Adventures in Librarianship: Build It and they will … maybe …

Ned Kraft
Ralph J. Bunche Library, kraftno@state.gov
I knew what I was getting myself into. It wasn’t a secret. Full disclosure. But when I actually started working in an acquisitions office that had just recently abandoned its “order cards” in favor of managing their purchase records on ... spreadsheets, well, my heart sank a few inches. “Always make five copies of every order: one for the vendor file, one as a receiving copy, one for the chron file, one to send to the vendor, and the last one goes to Mrs. Hendricks on the fourth floor. We don’t know what she does with them.” I followed my trainer around in a sort of daze. I may have been trembling a little. Filing? How many copies?

“Then, all the purchase orders get logged in over here. That’s a twenty-seven digit number, where the fourth and fifth characters are the fiscal year; the fourteenth through seventeenth characters are the library’s founding date; the final three characters are sequential, preceded by your birth date; and the rest of the characters, we don’t know what they mean.” Are we doing the math by hand? Couldn’t we hire elves to come in at night and take care of all this?

“But that’s only for standard orders. If it’s a blanket order, we log those in across the street using a seven-character alphanumeric. The final three characters are sequential. For the first four, the ‘P’ stands for purchase, the ‘A’ stands for allocation, the ‘I’ stands for invoice, and the ‘N’ is for nomenclature. Make sure you type a hyphen between the fourth and fifth.” Did she say type? Like, on paper?

Now I don’t want to paint too dark a picture. My new office had begun using credit cards for purchasing before that had become common practice; they were taking advantage of some fairly fancy contractual arrangements for the bulk of their purchasing; and they had, using their three-by-five cards and spreadsheets and folders and files, managed to keep up with a heavy and complicated purchasing workload. But the age of automation had certainly slipped by unnoticed.

So I got to work trying to figure out the proper files for this and that, all the while dreaming of automation. There were a few serious systems roadblocks to automating the library’s acquisitions operations, and there were some very tricky procedural necessities that I couldn’t imagine any “off-the-shelf” system accommodating. So, grabbing a few minutes here and there, I began playing with the idea of building a system myself. I had a great database design class in my MLS program (Thank you Dr. Old!), and I’d built a few fairly simple databases using one of the commercial software packages. But this would be a real stretch. All that accounting and fund tracking! Even in the early, dreamy stage I was picturing at least nine tables and I knew the list would grow.

I stole my moments of work, shrank my screen whenever someone approached, and kept it all a secret for a while. Why announce it when I don’t know that I’m even capable? Why scare the library assistants who are entrenched in the paper files when I don’t know that I’ll be able to offer a better way? But slowly I mapped out the tables, drew the relationships, laid out the forms, scripted my first few crude macros and began to realize that it was possible, that I could make it work.

Building a database feels a bit like architecture. You must know the work that will go on inside, know it well, know it with all its quirks. You must improve that work process wherever possible by knowing how other systems work, taking the best from every example you’ve seen. You want your construction to be beautiful, inviting, and simple to the eye yet with all the needed complexities built behind the walls. You must know the local codes and abide by them.

When finally I couldn’t keep it a secret any longer and mentioned to another librarian in the office that I was building an acquisitions system, I’m not sure she believed me. But she was very polite. She smiled and said, “that’s quite interesting.” Then I knew that selling the system might be just as difficult as building it.

Facing change, especially radical change, is, I think, difficult for everyone: to jump from comfort into the unknown. But most reasonable people know that particularly in business, change is inevitable. Some get over the initial fear very quickly. Others take a while. Some accept change with just a doubtful shake of the head. Others rail against it with all their energy. Some jump on the opportunity of change to rebuild from the ground up. Some just want to get it over with. And many of us will go through all of those reactions and more.

After I announced, and rumor spread, came the more difficult job of persuasion. I had figured out how to prorate discounts and shipping charges to line items, but how do I convince the staff that the world would not be coming to an end?

Well, it’s patience, clear explanations, listening, drawing people into the process, giving them familiar-looking reports, and recognizing that everyone, on some level, is afraid of change. We had a few emotional moments, we had many hours of challenging questions, but just before implementation even the stubborn staff members were becoming enthusiastic.

The most convincing, and perhaps the most practical, argument for this particular system was that automation will come eventually, so if we build our own system, we maintain control over the ordering process and can make changes whenever we want to. Screen formats can be adjusted in minutes. Reports can be modified in an hour or two. The people making decisions about the system are the people sitting next to you. That, however, is now my greatest fear. We won’t have a large company out there to call when there are problems. Only me. We won’t have anyone to blame if something disastrous happens. Only me. Do I really want to be the systems guy? Will I have to wear a beeper? The house, the database, is built, and we’ve recently moved in. So far, ordering looks good, as does claiming, account totals, receiving, and invoicing. Most of the summary reports are yet to be tested with real data, and I can’t be sure how the system will behave after we’ve accumulated, say, a year’s worth of records. Keep your fingers crossed for me.