are important, zeroing in on those documents and quickly sifting through them intelligently using predictive coding and other methods that get bandied about in the e-discovery world, that's coming. It's going to get better.

Kee: How do you see this technology changing the dynamic of a law firm? Assistants, paralegals, number of associates, how do you think that changes?

Richardson: We've seen that over the past 25 years. When I started practicing law, it was more of a one-to-one ratio between support staff and attorneys. Today, with attorneys knowing how to type and creating their own documents and things being even more automated, you can get by with multiple attorneys with one staff member. Many attorneys, especially solos and small firms, can probably get by without a staff member. When you're not mailing things anymore, you're emailing them. You don't have to worry about making photocopies because

the PDF is there and everybody can share the PDF. I think that's going to continue more in the future. There's going to be less of a need for support staff and perhaps a greater role, or a different role, for paralegals.

Kee: From a client perspective, are you getting questions about your or your firm's technology capabilities and has that affected how you staff matters?

Svenson: When I left the big firm, I went out as a solo. Clients and prospective clients would ask how I would handle this work without the big firm's resources. By then, I had already begun the transition from the reliance on support staff. When I started practicing in the big firm, I learned how to practice law, at least the case management side of it, from paralegals because they managed the documents. They were at ground level and understood the work flow and so I learned from them. I learned how to use the database and filter things to get my witness exhibit list or to get my witness questionnaire. All the things needed to create a pretrial order became a checklist. When you're using PDFs, you're not managing paper anymore, but you're managing digital documents, so I was able to practice law in the same way for a lot of the cases I worked on. The clients were happy because the work was done efficiently, reliably and professionally with me directing everything using software.

Richardson: You can see that we're in that transition period because, already in federal court, here in 2016, everything is e-filed. State courts are slowly moving that way. You can e-file in some state courts but not in others. It's a little haphazard in Louisiana because different courts have different systems. In the federal system, once you learn one, you learn them all. Already, the Code of Civil Procedure recognizes that you can agree through consent with your opposing counsel to serve via email instead of paper. We will look back years from now and realize these were the building blocks for this new type of litigation practice that the technology allows us to have.

Stein: Let's discuss hardware changes that might be coming. Do you think that, 25 years from now, there will be such a thing as a desktop computer?

Richardson: I think so. Law has been document-centric for a very long period of time, and I think it's going to continue to be that way for the next 100 years — certainly the next 25 years. As long as you have documents that are being read, you're going to have to create those documents with something that looks like a typewriter.

In an office environment, no one wants to be sitting next to people who are dictating briefs. I still think the typewriter keyboard works well, whether it's a desktop computer, a laptop computer, or something similar to an iPad with an external keyboard. I do think that lawyers will continue to type briefs and, from that standpoint, there will be a place for something like a computer — for lawyers. In some other fields, we may move away from that. But the law has always been about the words, and I think it's going to stay that way for a while.

Stein: Even in the past eight years, we've seen dramatic advances with smart phones and tablets. What sort of advances do you think are coming in the next 25 years to those types of devices? Do you think they could get any more close to paper thin or bendable or foldable displays?

Svenson: For sure. There are materials that are going to be developed to allow that to happen. Twenty-five years from now, I expect the computing powers to get faster. It's going to be more mobile. We are going to have desktop computers because it's just easier to work in a particular place that's dedicated to the complex work we do as lawyers. You're going to have your main device there, but it will be totally possible, in 25 years, that your computer that you're working with at your desk would be some kind of device that you carry around with you, so that all the important data you need is there and secure. You take it wherever you go, and you plug it in wherever you need it to work. But smart phones and mobile devices are obviously going to be huge. They already are.

Richardson: One interesting twist in all of this is something that people now call the internet of things — where so many devices, whether it be a Bluetooth speaker or other types of devices, are connected to the networks so they can all talk to each other. They can all do things. Already in my house, I have devices installed that I can just say to my phone, "set the lights in my TV room to 20 percent," and it will automatically do that without me actually doing it. We're at the early stages of this. I don't know how necessary it is for my toaster to be on the internet, but, as more and more devices become part of the internet or some sort of network, everything will be talking to each other. The lines between computers and objects will be blurred because they'll all talk to each other. They'll be able to interact with each other and use the information from each other.

Stein: It sounds like that might actually

be a nightmare depending on your perspective for electronic discovery. Right now, you ask, "Where were you on the night of December 12 at 8 p.m.? Let me see your iPhone history." In 25 years, with the internet of things, you may be asking, "Let me see what your toaster was doing" or "Let me see what your refrigerator says." Do you see that exponentially adding to discovery?

Richardson: We are watching this debate in real time right now with the ongoing issues between the FBI and Apple. Is it appropriate for the federal government to compel a company to create what many are calling back doors in devices? For now, the government is saying it is to prevent terrorism or future incidents by accessing the phone for more communications. But if the government is asking for that, it could very easily ask companies, "That device tracks you all the time and we'd like to know where everybody we're worried about is" or "All of those devices have microphones on them, and it would be really helpful for our investigations if we could listen to everybody." Movies like *Minority Report* that talked about pre-crime and predicting crime in the future sound very futuristic, but the technology that we have is actually not that far away. Issues like privacy versus security are going to become even more important in the future. As lawyers, protecting our clients through the laws, we're going to be at the forefront of that. Much like way back when the lawyers would be defending the Fourth Amendment of what places were appropriately private that you would need to have a search warrant to enter, what places were public, if you were in a car, is it a private place, is it a public place — those were the debates that were decided by the courts 50 and 25 years ago. Now, we're going to be seeing far more interesting debates on difficult issues because of technology.

Stein: We've come a long way from floppy disks and tapes. The next big thing in storage currently appears to be cloud-based. Do you believe there are ethical issues with storing certain information in the cloud?

Svenson: Any time you're storing information that relates to your clients' matters, there will be ethical issues. That's true for paper and equally true if it's stored in the cloud. Often when discussing this topic, we deal with the fear mongering first — "Oh my, something horrible could happen." Yes, something could happen horribly everywhere. The questions to consider are what's likely to occur and what steps can be taken to prevent those things from becoming problems. Since it will make sense for lawyers to use the cloud to some extent,

what are reasonable precautions to prevent client data from being accessed by hackers or people who shouldn't have access to it? Number one is password protection. We should have strong passwords. People should be taught how to manage their passwords and to use password managers. If you're doing that correctly, you're going to have less risk with the cloud. I get upset when people start talking about the problems with the cloud without talking about the basic problem which is . . . people use crummy passwords. Every year there's a list showing the top 15 most commonly used passwords. Every hacker knows those passwords, and those are the first ones they try. If people are using those kinds of passwords, then they are going to have trouble in the cloud. And they're going to have ethics issues.

Richardson: What makes it tough is the question of what is reasonable. If you asked attorneys if it is reasonable to keep a client's documents in a filing cabinet in their offices, everyone would say yes. But if a thief wanted to pick your lock, get into your office and open up the filing cabinet, they could take whatever they want. None of us are under the illusion that keeping things in our office makes it impossible for bad guys to access our information. Yet we as a profession have decided that that's reasonable. You don't have to have Fort Knox inside of your law office. You just need to have reasonable precautions on locks and security. Those same issues that we've considered in the analog world are now being applied to the digital world. Is it reasonable to keep client-sensitive documents on a cloud-based service that theoretically could be accessed? Unlike your office where you're going to see that somebody backed a truck into your front door and broke in, there may not be any signs that a hacker around the world has broken into your Dropbox folder and has taken your files. On the one hand, you have the opportunity to use encryption on the digital files whereas you can't encrypt the paper documents in your office. There are pros and cons on both sides. There is no question that our practices are moving towards cloud-based solutions, for good reasons, I believe, but we're going to have to be careful about privacy and security. As lawyers, we have a duty toward our clients to be reasonable and to protect their confidences.

Stein: Let's discuss software. Over the past 25 years, we used 1991 as a reference for how technological advances have revolutionized how lawyers work. Now a practicing lawyer need never pick up a physical book with the availability of WestlawNext, Lexis and similar services. But what happens when, instead of assisting the lawyer in his/her work, the technology starts performing some of the work that used to be done by the lawyer? Let's talk about predictive coding. Briefly, this technology allows a user, such as a tech-savvy lawyer or paralegal, to train a system to recognize "good documents" from "bad documents," "relevant" versus "irrelevant," "responsive" to a certain request versus "non-responsive" and, in some cases, "privileged" versus "non-privileged." Once the lawyer trains the system with a sample set of review documents, the system can then, nearly instantaneously or in a very short period of time, review millions of documents and identify the ones that meet that given criteria. In the past, where a lawyer or lawyers might have spent significant time and money reviewing each page of an enormous document set, now the majority of the set can be reviewed by predictive coding algorithm and produced without a lawyer laying eyes on all the documents. This technology appears to be here to stay with at least one court ordering parties to use it to cut down on discovery costs. What ethical issues do think technology like predictive coding will raise as it gains steam?

Svenson: First of all, the word "review" means to be analyzed when we start talking about predictive coding because you're not necessarily reviewing the documents but filtering them. Then at that point, the decision must be made if the documents will be looked at by a human being. That's where the strain is going to come into play because, as lawyers, we want to be as close to perfect as we can. The idea of lawyers suddenly transitioning to the world where we say, "I'm not going to review that and it's probably good enough," that's not in our DNA. But, in the future, the amount of data that can be conceivably relevant in a case is going to be so huge because of all this internet of things that we've been talking about — all this data is automatically being collected — there has to be a way to sift through it and computers are going to help us do that. Of course, there are ethics issues embedded in all of this. There's really more logistics questions because, at some point, we're going to have to make some decisions about doing things differently because it's not humanly possible to review all of that data in a lot of cases.

Richardson: I think the ethical responsibilities come into the attorney understanding the issues so that he/she can explain them to the client and make the appropriate decisions of where to draw the line. We're headed to the point where, unlike in the old days where there may have been 100 letters to review, there's going to be 10,000 emails or text messages or recorded voice conversations and it's just going to be ridiculous in many cases to have a bunch of associates sitting in a room going through all of that. You will need to filter and you will need to use predictive coding. Although it presents the risks of missing something, it also gives you the opportunity to catch things that humans late at night may fail to see. So I think the pros and cons go both ways. The key is going to be the lawyer understanding what the risks are so that the lawyer and the client can make the appropriate decisions for themselves. Then when you need to explain to a court and to opposing parties what you've done, you can do so in a rational and intelligent way.

Svenson: Yes, lawyers need to understand how that information is gathered in the first place. One of the things we tend to assume when we start talking about predictive coding is the computer is perfect at figuring out just even simple words. I've heard presentations by people like Craig Paul, who is an expert in this area, talk about how in certain key cases the company failed to find its own documents because they didn't even think about how people within the company were using a different name for something that was their own product. You have to think about what kind of words you are looking for, how reliably you can find documents, what assumptions you are making about whether the documents will contain those words, whether those words will be spelled correctly, etc. It's not enough for lawyers to just search around and see what they can find. They will need to understand the actual technological limitations and framework for how this stuff is done. It's not something that lawyers want to do because they didn't go to law school to study technology, but it's a fact of life and I think it's going to be an important part of what lawyers do.

Stein: Building on that, with a predictive coding system, training becomes very important. Do you believe the training should be done by someone who is both an expert lawyer and knowledgeable about the system because that's the person who has to teach the system what is good, what is bad?

Svenson: There are a lot of components that go into good training . . . psychological elements, cognitive learning elements. Lawyers who are using this system will need to understand how the data gets collected technologically because that's going to determine what kind of documents they get and the reliability of the documents.

Kee: What advice do you have for a lawyer working in this backdrop who may not be

as practiced and well-versed in this as you?

Richardson: This is not a new problem. Already, lawyers have to deal with doctors explaining medical conditions of people and the lawyer may not understand that. But that one lawyer at your firm who was a former doctor or nurse or knows the medicine, that's going to be a valuable part of the team. I think this is the same thing. If you're not the person who understands the technology, then you will need someone on your team who does so when you need to explain it to the court you can do so. As technology becomes more and more a part of practicing the law, I think the bar of what each lawyer needs to know is going to rise every year.

Stein: Do you think it will ever be the norm to use something like predictive coding, assuming that the data set was big enough, to do a privilege review?

Svenson: Yes, I do because it's an algorithm. There's a thought process. Anything that lawyers do involve some kind of algorithm, whether they're conscious of it or not. We go through a logical sequence and that's what computers do. Software is just algorithms mapped out by really smart people who are anticipating what conditions are likely to occur. So, yes, there will be predictive coding and it will be commonplace because, and this is my view, it's going to have to happen. You won't be able to review all of this data that we're now having to deal with and the amount of data is growing exponentially. You're going to have to have some system for filtering. I think it's inevitable.

Stein: Over the next 25 years, do you see any other technological advances on the horizon that could change the way we practice law? I know it's a broad question but, for instance, do you see more products like Legal Zoom that try to chip away at what used to be exclusively a function of a lawyer and automate it and package it and give it to the consumer?

Richardson: Technology will give us assistance in various different ways. One of things that technology does really well is, when you have a lot of information, it can help make intelligent decisions about that information because it can quickly go through it and give you output. We talked about that in the context of discovery production with predictive coding. But it is just as useful in other areas. I can see technology that can look at all of the information that you have on a case and help you put together timelines or make connections that you might miss because we're just talking

about so much data and so much information. This will be an aid to attorneys. Already when you're using Westlaw, you have your main search results, and then on the side it has some things that may be helpful to you based upon Westlaw giving an interpretation of what you're looking at. Not that it's going to be making the analysis that the lawyers would need to do, but it could help to bubble some things up to the surface that you may not necessarily see yourself.

Kee: How has this affected trial or hearing presentations?

Svenson: I think the use of visuals in explaining and in persuading is something we are not tapping as much as we should. If you want to persuade somebody, you have to explain the underpinnings of whatever it is you're trying to persuade people to understand. So you have to explain first. There's nothing better at explaining quickly and efficiently and in a memorable way than incorporating visuals. This is not something new. What's new is that lawyers need to learn how to do that and, to some extent, they need to be given permission to use it in different ways. That's something that maybe has to be addressed as a procedural requirement, but there's no question that using visuals to explain helps people remember and understand.

Richardson: I don't think we are far away from a time period where some of the wearable technology could have an impact on trials as well. Already, you're starting to see more lawyers wear an Apple watch or something like that and have somebody sitting in the back of the courtroom feeding information or alerting them to something they may have missed. We're already at that point where the technology that we're wearing can assist us in different ways and I think that's going to be happening more and more in the future. I'm not saying we need to become Robocop, but I do think we're going to become smarter. Already today your opponent mentions a case that he "forgot" to give you until the day of trial and we have the technology with laptops, iPhones and iPads to quickly shepardize or key cite the case and decide why that case is inapplicable right there in the courtroom. Years ago, you didn't have the ability to research while you were approaching the bench and I think that technology has some opportunities to assist lawyers in trials in those ways as well.

Kee: We've talked about practicing lawyers, but how do you see this affecting law students? Is this something you're asking

about in interviews?

Richardson: When I interview new lawyers, there are the things that everyone wants. You want them to be smart and you want them to have a certain degree of charisma and the ability to articulate their thoughts well. But it's always nice when they bring something else to the table. For some people, it may be their scientific background. They used to be an engineer or they have something else that they bring to the table that makes them a unique member of your law firm. I think that there's certainly an understanding that every new lawyer nowadays needs to know their way around technology a heck of a lot better than the older lawyers at the firm do. But because technology is becoming such an important part of the practice of law and a part of our clients lives as well, those lawyers who excel in technology have more to bring to the table in hiring decisions.

Svenson: I pay a lot of attention to the person's mindset for finding information. I have kids who are now adults and I saw that they and their peers were more inclined to look up information using their smart phone devices. Part of it is multitasking, but putting aside the attention-dividing deficits of multitasking. People who are adept and have a mindset of finding information are running circles around the people who are waiting for the mother bird to bring the worm home to them. That's the way I look at. That's the digital divide. I don't think the digital divide is as much about how much money you have, but about your resourcefulness and your curiosity and acting on that curiosity. We've never lived in a world where there has been more information instantaneously available to you in your pocket, at your fingertips, then we are today and that's just where we're going to be for the foreseeable future.

David M. Stein is a partner in the New Orleans office of Adams and Reese, L.L.P. Pete (PJ) Kee, Sr. is an associate in the New Orleans office of Jones Walker LLP. Both are members of the 2015-16 Leadership LSBA Class. (david.stein@arlaw.com; Ste. 4500, 701 Poydras St., New Orleans, LA 70139) (pkee@joneswalker.com; 201 St. Charles Ave., 47th Flr., New Orleans, LA 70130)