



## Profiles

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### Profile of Janetta Waterhouse, Vision Speaker for the 35<sup>th</sup> Annual NASIG Conference

Christian Burris, Profiles Editor

Janetta Waterhouse is the Vision Speaker for the 35th Annual NASIG Conference. She is the Director of Technical Services and Library Systems at the University at Albany. Ms. Waterhouse earned her MLIS at the University of Iowa and is completing a second master's degree in IT Management and Leadership from the University of Illinois Springfield. She also holds a graduate certificate in Human Resource Management and a Project Management Professional (PMP) certification.

I completed my interview with Ms. Waterhouse by email on May 18, 2020.



Photo courtesy of Janetta Waterhouse

#### *How did you enter the field of librarianship?*

My undergraduate degree is in computer science, and I worked in IT for several years. I liked working with technology, but, for reasons I didn't understand at the time, I kept considering different jobs. I lived in the Iowa City area, and I was discussing a second career with an acquaintance. I had an "aha" moment when I recommended librarianship to her and finally understood that that was the profession for me. I didn't realize that I wouldn't be straying far from IT when I made the decision to go to graduate school to become a librarian.

#### *How did you enter the field of information technology management?*

I had one year of college after high school but was undecided about my major so I joined the Air Force. My work involved repairing the radar on a fighter jet, and before my four years of service were up, I completed associate's degrees in both electronics and computer science. I returned to my native Iowa to complete my undergraduate degree in computer science and was fortunate enough to work part-time doing GIS support and Unix system administration at the U.S. Geological Survey as a student. I was able to translate the formal problem solving methodology I learned in the USAF to system, network, and database administration. I love understanding how systems are configured and integrated, and I especially love problem solving and project management. Even though I imagined myself helping people get answers to questions at a reference desk when I went to grad school, it turns out that libraries are technically complex places. Every position

I've had has involved library technology, and it has been a great fit and very rewarding.

***Could you talk about your journey to the University of Albany?***

It has been an interesting journey! Given my background in IT and my interest in project management (as of August 2017, I am a certified Project Management Professional (PMP)), I have been fortunate to have several job opportunities since becoming a librarian in 2003. From wearing multiple hats at two small libraries early on, to acting as a systems librarian at the University of Kansas, I was able to get both broad functional experience and in-depth library systems experience. Then I was the director for systems and technical services at University of Illinois Springfield (UIS) where I had the incredible opportunity to participate in a year-long, applied IT Leadership Program as a cohort within the University of Illinois system. I was gaining management experience and considering a second master's degree in computer science. After the leadership training experience, I opted for an integrated degree program in IT Management and Leadership at UIS. I am working on my thesis and plan to graduate this year.

Before and after UIS, I held positions that involved project management, including as a Senior Implementation Manager at OCLC. While there, I helped three cohorts (21 libraries) migrate to WorldShare Management Services and dozens of libraries migrate to hosted EZproxy. I returned to higher education by directing technical services at West Virginia University during a time when the institution was not only migrating to a next generation system but also centralizing technical service operations and reorganizing the division to meet these various needs. I presented on this technological, organizational, and cultural transformation through migration at the Charleston Conference in November 2016, which caught the attention of two employees at University at Albany. The State University of New York (SUNY) library system was in the early stages of a migration for 60

institutions, and I was encouraged to apply for my current role.

***What are your current responsibilities?***

I am the Director of Technical Services and Library Systems, which includes acquisitions services, resource management (cataloging, database maintenance, and discovery), and library systems. Currently, the technical services departments are still cleaning up data and learning workflows related to the relatively new SUNY-wide Alma/Primo LSP (we went live in July 2019). The workflows for, and troubleshooting related to, electronic resources are very different than the Aleph ILS and related tools that were in place a year ago. Creating reports for annual surveys is also quite different in the new platform. The library systems department is responsible for supporting Alma/Primo, managing workstations and servers for the library, and administering a wide variety of systems and applications for the libraries. We are fortunate to have a web developer and applications administrators, and are focusing efforts on web site development, integrating Alma using APIs, and understanding our institutional repository architecture.

***In your opinion, what are some of the challenges facing libraries from the perspectives of both technical services and library systems?***

Recovering from the impact of the COVID outbreak is yet to be determined and is likely be far-reaching, so I will focus on what our challenges would be no matter what fiscal climate we face.

I ran across the term simplicity a few years ago, and I immediately thought of library technology. Now I use it to refer to one of the main challenges we face: the paradox that creating and maintaining a front end system that is simple enough for a satisfying and successful user experience unfortunately requires a lot of complexity to design, integrate, and maintain on the backend. Technical services and library systems are accustomed to adaptive change, relatively minor adjustments to take advantage of changes in

collections, metadata, and technology. However, not only have we faced transformational change recently, the pace of adaptive change has increased.

The recent moves many libraries have made from legacy integrated library systems (ILS) to cloud-based architecture of the library services platform (LSP) represent transformational change. The transition to electronic resources has caused a shift from processing single items to maintaining collections, which are variable and complex. The ILS print-based workflows are being replaced by LSP workflows designed for electronic resource formats and purchasing models. Because they are cloud-based systems managed by vendors, LSPs also undergo updates much more frequently than the ILSs generally maintained by library systems staff, putting us into a state of continuous change. The benefits of these systems also come with a significant hurdle: no matter how well library personnel understood the ILS/OPAC technology and how resources are represented in them, the LSP/Discovery model is much more complex and challenging to grasp, even for those working with them on a regular basis.

Fortunately, libraries have a long history of adapting to changes in technology and formats that drive workflow changes. The transition to the continuous change of a more complex system, maintaining collections with a variety of purchasing models and delivery methods, is significant but necessary to provide as simple a user experience as possible. This frequency and intensity of change is also preparing us for the changes that AI and ML may bring to the profession.

***How do artificial intelligence and machine learning factor into the next layers of development for library technologies?***

Unlike FRBR, RDA, and BIBFRAME, AI and ML are not specific to libraries. They are not new technologies, they're just getting more attention with the advances in computing capacity and the availability of large enough data sets. They are likely to disrupt library systems in a few years, but what I'm more interested in now is

helping people understand the basics of AI and ML and the variety of ways libraries can provide support.

In addition to helping our patrons better understand how AI and ML impact their virtual lives, librarians can look for ways to support researchers or patrons who are actively engaged in AI and ML applications. Our vendors are already using them in a variety of ways that we would do well to stay on top of and even question. And of course, knowing more about them will help our involvement in the systems that libraries will be directly responsible for. None of this will be possible until rudimentary principles of AI and ML are part of our collective knowledge.

Through my studies in management and leadership, I came to appreciate domain knowledge and the need to approach fields related to librarianship intentionally. We are taught, whether in school or on the job (formally or informally), the various workflows that make up traditional technical services and library systems. When we venture outside our areas of expertise, we must acquire a foundation of that domain in order to make sense of it and, more importantly, how we can apply it. That's what I have done with certain aspects of management and leadership and have started to do with AI and ML. I don't think we can be prepared to support AI and ML with our patrons, let alone contribute to future library systems, without a basic understanding of what is involved, as well as the associated risks and rewards.

***Do you have any other comments?***

I feel fortunate to have found a career that is such a good fit for my interests and my abilities, and I'm excited to have a chance to give back to the profession. As an academic librarian, I get to choose an area of research. My focuses are management and leadership, change management, and project management, especially as they apply to IT and technical services. In particular, I'm interested in how they intersect to support successful and positive change. I have spoken on these topics over the past seven years, and people have asked me where they can find more information.

There are certainly resources available, especially for the individual topics and subtopics. Most of what I use, I assembled through many semesters, and literally of dozens of academic resources, over the past few years. Because I couldn't find a source that integrates this information together in a way that I thought would be useful, I decided to start writing about it myself. I am launching a blog this month and using these early, exploratory writings to put toward something more substantial that I hope will be helpful to others.