
The importance of library science in implementing DAM systems

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Abstract Many organizations are finding that hiring staff trained in library science is instrumental in creating and managing their digital asset management system's data structure, rules, and values. This paper briefly outlines the benefits of hiring library science professionals, and the kind of education and training they commonly experience.

INTRODUCTION

If metadata are the key to finding digital assets, then it is in an organization's best interests to implement a digital asset management (DAM) system with a clear and efficient metadata structure, as well as to have consistent data input into the metadata records. Structuring a DAM system with a confused or opaque data schema can result in users not knowing *how* to find the information they need. Inputting inconsistent data into the records will make it difficult for users to find what they need, regardless of the structure's finesse.

Many organizations are finding that hiring staff trained in library science is instrumental in creating and managing their DAM system's data structure, rules, and values. The library science profession has long since passed the period of card catalogs and the clichés of Marian the Librarian shushing patrons. Library science schools offer courses in information management and digital

library creation, producing graduates proficient in metadata analysis and information architecture. These are different courses than one might find in computer programming academic streams. The library scientists are trained to create data structures, and are educated in the various data rules and standards that have evolved over the years, as well as in controlled vocabulary and thesaurus construction. They are not trained in programming languages, but in how to work with programmers and IT staff to build coherent information management systems.

SKILL SETS

Staff with library science degrees — usually a Master in Library and Information Science (MLIS) in the USA — are trained in analyzing and organizing data in meaningful ways. They look at the “big picture” of how the metadata will be used in the future by unknown users, not at how it can be

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used by one person today. A DAM manager need not always have an MLIS degree, but experience in cataloging, using controlled vocabularies, and building data structures following standards should be a job requirement.

There are many areas of specialization in library science programs. Degree candidates can focus on information management, cataloging, archives and digital libraries, among other topics. Library scientists working with DAM systems tend to come from information management or cataloging specializations. In the cataloging track, students learn about data structures, data analysis, how to use or create controlled vocabularies and cataloging rules. These are all essential skills for creating and administering metadata models in a DAM system. No matter what brand of DAM is implemented, a manager with a library science background could apply basic principles of data creation and management to the system, making it more efficient for those contributing information to it, and more useful for users needing to retrieve assets from it.

The skills required to be a DAM metadata manager are different from those required for a database administrator (DBA). DBAs rarely have a library science education. They focus on supporting and analyzing data in a database, but not on the rules involved in creating the metadata.

EDUCATION AND TRAINING

In the USA, one can study library science in a professional degree program that usually takes two to three years to complete. The number of universities offering MLIS or equivalent degrees decreased in the 1980s and 1990s, and library science programs redefined

themselves in order to better prepare their graduates for the new digital and information science positions. Students can now get training in not only traditional book cataloging, but also in metadata creation for digital assets.

While programs might not offer courses in digital asset management *per se*, those that offer courses in digital library creation and information management would best prepare candidates to work in digital asset management.

A list of library and information science programs in the USA, with links to the programs' websites, can be found at: <http://www.univsource.com/library-information-science-schools.htm>.

Examples of library science curricula:

1. University of California, Berkeley's School of Information Management and Systems: Masters of Information Management and Systems (MIMS).¹
Since the mid-1990s, this program has developed a definite focus on information management, so much so that it changed its school and degree name to reflect this change. Its course catalog has few offerings in traditional library school studies such as grade school or media librarianship.
2. University of California, Los Angeles, Department of Information Studies: Masters of Library and Information Science (MLIS).²
UCLA's program offers courses in traditional librarianship, but also has a specialization in "Informatics," geared towards the study of information management and digital libraries and preservation.
3. Simmons Graduate School of

Library and Information Science, Boston, MA: Master of Science (MS).³

The Simmons program offers general librarianship courses, as well as a specialization in archives. It also has courses in digital libraries, and management of information technology (IT).

4. University of Texas School of Information, Austin, Texas: Master of Science (MS).⁴

The University of Texas has a strong program in preservation and digitization. The curriculum includes a course in metadata for digital objects.

A more recent potential source for education and training in DAM is in the new archival moving image programs that launched in the past five years around the world. In particular, New York University's Moving Image Archiving and Preservation program⁵ has courses where DAM is discussed (courses in digital preservation, cataloging and collection management). In these courses, DAM is presented in the context of preserving moving image and audio materials that were transferred to digital formats, or were created as digital files.

Practical experience should not be dismissed if a potential digital asset manager does not hold an MLIS. Many qualified DAM metadata managers have relevant experience in library cataloging departments, or in digital library programs at academic libraries and research institutions. In these environments, they learn the essentials of information management and cataloging that can be applied to DAM. Since DAM is a new field without specific

degree or academic training programs, the people working in it are most likely applying concepts from similar areas.

CAREER PATHS

Like any graduate with a fresh degree, new MLIS holders will most likely obtain entry-level professional positions while they gain experience over a few years. They will often find work as catalogers in an academic or corporate library; some with pre-degree digital experience might find positions in metadata creation for digital libraries. Digital library or metadata specialists are in high demand due to the exponential need in the field, so these MLIS holders have the potential to move ahead quickly — with the danger to management that they can also be wooed away by better offers.

As corporations implement DAM systems, the higher salaries in the corporate area can be incentives for library science specialists working in more traditional academic library environments. Typical salaries in 2003 for academic librarians can be found on the American Library Association website.⁶

According to the chart, department heads or senior managers earn under \$60,000 a year. In a typical academic library, it can take years for staff to move up the ranks to a senior level. In contrast, in the corporate world, DAM metadata specialists or managers can make on average \$80,000–\$100,000 a year.

APPLYING KNOWLEDGE WITH AUTHORITY

The salary differences can be appealing to smart library scientists interested in information management, but to keep a

qualified expert, the work environment should support staff's efforts to keep up to speed on new initiatives and standards. Attending workshops, seminars, and conferences on metadata and information management is crucial in this quickly evolving field.

Perhaps the most important action administration can take in staff retention is respect for the library scientist's knowledge and expertise. While organizations are increasingly hiring staff with library science degrees, having these skills on board is irrelevant if the library scientist is not given authority to create the metadata structure and cataloging rules for the organization, and more importantly, to enforce them. Many hands could potentially contribute to an asset's metadata in the course of its life. The more people who contribute to the creation of a metadata record, the more chance there is for error or inconsistent data. Inconsistent data can result in users having difficulty retrieving what they need, or worse, assets can become virtually "lost" on servers without good metadata to identify them. The metadata manager should have authority to instruct staff across

department divisions in how to create and use metadata.

Library scientists should also be involved in creating the architecture for the organization's DAM system. They should work as a partner with the IT department in developing and implementing the organization's DAM system to ensure that an efficient data creation and retrieval workflow is integrated into the system.

For the benefit of the organization, management should be proactive and support their library science staff as these specialists attempt to bring order out of potential digital chaos.

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References

- 1 <http://www.sims.berkeley.edu/academics/courses/coursecat.php>.
- 2 <http://is.gseis.ucla.edu/>.
- 3 <http://www.simmons.edu/gslis/>.
- 4 <http://www.ischool.utexas.edu/about/>.
- 5 <http://www.nyu.edu/tisch/preservation/>.
- 6 <http://www.ala.org/ala/ors/reports/alasalarysurveysummary.htm>.

Note: All URLs last accessed 20 April 2005.