When Archivists and Digital Asset Managers Collide: Tensions and Ways Forward

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ABSTRACT

While archivists have been developing methods to appraise, accession, arrange, and describe born-digital records, a new class of professional—the digital asset manager—has emerged. Digital asset managers see their role as creating repositories of assets that can be easily and efficiently reused by staff. Given the closeness of this role to that of the archivist, this case study explores the question, what issues arise between archivists and digital asset managers when they are working together in the same organization? To study this, the researcher spent one year as a participant observer at a major art museum located in the northeast United States. He found that indeed tensions do exist, first because the digital asset manager and archivist do not recognize the different roles each is playing and hence enter a kind of competition. Second, this tension stems from an intellectual disagreement about how digital recordkeeping will play out over the next several decades. The article concludes with suggestions for moving forward so that both digital asset managers and archivists can further their respective missions.

KEY WORDS

Digital archives, Digital asset management, Case study

Institutional archivists (including digital archivists) maintain the inactive records of permanent value for an organization. These can include paper records or electronic records and may vary in format from email correspondence, to architectural drawings in CAD format, to records on carbon paper from the twentieth century. While archivists have been working to develop methods to accession the many formats in which records occur, institutional staffs have been engaged for more than twenty years in transitioning to digital production. For example, museums have undergone a changeover to digital production for the majority of their products, such as exhibition catalogs, didactics (or wall text), exhibition design, and audio guides. This transition to digital production has occurred across most sectors of society, such as the entertainment sector and the publishing industry.

In the predigital world, staffs were sometimes motivated to transfer inactive records to the archives—often stored in attics or basements—to free up desirable office space. However, as digital files do not take up physical space and as the capacity of digital storage has continued to grow, producers of digital information started to develop a new attitude: *digital files would never become inactive*. With this new attitude came the notion that all active and inactive records could be kept together and searchable from a single interface. This seemed plausible given that the Google search interface appeared to do exactly this: provide access to new and active content (e.g., breaking news stories), while continuing to point to things that have seemingly not been updated in decades (e.g., the website for the Warner Brothers film *Space Jam*).[1] As many units transitioned to digital production, and the years of content accumulated, it became clear that, at a minimum, extensive organization would be required. This led to the creation of digital asset management (DAM) systems and the hiring of those who oversee them. These individuals often have the job title "digital asset manager."

Although relatively little professional literature addresses DAM—at least compared to the literature about archives and archivists—the literature does confirm the view that digital files can remain active "forever."[2] In her book, *Digital Asset Management*, Elizabeth Ferguson Keathley argued that "an archivist or records manager is only concerned with the assets at the end of the life cycle; the role of a digital asset manager is to assist with the arrangement, description, preservation, and access of assets that never have a clear end-of-life status."[3] This statement is not entirely correct because the records manager's role is to manage active records, and those records with permanent value are transferred to the archives when they become inactive. Despite this inaccuracy, she further reinforced that ". . . a creative asset never truly reaches the end of its life for dead storage, as was the practice in the last century" and that "digital files can and should *live forever* with the ability to be searched and reused as

needed."[4] Thus, from Keathley's standpoint, the archivist ought to stop making distinctions between inactive and active records and bring "the practices of archivists and records management out of basements and into the everyday working environment."[5]

Keathley raised a number of issues for both archivists and digital asset managers. For example, is the role of the institutional archivist destined to become digital asset management, where he or she helps manage digital assets that will "live forever"? Is identifying and separating active and inactive records still valuable? Can DAM systems accommodate all the active and inactive content and still be useful, or will they become so overloaded with content that no one will be able to find anything? As time goes on, will DAM systems fill up with obsolete file formats? Will the provenance of a particular asset be evident over time? How will public researchers access such systems?

I studied how these issues played out over the course of a year at a major art museum located in the northeastern United States as part of a small grant project to help this institution plan for a born-digital archives. This museum will be referred to as USAM for brevity. Using a participant observation methodology and treating USAM as a case, I posed the following research question: what issues arise between archivists and digital asset managers when they work together in the same organization?

Before I introduce the method and results, I will review relevant literature to clarify the issues at stake.

Literature Review

This literature review assumes that the reader is familiar with the foundational writings on archives, but may be less familiar with the emerging literature on DAM and how it interconnects with archives. Thus, I will focus here on DAM. Useful literature on who archivists are and how they differ from other types of information professionals include foundational texts by Anne Gilliland,[6] Richard Cox,[7] Kathleen Roe,[8] and Gregory Hunter.[9]

A casual observer may surmise that digital asset management is simply a reframing of archives for digital content. However, on closer inspection, the disciplines' dissimilarities start to become apparent. In archives and digital archives, the unit being managed is the "record." The Society of American Archivists' (SAA) *Glossary of Archival and Records Terminology* offers an extended definition of a "record" that most archivists could agree on: "data or information in a fixed form that is created or received in the course of individual or institutional activity and set aside (preserved) as evidence of that activity for future reference."[10] The record does not necessarily have any monetary value. Rather, its value is its ability to act as an "extension of human memory,"

"demonstrate accountability," and act as "evidence or proof" of the activity that produced it.[11]

In digital asset management parlance, the unit being managed is not the record but rather the "asset." In his book *Digital Asset Management,* David Austerberry argued that an asset within a DAM is about property in much the same way as it is meant in the financial sense.[12] He noted that "content + rights = ?$ asset."[13] Thus, "the most important feature is that DAM provides a framework for the successful monetization of media assets."[14] Not all digital asset managers view their assets as the possible monetary value derived from the content in combination with the usage rights, however. Austerberry focuses on media assets in the entertainment and commercial sector, and his notion may not apply very well to other sectors such as nonprofit or government entities. For example, Peter Krogh, in his book on DAM for photographers, noted that the return on DAM "may be in the form of monetary payment or personal satisfaction."[15] Nevertheless, an important distinction between these two views should be made. Archivists are interested in the record not only for its content but for what it might imply about aspects external to the record itself, including historical and social implications. Digital asset managers are more focused on the content, including the legal rights to reuse.

Thus, for the purposes of this article, I use the SAA's definition of a record. However, in the context of an institutional setting, I will define a digital asset as *a kind of record that individuals can readily reuse in future work products*. Thus, certain kinds of records have better reuse value than others: photographs or exhibition catalogs as compared to email correspondence. Records like email or research notes may *inform* future work products but are unlikely to appear *in* a work product. This definition is also useful because a file would not be considered an asset if its legal reuse in a future work product could not be secured (e.g., attempting to use an image of Mickey Mouse outside of the Walt Disney Company).

Although today digital asset management may affect archives, the intellectual underpinnings of DAM are more akin to librarianship or the computing industry. Most DAMs function more like item-level digital libraries, where individual items are assigned metadata using schemas like Dublin Core, VRA Core, or customized item-based schemas. Provenance—such as the creator of the work—is assigned equal importance to other facets, such as title, description, or rights information. This is unlike archival practice, which gives provenance—or the creator—supreme importance and casts it as the ultimate organizing factor. For example, archivists often produce extensive biographies and time lines of life events for a given creator. This is unlike bibliographic description, which often does not go into much detail about the creator, other than to give the full name and, in some cases, birth and death years.

The profusion of digital assets, most notably digital photography, has largely driven digital asset management's propagation. As digital photographs do not require the cost associated with film rolls and film processing, the quantity of photographs has grown dramatically. With this growth, preservation and access have become salient issues that DAM addresses.[16] For professional photographers, efficient DAM is essential to operate. Krogh wrote that "the market value of a photograph is dependent on your ability to get that image into the hands of someone who wants it" and that DAM practices "give you the ability to sort and retrieve photographs according to many different needs, and therefore to make the pictures more accessible."[17] Thus, DAM is most established in photography contexts, but its applications are growing. For example, Austerberry advocated for its use in video production environments such as television studios.

Very little literature attempts to break down the role differences between digital asset managers and archivists. Keathley provided an interesting, although somewhat troubling, account. She argued the following:

> While the arrangement, description, preservation, access, and, above all, findability of information has fell [*sic*] to librarians in the twentieth century, DAM professionals would do well to keep the term "digital asset managers" and not call themselves "librarians" or "archivists." While the jobs are very much the same, and my background in library science gave me an excellent grounding in the techniques and processes that help in the understanding and implementation of a DAM, labeling the job as "digital librarian" or "digital archivist" may be the path to low earning potential over a lifetime.[18]

In Keathley's conception, the roles of the digital asset manager and the archivist are fairly similar. However, because the work of librarians and archivists is perceived as "'women's work' and the devaluing of their role in society" stunted wages they command, calling the new profession "digital asset manager" would avoid the low wages attached to "women's work."[19] Although Keathley is no doubt correct that professional roles traditionally occupied by women pay lower wages, the equating of digital asset management and archives as "very much the same" ignores the very different missions of both groups that I will explore in this article.

Method

I studied the relationship between archivists and digital asset managers at USAM, which has both a digital asset manager and two archivists, as part of a small, one-year grant project to help it develop a born-digital records repository. During that time, I acted as a participant observer (in my research

capacity) and electronic records consultant (providing advice on digital records), closely observing the interactions between the digital asset manager and the archivists and keeping detailed field notes. Participant observation is an ethnographic research methodology during which the researcher has "prolonged, personal contact with events in a natural setting," allowing for him or her to develop a "better understanding of the people and social processes that occur within that setting."[20] I was on-site at USAM two days a week for a year (78 eight-hour days total), which gave me extended exposure to how the digital asset manager, archivists, and other staff interacted with each other. In addition to closely observing the interactions among these groups, I investigated all the digital recordkeeping practices at the museum, including staff recordkeeping practices (through focus groups with every department in the museum), files stored on network storage and in the DAM system (or "the DAM"), and digital records in acid-free boxes (e.g., floppy disks). Select meetings with the digital asset manager and the archivists were audio recorded with their consent. From these recordings, I transcribed significant quotes and added them to my notes. To address the research question, I analyzed the notes from one year's worth of data, allowed themes to emerge, and then drew conclusions from these.[21]

Context Overview

USAM collects contemporary and modern art, produces approximately a dozen exhibitions each year, has over 50,000 square feet of gallery space, and welcomes on the order of a million visitors annually. The museum has maintained archives since the 1970s and currently houses approximately 7,000 cubic feet of paper records. This archives includes exhibition and artist files, as well as other historical records, and it is open to researchers throughout the year on a request basis. The archives is led by a head of library and archives, to whom an archivist with sole responsibility for the archives reports. Both archivists and the digital asset manager hold master's degrees in library and information science (MSLIS) from American Library Association–accredited institutions.

In 2006, the photography department at USAM, which is in charge of photographing the museum's collections as well as photographing "as-installed" views of exhibitions, closed its darkroom (making it into a storage closet) and transitioned to digital photography. The needs of the photography department, such as organizing and providing access to the growing collection of born-digital photographs, prompted the purchase of a MediaBeacon DAM system. By the end of 2013, it contained over 220,000 individual files that occupy 7 terabytes of disk storage. A digital asset manager was hired in 2012 to report to the head of photography and manage the DAM.

Findings

This study revealed that tensions between the digital asset manager and the archivists did not *initially* exist. One reason is that the DAM system was purchased as a tool for use primarily in the photography department, and it did not initially affect other departments. When the photography department was producing photographs on film, it did not transfer inactive content to the archives, thus acting as the de facto photo archives of the institution. With the transition to digital photography, past practice dictated that the photography department would continue to act as the photo archives, albeit through the DAM system rather than by maintaining drawers of film prints. However, because the DAM was a significant investment in software and was hosted on-site by the information technology (IT) department, additional uses beyond photography were considered. Thus, when the digital asset manager was hired, it was clear that he or she would provide services to the photography department (e.g., ingesting photographs into the DAM, developing organizational schemas for use in the DAM) and also eventually start working with other departments so that they could use the DAM for their own needs.

The notion that the DAM could be a cross-institutional tool laid the groundwork for tensions between the archivists and the digital asset manager. For the photography department, the introduction of the DAM signaled the possibility of a growing role within the institution. Its purview would include not only photography, but also providing a way for all departments to upload, organize, and reuse their high-value intellectual property assets, such as exhibition catalogs, highly produced video works, and content from audio guides.

Tension 1: Users, Files, and Where They Get Stored

Although the archivists did not object to the notion that the DAM could be used across multiple departments, they did object to some of the unstated assumptions that attracted them to the DAM system. The most obvious problematic notion was that if a file was deposited in the DAM, there would be no reason to deposit it in the archives as it was permanently preserved and made accessible to staff via the DAM system. Under the DAM-as-archives scenario, the digital asset manager—in consultation with the authoring department—would organize and ingest the files as deemed fit into the DAM and not deposit them into the archives. For example, exhibition catalogs would be organized under the authoring department (publications), provided with item-level metadata (e.g., title, description), placed in a folder with the exhibition name, and set with access rights. The archivists would organize exhibition catalogs according to the principle of provenance. Thus, the records of a given exhibition would be kept

with the records of its curator, and an exhibition catalog would be kept with the other records of the same exhibition. Using the archives policy, the exhibition records would be opened to the public twenty-five years after creation. However, records made for public consumption, such as exhibition catalogs, would be made available to public researchers immediately upon request. This is unlike the DAM system, which makes materials available only to institutional staff and not outside researchers.

Thus, the initial tension between the archivists and the digital asset manager involved the notion that the DAM system would become the archives of high-value, born-digital content. This would leave the archivists with the paper records, which they had been managing since the 1970s, and the born-digital records not considered "assets," or those records that may have historical value but no clear monetary value. This could include records like Microsoft Word files (e.g., research notes from curators), emails, and the like, whereas the DAM would hold items like photographs and books, all of which are more clearly "assets" (using my earlier definition).

Tension 2: Differing Work Practices

It is worth noting the different practices of archivists and digital asset managers, both at USAM and more generally. The digital asset manager at USAM clearly saw his role as inextricably linked with the DAM tool itself. Thus, he dedicated extensive effort to convincing staff of the value and benefits of the tool (such as being able to access content through a Web browser and not having to initiate a Virtual Private Network [VPN] connection, not having to rely on disorganized network shared drives, and being able to use a powerful search engine). It is also worth noting a difference in users. For the digital asset manager, the user is almost always a member of the institutional staff. For the archivists, while institutional staff is a user group (especially museum curators), researchers from the general public are also considered users. From the DAM literature, a focus on user needs is especially evident. For example, Keathley noted "an organized collection of digital assets isn't worth anything if those assets aren't used, and in order to make a usable DAM, a digital asset manager must know his or her audience and what that audience would wish to access."[22]

Digital asset managers are expected to be particularly responsive to the immediate needs of departments. This is also important for retaining the buy-in from staff so that they continue to use the DAM. For example, when photographs of an exhibition are taken, the USAM digital asset manager needs to assign metadata to the photographs quickly so they can be found and reused by institutional staff for a variety of publications. The practice of being a bridge between the creator of the record (e.g., the photographer) and the users of that

record (e.g., the institutional staff) immediately following record creation is quite different from the practices of most archivists. Archivists tend to seek out records when they become inactive and, in some cases, act as record managers to organize and communicate when a record is no longer active. Thus, at USAM, archivists tend to become interested in acquiring particular records when an initiative is winding down, or when a staff person is departing. The archivists at USAM made it clear that they would not relish the work of digital asset management, such as having to assign item-level metadata to photographs needed immediately. Being able to approach creators when their records are becoming inactive and accessioning them into backlogs allows a comparatively more relaxed approach to building collections. Thus, the active and inactive records environments and their related workflows create noteworthy distinctions in how archivists and digital asset managers operate.

Tension 3: Approaches to Digital Preservation

Another source of tension between the archivists and the digital asset manager involves the lack of digital preservation planning. After I studied the files held on network storage at USAM, it became clear that obsolete file formats are not a theoretical issue but a historic problem. For example, in late 2013, 11,694 WordPerfect files occupied network storage, as well as 5,194 QuarkXPress files and 1,430 Lotus 1-2-3 files. As a consultant on this project, I developed methods for appraising these files for permanent retention and migrating them to more sustainable formats for deposit in the digital archives. However, the archivists were frustrated that the digital asset manager did not seem to consider the issue of preservation planning, or what formats would be accepted into the DAM and how it would respond to file formats once they became obsolete. Archivists viewed the assumption that files deposited into the DAM would be accessible "forever" as shortsighted and thought the digital asset manager ignored the evidence that preservation planning was needed. Preservation planning is less essential when only one type of file is being managed (e.g., uncompressed TIFFs from the photography department), but it becomes a more prominent issue when the DAM is opened up to all departments and the types of files they may want to deposit (e.g., exhibition designers use a variety of 3-D modeling file formats and two-dimensional drawing formats; video creators use a variety of video encodings, etc.).

A related digital preservation planning issue arose during the study concerning file fixity checks, or rather their absence from the DAM system. File fixity checks look for hardware or software failures that could render a file inaccessible or inaccurate. This is often referred to as bit-rot or bit-flipping[23] and is usually addressed by running a file fixity check such as applying the MD5

checksum generator to a file upon ingest and verifying the checksum remains the same through time.[24] If the file changes somehow (a bit is flipped), the file can be restored from backup. At USAM, the digital asset manager did not seem to mind the absence of these checks or that the capacity to execute them did not appear to be a software feature of the DAM system. This is somewhat problematic considering that file fixity checks figure prominently in standards for digital preservation, such as the National Digital Stewardship Alliance's Levels of Digital Preservation and the Trusted Repositories Audit and Certification checklist.[25] Henry M. Gladney found that content management systems, of which the DAM system is a variant, are "not adequate for long-term digital preservation because [they include] no mechanisms for reliably assuring authenticity and intelligibility of digital documents for fifty years or longer."[26]

Tension 4: Communication with Staff

A further tension exhibited itself when archivists and the digital asset manager attempted to communicate with department staff at the same meeting. During such meetings, the digital asset manager would indicate that digital files with value should be deposited in the DAM and that they would be available indefinitely, thus making the archives appear superfluous. The response of departmental staff was largely determined by their previous experience in professional and personal contexts. For example, staff members who often use Web-based systems for sharing and organizing content (e.g., Facebook) found the notion of the DAM system very appealing and thought it only natural that the DAM function as the digital archives of the institution. Staff members such as museum curators, who are the heaviest users of the archives for research, would gravitate toward the archives as a repository for their records. At these meetings in general, the archivists tended to underappreciate the extent to which staff wanted unmediated access to their assets through a system such as the DAM, and the digital asset manager seemed too willing to undermine the archivists' role within the institution to advance his own mission.

A notable problem was that staff members readily considered many things to be an "archives." Some departments with extensive collections of older records viewed these collections as "archives" of the departments' work and exhibited a somewhat proprietary attachment to them. They preferred to maintain records on their departmental network shared drives. However, they were not sure if the files could be accessed because they might be in obsolete file formats. Trevor Owens explored the many meanings of the word "archives" and noted that at least six definitions are used in contemporary society. Many of the uses do not refer to SAA's definition, which is that archives are the inactive records of a person, organization, or family.[27] Because of the readiness of staff to

call something an archives, that word gets attached to many things, including the DAM. This can be troubling for the archivists, who must contend with the many department staffs who believe that they are keeping archives and may view the DAM as yet another archives.

Tension 5: Differing Approaches to Planning

The last source of frustration for archivists was their sense that the digital asset manager was targeting high-value content whenever and wherever it occurred without a systematic plan for what would be included in the DAM. In 2005, a records retention schedule was developed and approved by the board of trustees, which made clear to all staff which records have permanent value and should be deposited in the archives and those that could be destroyed after their life cycle ended. The archivists continue to update the records retention schedule and make it more explicitly acknowledge electronic records. The archivists desired a more comprehensive plan identifying what would be included in the DAM. However, it appeared to them that the digital asset manager was approaching content producers without a clear plan for the DAM system's future development.

Discussion

This case revealed that tensions indeed do exist between archivists and digital asset managers. These tensions arise first from intellectual disagreements about how digital recordkeeping will play out over the next several decades. Archivists distinguish active from inactive records and generally reject the notion that because a record is a digital file, it can remain active forever. They recognize that "forever" will be interrupted by eventualities such as file formats becoming obsolete, which has already occurred (such as the transition from Wordperfect to Microsoft Word, QuarkXPress to Adobe InDesign, or Lotus 1-2-3 to Microsoft Excel). Without preservation planning, a DAM could decline in value over time as the assets grow and their accessibility wanes as individuals move on to new computer programs or cloud-based computing options. Archivists tend to take a longer view of at least a couple of decades and do not necessarily think the content itself is the most important thing. They also consider aspects external to the record. Thus, archivists dedicate extensive effort to describing the provenance of a record to capture context about its inception. They believe that creating item-level metadata for all records with permanent value is impossible given current and expected resources, and thus they rely on aggregate description at the record group or series level. For archivists, DAM

systems house active records put there for reuse, which for archivists means that they are not really inactive.

Digital asset managers take the view that digital formats are becoming more mature, and obsolescence is not as major a concern as archivists make it out to be. For example, JPGs and DOC files are well documented and show no signs of being inaccessible. They use organization methods most common to libraries and digital libraries, including cataloging at the item-level. This is essential if items are to appear in the DAM system's search results. For them, the most important aspect is the content itself and how it can be reused by active departments to maximize the value of the asset. Digital asset managers work to document legal use rights so an asset can be easily deployed in future contexts, thus eliminating the need to track down copyright owners. They tend to see value in archivists' handling of paper records, or records without clear value for the DAM, but otherwise feel that they are best equipped to create a repository of digital assets for future use. They feel that users have a strong desire to access materials through a DAM, which aligns well with users' experience with systems such as Facebook for curating their personal photographs. Their job is to make the DAM meet the needs of staff users and integrate it well into the workflows of digital producers.

Archivists recognize that the archives will decline in value if it does not include digital assets, such as as-installed photographs or exhibition catalogs. Digital asset managers are perturbed by archivists who insist that staff deposit their records in the archives. Digital asset managers believe the DAM can act as the "forever" repository for these files; a digital archives is limited compared to the active reuse strategy they are offering.

Given this set of tensions, how can these significant disagreements be reconciled? Clearly, both digital asset managers and archivists are going to need to work together if either role is to continue, but how?

For USAM, I recommended that items deemed assets be deposited both in the DAM system and in the digital archives. In the digital archives, the asset will be grouped with other records of the same provenance (e.g., an exhibition catalog will be kept with other records from the same exhibition with the top-level organization being a curator). In the DAM, metadata will be attached to the file to encourage its findability for reuse by staff. The archivists will document the activity of the institution for researchers, while the digital asset manager will curate assets so that staff can reuse them for new purposes. Because the purposes are not the same and the user groups do not overlap entirely, it is sensible that assets appear in both places. This is not wasteful because digital preservationists have found that "lots of copies keeps stuff safe."[28] At a minimum, references to the assets contained within the DAM should be added to the archives intellectually if not physically. However, because DAM systems are so new, it is

unclear whether they will be able to provide a persistent link to such content or even whether a DAM system will continue to be used indefinitely into the future. Thus, high-value assets are best deposited both in a digital archives and a DAM system. If a DAM system is discontinued, the history and activities of an institution can still be uncovered through the archives and assets extracted from it as needed. If the archives is discontinued, only the assets survive and an incomplete picture of the institution's activity remains. Thus, there is strong reason to keep both digital asset management and digital archives initiatives active. The activities related to digital asset management add convenience that is very compelling to staff users. The archives provides services essential to documenting institutional history for its larger role in society.

Although both groups acknowledge that a DAM system can provide convenience to staff users, it does not replace the need for a digital archives nor does it mean that items deemed "assets" should not be placed in an archives. Some may assume that placing assets into a DAM is sufficient for creating a historical record of an institution's activity. The problem is, most items interpreted as assets, such as photographs and exhibition catalogs, are designed for the public and are the tip of the records iceberg. Information about *why* things developed the way they did is contained in other records (e.g., email collections, caches of documents for nonpublic consumption, etc.). Thus, although providing functionality for quick and efficient reuse of media assets via a DAM is a worthy goal, it should not replace the need to create digital archives that document institutional activity. The key is making institutional staff understand this difference, thus avoiding the interpretation that digital archives and DAM systems are redundant. It is also essential that digital asset managers and (digital) archivists respect the different roles they play and not try to undermine each other (e.g., telling a staff member that he or she only needs to deposit an asset in one place and not the other).

Efficiency experts are always interested in eliminating functions that may seem redundant. Thus, most institutional executives would rather have a single digital repository that holds both records and assets. Given this reality, could a DAM work not only as an asset repository, but also as a records repository? As noted earlier, the organizational systems used by DAMs tend to privilege item-level organization, making them less appealing places for records grouped by provenance. One strategy could be to organize records into groups of folders and then place them in a ZIP file that gets ingested into a DAM. However, a limitation of this approach is that most commercial DAMs have little or no digital preservation functionality, such as tools for monitoring file format obsolescence or file fixity. Thus, systems designed explicitly for digital preservation of archival assets are better suited for this task. Also, if the purpose of a DAM is to promote the reuse of media assets by current staff and the DAM is filled

with records that have limited reuse value but continue to appear in search results, this could diminish the DAM's value and affect its future. To promote the differing missions of archives and DAM systems, it is important to dissuade the efficiency experts from canceling one initiative or the other in favor of the "one stop shop" approach.

This study necessarily raises new questions as it answers the initial one. Is it possible that digital asset management might cause archivists to rethink their acquisition, description, and access practices? Can archivists can learn from digital asset managers and vice versa? Are the goals of the two professions really that far apart? Although each of these questions could warrant a new study, I will offer some initial thoughts.

Clearly, the professions are not so far apart. One indication is that the same degree (the MSLIS) can help meet entry-level qualifications for both roles. However, throughout this study, one factor became clear: the digital asset manager did not want to be the archivist, and the archivist did not want to be the digital asset manager. Wanting to be involved in the active records environment or in the thick of things seems to be a necessary trait for the digital asset manager. Some archivists would rather be a step removed from this environment and have the opportunity for more reflection, which is a useful trait for maintaining historical records for researchers. Some archivists would prefer not to assign item-level metadata to large volumes of digital assets, just as some digital asset managers would rather not steward troves of yellowing papers. Determining how many archivists or digital asset managers fall into these categories would require a larger research project than the present case study.

In the course of this case study, I grew more confident in the flexibility and economy that archival methods permit, specifically not requiring metadata creation for every item being stewarded. I was particularly concerned with the extensive labor involved in creating item-level metadata for every item in the DAM and wondered about the long-term sustainability of this practice. Despite this increased confidence in archival methods for dealing with large quantities of information, I did grow concerned that users are accustomed to Google-like access to items such as DAM systems offer and may not be satisfied with access at the aggregate level that archival arrangement and description allow.

Limitations and Conclusions

This study is notably limited because it provides an in-depth look at a single context (USAM) only, and it may not be applicable to other museums or organizations that have both archivists and digital asset managers. Furthermore, many organizations may employ one of these professionals and not the other, and thus this tension does not exist. And, last, it is certainly possible that other

organizations with both digital asset managers and digital archivists have not experienced similar tensions. This is a limitation of the single case study method, which can describe a certain context in depth but cannot shed light on how applicable the situations described are instantiated in other contexts. Additional research that pays close attention to the interplay between digital asset managers and archivists across a variety of contexts is necessary for the future health of both professions.

In conclusion, this case study revealed that tensions can exist between archivists and digital asset managers. This tension results largely from digital asset managers and archivists not recognizing the different role each plays and thus entering into a kind of competition. It also stems from an intellectual disagreement about how digital recordkeeping will play out over the next several decades.

Fortunately, this tension can be lessened if each group focuses on its mission and creates opportunities for the other group to be successful. For example, digital asset managers should focus on their mission: creating a collection of digital assets for effective and efficient reuse by staff members. Archivists should focus on their mission: documenting institutional activity through records of permanent value in whatever format they may occur for use by staff and public researchers. Thus, when the archivist discovers reusable assets such as digital photographs that should be available in the DAM for easy access by staff, he or she should alert the digital asset manager. When the digital asset manager encounters an asset that is an important record of institutional activity not contained in the archives, he or she should contact the archivist. Because of the differing roles played by the archivist and the digital asset manager and the nonoverlapping nature of the information they are managing, tensions should become a thing of the past as our digital world continues to unfold.

Notes

[1] *Space Jam*, directed by Joe Pytka (1996; Warner Brothers), http://www2.warnerbros.com/spacejam/movie/jam.htm.

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[3] Keathley, *Digital Asset Management*, 12.

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[21] Note that this study is exempt from Institutional Review Board (IRB) approval because it relies exclusively on pre-existing data collected by the researcher in his capacity as a consultant with the identity of subjects anonymized.

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