

5 Tips to Help Info Pros & Data Scientists Work Better Together



Information management today is a dynamic field where the intersection of two crucial roles—information professionals and data scientists—holds the promise of unlocking incredible knowledge, fostering innovation, and driving unparalleled efficiency within organizations.

Mary Ellen Bates, the principal of Bates Information Services Inc., has more than four decades of experience working within the information industry and providing business insights to strategic decision makers in the space. Mary Ellen has witnessed first-hand the profound impact and transformative potential that occurs when information professionals and data scientists are able to collaborate effectively.

In this ebook, Mary Ellen provides five tips that can help information professionals collaborate more effectively with data scientists. From high-level insights to everyday advice, the tips that follow will make it easier for info pros to adapt and innovate within their field while building stronger relationships with data scientists.





Mary Ellen Bates is the principal of Bates Information Services Inc., providing business insights to strategic decision makers and consulting services to the information industry. Mary Ellen worked for over a decade

in corporate and government information centers before launching her business in 1991. She received her MLIS from the University of California Berkeley and is based near Boulder, Colorado.

Elevate and share your capabilities

Make sure you elevate your capabilities in your organization's core domain. Watch for new resources and tools and share what you learn with the data scientists. Look for opportunities to bring your expertise to the forefront and highlight your familiarity with external information sources and licensing issues.

Question from an Info Pro

What's an effective way to communicate within my organization the value I bring as an information professional?

When communicating with those who may not be familiar with your role, I recommend finding a way to summarize a recent success that made an impact within your organization in just a few sentences, such as: "I was brought in on a recent project where I was able to identify a dataset that was much more comprehensive and higher quality than the one already being used, and we were able to use that same dataset in three other projects, as well."

Not only is the above example short, but it also makes mention of the impact of what was accomplished on the data scientist(s) working on the project. It's also powerful if you can talk about things that data scientists may not consider in the first place, like risk reduction or successful negotiating that required the expertise of an info pro.

Cementing Your Value Within Your Organization

I met an information professional working at a science advocacy nonprofit who serves effectively as a gatekeeper due to her success at relationship building over time.

As she described it to me, "I had worked with one director on several projects and we had built a strong relationship, so now she makes sure that all her scientists contact me for help at the beginning of every project. I have become part of their workflow, and they know to ask me for literature searches or external data sources.

And, looking more broadly, I like to insert myself in the project planning and budgeting process. Before the start of each fiscal year, I send out a reminder to the project budget managers, reminding them of the resources we have available and asking how that fits with their next year's portfolio."

She emphasized the need to "institutionalize our successes so that people understand the importance of bringing the library into their projects at the outset. The data scientists get better outcomes and less stress they're happier people—because the library handles the data acquisition and management and we see the continuum of data needs within the institution."

Communicate the value of information science

Often the data scientists are new to the organization sometimes, they are right out of university—and they may not be aware of the role you can play. Your messaging around the value of information science and what information scientists can bring to the table is critical.

Bringing Value to Projects from the Jump

I recently spoke with an information scientist leading a team of info pros at an international pharmaceutical firm. On the topic of working with data scientists in his firm, he noted that they "respect us as the experts in external data and information just as we respect them as the experts in their domain. Whenever they begin to map out a project, they bring an information scientist from our team in to ask us what kinds of resources we could provide and to spell out their information requirements. I think it is critical that we are always offered a seat at the table; we don't have to fight to be brought into a project at the beginning."



Reduce competitiveness and build trust

Be open about the fact that you're not a data scientist, and you are not in competition with them. Sometimes you will be brought into projects in areas with which you are not familiar and much of the discussion at team meetings might go completely above you. But that's OK—by building relationships around openness, trust, and respect, everyone appreciates the information scientists for the expertise they bring to the table.



Anticipating the Needs of Data Scientists

"Data scientists love good, structured data. Information people know where to get that data." That's how an information professional at a large pharmaceutical company described what drives the collaboration between info pros and data scientists at his organization. He sees himself as an "information tour guide," helping connect scientists to the right data sources for each project and arranging for text and data mining licenses to enable them to glean intelligence from the data.

There are many ways you can act as an 'information tour guide,' including reaching out and providing support to entry-level data scientists in your organization and gaining an understanding of the basic concepts and language of data science to help introduce colleagues to existing systems and approaches that may help them.

Even more importantly, you can share what you're doing behind the scenes by evaluating output and identifying ways to bring more structure to unstructured data.

As this info pro described it, "we work with the data scientists on entity extraction, making sure that it is normalized according to our ontologies. The scientists assume that this works automatically; they often don't see that we are evaluating the quality of the search results.... We think about the real-world problems that can pop up when we normalize the data."

Acknowledge strengths, yours and theirs

Keep in mind that, while information scientists and data scientists both live in a world of data, the data scientists have a far deeper set of technical capabilities. They understand how to interrogate data, how to manipulate and apply machine learning to the data; they have a technical level of expertise that information professionals don't have. On the other hand, they may not fully appreciate your expertise in identifying resources, negotiating contracts, or working collaboratively to leverage the value of content.



The Value of a Different Perspective

The info pro I met at the science advocacy nonprofit observed that some of the biggest impacts she has had in her role have been around contract and licensing negotiations: "We have had times when a team might think that they have identified the data that they want, and then we start the negotiation and discover that it's too expensive, or the publisher can't offer the right kind of licensing, or they couldn't do what they thought they could do with the data. At that point, the team may decide to modify the project; I see that as a success, in that we're not spending money on something we would not be able to use." Regarding the differences between info pros and data scientists, her example involved the US Census Bureau: "Librarians understand census data as an entity—we know how it is created, how it's maintained, what kind of structure it has, what its limitations are, where the ambiguities are. Data scientists, on the other hand, are more focused on how they can transform the data in whatever tool they are using rather than about whether the data needs to be made consistent or whether the structure allows for a particular type of analysis. We have to remember that we look at information from a different, broader perspective and can see issues that the data scientists might not anticipate."

Stay bleeding edge

Embrace change and take advantage of the opportunities you see. You either sit back and don't innovate and become irrelevant, or you embrace the change and create your own opportunities. You need to constantly reassess what it is you deliver as an information scientist.

Question from an Info Pro

How can I balance being inquisitive and open about new resources like AI chat services in a workshop while not promoting them if I have concerns about their credibility?

The most effective workshop to me is the one in which an info pro takes typical requests from users, or the kinds of queries users might be trying in an AI chat service or other tool, and uses them in a comparison of these services and tools. For example, entering an industry-specific query into an AI chat service so that you can point to the low-quality information received (including possibly no sources cited). Then, you can take the same query over to a more specialized AI tool to show those in your workshop the significantly better result you receive from it.

Additionally, it can be helpful to emphasize in your workshop the ways in which tools like AI chat services can be effectively utilized. For example, you could showcase how a particular AI chat service is great for summarizing texts you provide it, or how it can generate a solid first draft of a business email.

By framing the conversation in this way, you're not endorsing a bad tool, but instead placing it in the context of other tools that are more reliable than it is. This helps data scientists gain a sense of the full scope of services and tools available to them while also showing them that info pros can evaluate tools in the same way that we can evaluate datasets to help them find the best one for their needs.

Things Change Fast, But Info Pros Can Handle It

The team-leading information scientist at the international pharmaceutical firm I mentioned earlier also shared with me that he has suddenly found himself having to manage several AI-focused projects. He described his approach to introducing his team to the new type of project:

"I brought my team together and asked them to list on Post-It notes all the skills that they bring to the table as information scientists. What they didn't know was that, in another room, I had already created a wall with Post-It notes listing all the skills I knew would be needed to run the AI project.

I brought the team into the room and asked them to see how much overlap there was between the skills they have and the skills the project required. We all decided to embrace the change, have some fun and use our strong information science skill sets in these new areas."

Keep Exploring

For more insights on how information professionals can thrive in the evolving information management space and work successfully with data scientists, you can check out a recording of our webcast with Mary Ellen Bates, "<u>Successful Info Pros in a Data-Driven Enterprise</u>."



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