Question: What technology competencies do librarians and legal information professionals need to assist their organizations as they grapple with issues such as data analytics, artificial intelligence, etc.?

While much discussion of technology competency is platform (e.g., Microsoft Word or Excel), system type (e.g., e-discovery and social media), or topic (e.g., security and artificial intelligence) specific, I think that the overarching competency that can lead to success in all of the above is inquisitiveness, or having a questioning mind. To me, that breaks down into three segments.

First, it means thinking consciously about what you are doing and what the technology you are using is doing behind the screen. A lot of technology interaction in society is done in a rote manner (e.g., throwing search terms into the big search box, posting pictures to Instagram, or liking on Facebook), but legal technology requires engagement. To be a fully competent lawyer or librarian you need to ask the hows, whys, and whats: How can you use this platform more efficiently? Why is the algorithm returning these results? What are the benefits and risks inherent in the system (with a nod to Monty Python)? Conscious engagement allows you...
to always wonder if there is an easier or better way, and to ward off both the complacency of assuming our technology will work just fine and the bias of putting too much trust in computerized systems.

Second, it means being both systematic and flexible. Being systematic means that you understand the breadth (why this tool, what does it do/what are the expectations, and how does it work?) of not only the platforms, tools, and technological concepts that you use in your work, but also those that your lawyers/clients/patrons use as well. Being systematic is also about fully immersing yourself in the technology you use in your work, so you know the shortcuts, tricks, and affordances that allow you to use the system more effectively and efficiently. Flexibility is important because things change—nothing more so than technology. There is always a new technology or new version of existing technology that needs to be learned (just because I preferred the old dot commands in Lexis doesn’t mean I have the software loaded on my computer). Technology competence is an iterative process, it moves forward into the future and you have to be comfortable with questioning it every step of the way.

Finally, it means asking for or finding help when you need it. There is always going to be someone who knows more than you. So, ask that question or find the appropriate help tools/bot; otherwise, you are just spinning your wheels and may not learn the best way to do something.

To stay on the cutting edge, infopros need to understand the basics of artificial intelligence (AI) and be conversant in the various branches of AI—know how these branches differ and the impact the different branches of AI have on information products. When a vendor says “This tool uses AI,” a skilled infopro should be able to ask probing questions about the AI technology. Does the tool use natural language processing or machine learning or is it really an expert system? In any case, these differences impact how the technology works, and it is the infopro’s job to understand the underlying technology in order to properly evaluate it and utilize it within their business.

As for data, infopros have long been expected to understand the underlying data sources in any information product. Now, infopros should have the ability—or have the leadership vision—to use AI-driven data extraction tools, manipulate data in spreadsheets, and visually display data in a business intelligence tool such as Tableau, Microsoft’s Power BI, or Qlik. Our finance department colleagues have traditionally held the organizational reins when it comes to creating slick dashboards and using other data reporting tools, but that is no longer true as AI tools evolve.

Concepts long buried in language and in hundreds of thousands of documents will be the territory of infopros when they use these new, powerful AI tools and transform data into actionable intelligence.

Lastly, let’s not forget my favorite infopro competency—the skill of teaching and educating others about information and information technologies. I regularly hear myself saying “remember, you don’t have to build one of these.” Above all, demystifying and getting lawyers and organizational leaders comfortable with AI and the power of data should be an infopro’s key objective.