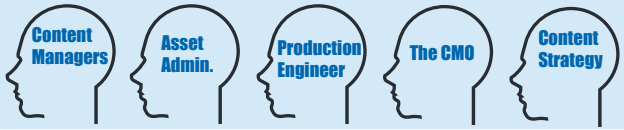
Digital Asset Management Trends and Lessons [DAM]

Digital Asset Management White Paper for Content Managers

April 12, 2016 5:15 PM

Written For:



Overview:

This is a report from my experiences of growing with the Digital Asset Management platforms and philosophies. It will help to provide potential information for further development of current philosophy and business infrastructure related to Asset Management. I will provide you with ten core lessons of DAM architecture, trends and learnings from my experiences over the years of being an Asset Librarian and DAM Server Administrator. This report assumes some familiarity with the Asset Management world.

Index of Information:

Summary:

More digital content exist today than ever before and it is growing exponentially. As more digital assets are created, employees are having difficulty locating relevant files which hamper productivity. Digital assets are now stored in a range of locations including shared drives, cloud storage services, file servers, company wikis, and email inboxes. These storage options are often used in conjunction with one another making file retrieval a time consuming, ambiguous and frustrating task. Estimates on the amount of time employees spend searching for information range from 6.5 to 8.8 hours per week[1]. Digital Asset Management (DAM) offers the promise to take these storage options and increase productivity by offering defined and search-able content across the organization. While DAM has been around for over a decade, it is still a developing sector within business and many paths to DAM exist. This deck is a guide to the many options and issues within DAM for today, as well as offering predictions on its future maturity based on the lessons learned form research and observations on current trends.

1. http://www.docurated.com - Cóbhan Phillipson

Section 1: Ten Core Lessons

Titled: Lessons of DAM for Today

Not in any particular order, other than they are all important.

Lessons in Digital Asset Management [DAM]

Ten Core Lessons in Digital Asset Management:

Lesson 1: The Idea of DAM is Very Fragmented

- The idea of implementing a Digital Asset Management (DAM) platform is extremely difficult to navigate to find proper solution. Everybody has their own idea of what DAM is, and what they want, which is usually specific to their experiences and company needs. It is so fragmented that 30% of vendors who call themselves a DAM solution provider do not even meet the basic criteria of a DAM. [See the Top 10 criteria of a DAM on Page 10]

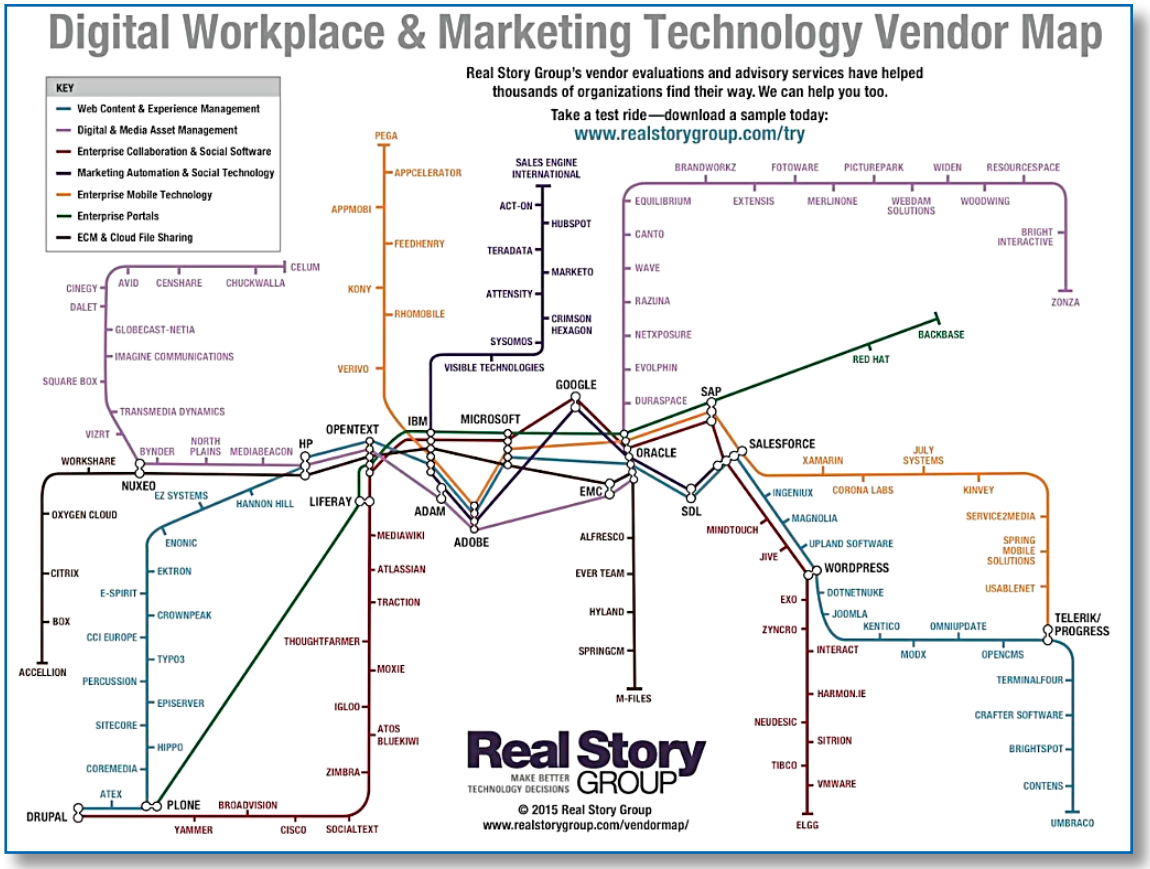
- There are many companies doing DAM at various levels of implementation. There are few companies doing it well, and for those that are, they have done it for years and have multiple systems of DAM, MAM, CMS, PIM and other home grown systems to handle the various departments and workflows to create best in class solutions. There are many more companies just beginning to explore DAM today than there are companies who are successfully using DAM in day-to-day operations. Still, far fewer have implemented DAM solutions and embraced the philosophy company wide to take full advantage of the single-truth potential. Many lack a cohesive upper management and/or IT structure to do so.

- Nearly all Companies have little expertise in-house to weed out a new DAM solution and while there are a few consultant companies who will offer help, very few are impartial and can offer unbiased information to aid in the decision. This holds true for MAM, CMS, PIM, DIS, KMS and PM solutions as well, which are even more difficult to navigate because of fewer consultants offering expert knowledge across these various platforms.

- Many companies in many industries that you would expect to be leveraging a DAM to re-monetize assets or re-utilize internal work, have not even started working on a solution.

- Using a DAM is as much about your process, management and personnel, as it is about the platform you choose to implement.

A screen shot of a portion of the DAM solution providers is supplied here by the Real Story Consultant Group as an example of how difficult it is for those new to DAM to sort out solution providers.



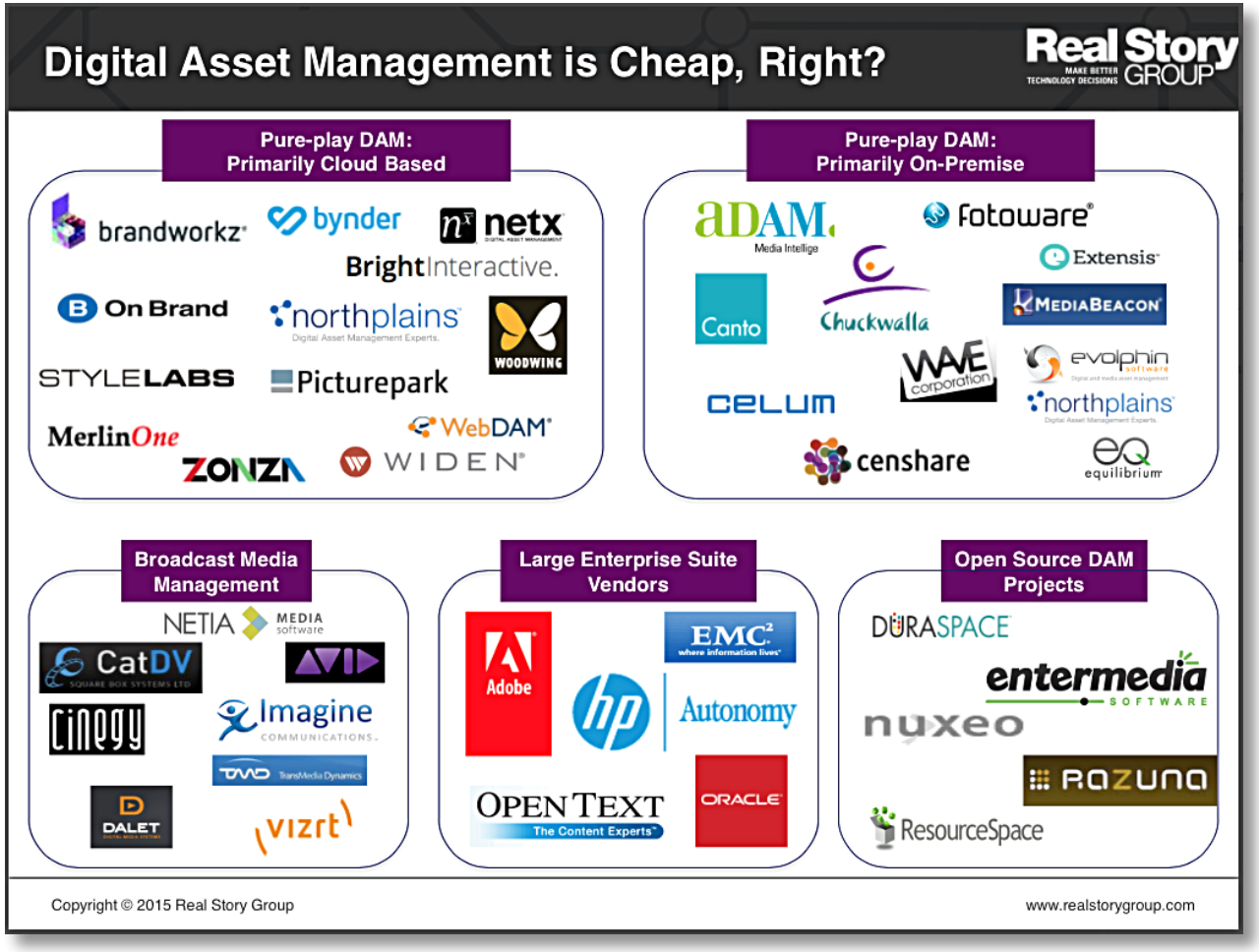
Ten Core Lessons in Digital Asset Management:

Lesson 1: The Idea of DAM is Very Fragmented... [Continued]

The Idea of DAM is fragmented. Another Example of DAM solutions and how they are segmented across the various solution providers.

- DAM can be segmented into Cloud based, On Premise or a hybrid between the two. What's Correct? You need to know before selecting.
- Types of DAM can be determined by Open source or Proprietary and cost can usually drive the solution as well. A key factor here is support and features needed for your business. What is correct for you? You need to decide before moving on.
- Your key business needs can determine how you think about what a DAM is for your solution. If you are a broadcast house, your DAM may be an internal MAM or a cloud based Video Delivery Service (OVP) as opposed to an insurance company who might think of a DAM as a hosted Document Management System (DMS). What is your core business need becomes more important than isolated wants or external desires.
- The size and scope of your business can weigh heavily on the vendor you pick. Some solutions are more scalable than others, some are more open than and follow standards better that different solutions. Interconnectivity to manage and number of users to support can be a determining factor to a DAM solution.

A screen shot of a portion of the DAM solution providers is supplied here by the Real Story Consultant Group as an example of how difficult it is for those new to DAM to sort out solutions.

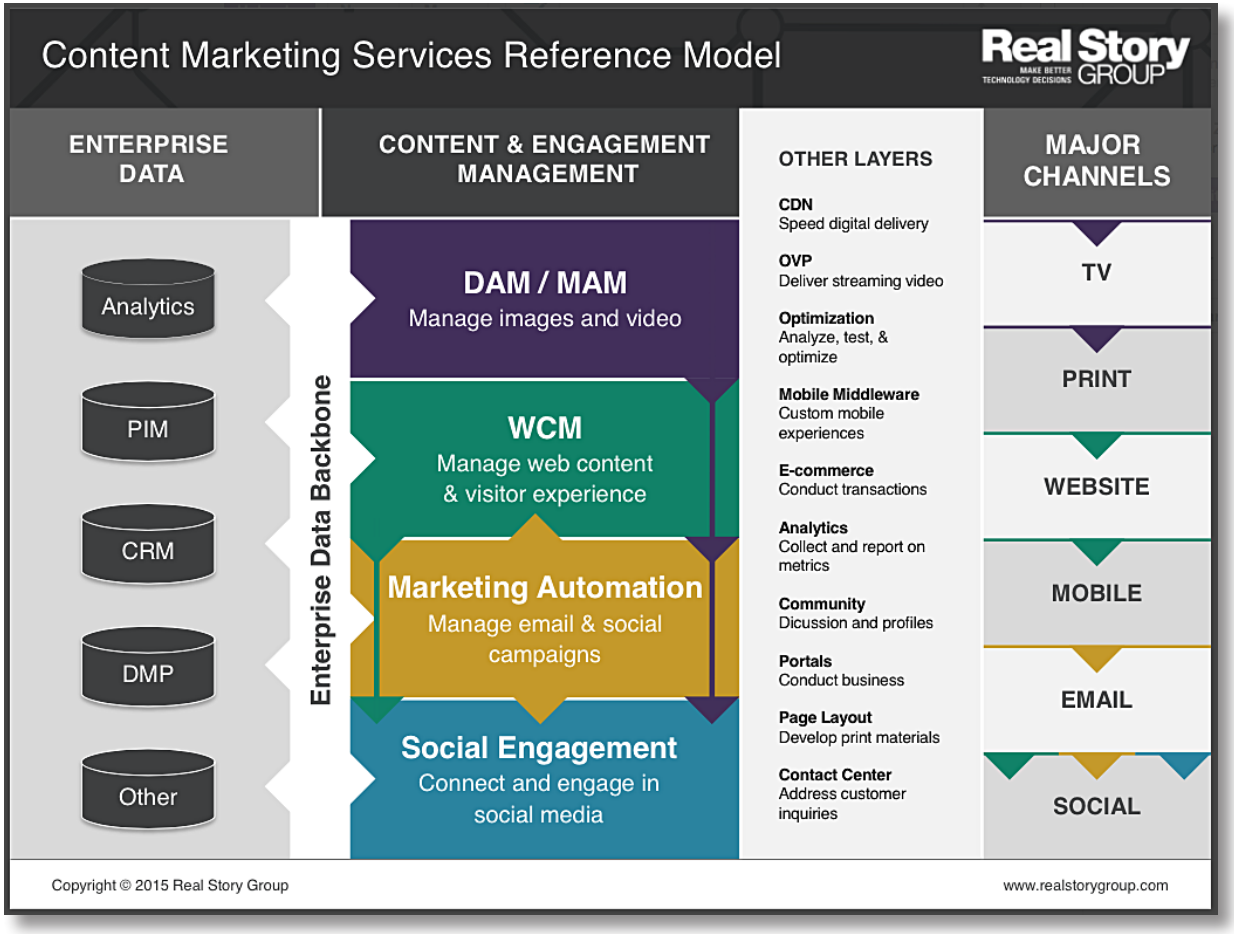


Ten Core Lessons in Digital Asset Management:

Lesson 2: How to Structure DAM within Your Organization

- The DAM is the CORE component to your Business Information. It is "THE SOURCE OF TRUTH" and the one place to find the safe and fully documented assets of your company. How you implement your DAM can have a huge influence on the time to your ROI and expectations on its capabilities.
- While DAM is still in its infancy in many ways, it is projected to grow exponentially in business adoption over the next three decades. Business leaders often find it difficult to find ROI with DAM systems, but its becoming more recognized that DAM will be required to meet the needs of responsive and nimble organizations.
- Enterprise data such as analytics, PIM, CRM and others should be fed and feed into your DAM.
- DAM feeds your CMS systems, Marketing Automation and Social Engagement Channels.
- Your DAM needs to be metadata rich, easy to navigate, accessible for your employees and secure within your infrastructure.
- Your Media Channels like Television, Print, Web, Mobile and Social need to be tied into and synced to your DAM to keep your intellectual property safe, provide a common branding platform and give you the reporting you need to quickly adapt and support your core business needs.
- Not implementing your DAM fully, or incorrectly building processes to utilize and leverage its information, is seen as the largest loss of unrealized ROI for any DAM implementation project. Good people and processes pay for themselves.

DAM implementation slide by the Real Story Consultant Group.



Ten Core Lessons in Digital Asset Management:

Lesson 3: You're Unlikely to implement DAM Successfully without these People in your Organization

Staffing for the Information gathering, Project Management, Technology Infrastructure and the Business Rules of DAM will lead you to success if you can identify and nurture these key personalities for the project. Without all of these people, your chance of success dwindles rapidly to below 12% with the loss of any three.

A successful DAM is about workflows and people with processes and governance:

The Consultant - The consultant is your source of knowledge. They help you navigate the uncharted waters of DAM vendors, your core needs and wants and help you develop a plan to pick the best solution. They will need to be able to take your vision and document it in real terms that DAM vendors can understand. They can greatly reduce the time it takes to pick your solution and keep you from making mistakes that will cost your organization large sums of money in re-work, scope creep and failed expectations.

The Sponsor - This person funds and provides the vision for the implementation project. The sponsor if often the CMO/CIO or the CTO who identifies the need for Asset Management and can see the problem solving abilities of DAM.

The Champion - who will lead the charge? This needs to be an internal person who has seen the light! They are passionate about the potential of the DAM, can readily see its promise and can communicate the vision to the various departments within your organization. This person is often driven by production needs or Marketing needs and is willing to role up their sleeves to work out the process and "get-ur-done".

The Librarian - The organizer and tagger of all the information. This person is tenacious about finding the important company assets, networking with other departments and offering the digital filing cabinet to the departments who can benefit from organization and data tracking. They are a collector who strives to provide order where none existed before.

The Governor - This impartial person grants the access to the various systems. The governor is very responsible to make sure that the DAM remains the first and best place for the company personnel to go for the relevant files they need, and they see only what they need to see. In large, complicated systems or publicly available DAMs, this person is key to security and managing group access rights.

The Vendor - This is your integrator and your trusted ally that you have partnered with once you have picked the DAM system of your dreams. They will need to spend many hours with you listening and asking questions in order to tailor the installation and implement your vision across the company. They will need to understand the people, the hardware and software; or know those who know better than themselves to do the job right and attend to the details. In the long term, your vendor will be your source of support and future integrations, so pick one that is looking for a "Long Term Relationship".

From Mark Davey's (President of The DAM Foundation) speech on DAM and Web 3.0.

Ten Core Lessons in Digital Asset Management:

Lesson 4: Bringing DAM to the Omni-channel is Very Challenging to Integrate with Current Technologies

Fragmentation and lack of standards has lead to industry based segmentation in DAM. Companies that specialize in bringing messages to the Omni-channel will have an extremely difficult time in structuring a DAM to handle the demands of Video, Print, Social and Mobile channels. There are NO centralized solutions at present that handle all of these channels well, or even at all.

Video Challenges:
Most systems that handle video well are further segmented into: 1] Online Video Platforms (OVPs) offering streaming hosting, 2] Channel Distribution Networks (CDNs) that specialize on handling the sending and tracking of video assets to broadcast stations while others 3] Media Asset Managers (MAMs) specialize in the seamless management of video creation from Non-Linear Editing Platforms (NLE's) to the internal video libraries that track video assets. All three segments have some to little crossover with each of the other segments causing large amounts of work in re-keying information and managing assets across multiple systems. This does not exclude the time and money it takes to network these systems together with Comcast, Netflix, YouTube and Brightcove being examples of the challenges for getting this content into the hands of consumers.

Print Challenges:
While print technologies and support for static file formats is by far the most supported and mature, there are still many examples of difficulties that exist in the DAM systems that handle print workflows well. Print file formats can support the embedding of metadata for the most part (thanks to Adobe), but once an image has been released for use, there is little that can be done to pull it back or remove it from outside usage. It is still difficult to track restrictions and rights information on composited images (Photoshop and PDFs) made from multiple source images. And while PIM and Print DAMs are becoming more integrated, it has not been widely implemented in most companies. Another deficiency in print has been the ability to gather relevant analytics to capture readership numbers, time spent on articles and follow-up to articles. In some ways, digital tie-ins to the print articles are being leveraged to bring more data and social-like experience to print consumers.

Social & Mobile Challenges:
Many DAMs have limited or little access back and forth from the social channels and getting the feedback returned to the DAM for analytics. For those who have decided to build a DAM based on Social needs, they do little with high resolution files and/or complex video needs and have no integration with production teams while leveraging marketing needs instead.

Intellectual Property Challenges:
Some DAM systems handle Intellectual Property Rights [IP] very well, but little else, and are designed to plug into other DAM and CMS architecture. The handling of IP in video and print images can be very difficult because of the inability of metadata to travel within video assets and the compositing of multiple assets together to create final artwork. Most DAM systems have some notion of IP but there is often an organizational disconnect between the financial departments, legal departments and the actual DAM librarians who input the metadata. In addition, displaying the various types of restrictions in these assets can be difficult to tag across the final assets and track throughout the life cycle of the files on multiple systems. While some major corporations are working with facial and product recognition technologies to help automate tagging the vast amounts of content that already exists, it is still very cost prohibitive to implement these new technologies in-house.

Organizational Challenges:
In the next decade companies will be re-defining the departmental structures which can be a hindrance to implementing DAM properly. How this will be handled will be seen as a key component to the success of the company and its ability to quickly adapt to the marketplace/omni-channel needs. Questions like: "Who is in charge of the assets?" and "What department owns this?", will help drive the internal philosophy of DAM. Already, some companies have moved away from an SVP for each market segment to having an SVP of Analytics and of Content who report directly to the CIO. Other companies will utilize the role of the CMO to leverage the DAM within their organization. Corporations will restructure to bring DAM to the forefront of the organization for marketing, PR, Legal, the monetization of assets, and core business responsiveness.

Ten Core Lessons in Digital Asset Management:

Lesson 5: Sorting Out What You Need from What You Want

Everyones idea of Digital Asset Management is somewhat skewed to their own business needs and experiences. To an insurance company, a DAM may be nothing more than a Document Management System (DMS), and a database of customers. When moving small amounts of data [under 30Mbs] a DAM can live in the cloud. If you are consistently pushing large, high resolution files with evolved and varied content, your DAM should be on premise. Here are some guidelines for sorting out a solution.

Limitations of Cloud Solutions: Speed, and then there's speed, and – oh yeah – Speed. Always remember that the cloud is not some magical place where your data is saved. In reality, its just someone else's server that you are paying to use. And, like working remotely, it will only be as fast as your connection speeds and the limitations of networking. The big thing that is often forgotten, is that its very difficult to build documents (Print, video & Presentations) in the cloud, because most programs want to link to file systems to build files and not web-links. Some cloud based systems can get around this, and the landscape is evolving.

Difficulties of On-Site Solutions: Anything you purchase to live on-site will need to have adequate horsepower to deliver the assets quickly, manage the access rights and have 99.5% uptime. Do not forget to staff internally for maintaining the system, the network, software updates, securing backups and make someone responsible to have the system meet your expectations. If no one is in charge of the DAM hardware/software solution internally, it will never be the system you paid for or wanted. Factor this into the cost of maintaining a DAM. If you are not ready to pay for a good person or team to make it a great solution, you might want to stick with cloud based systems. Don't forget about turnover and aging equipment as well.

Video Platform Needs: Video offers a whole host of challenges, from trans-coding formats for distribution, to tracking and managing where the content lives and who has access. There are many systems that do parts of this well, but I have yet to see a completely integrated solution for video from conception to distribution that exists. Beware of sales people who always say yes, and stick to what your core business needs are for a solution. If you are a large video distributer, you may need to settle on more than one management system to fit all your needs.

Embedding Data: Does your system need to embed your data in the assets themselves or is the search engine good enough? If you plan on sharing assets between systems, companies or with the public, you might want to considers systems that can embed the data into the assets for sharing (if the file formats will accept it).

Streamline Production Processes: If your production teams have to use the DAM to check licensing, search for files and projects, browse for ideas or pickup old projects to re-purpose them, you would be wise to invest in DAM solutions that streamline these processes to the production process. This point becomes the difference in many companies who successfully implement DAM practices vs. those who use the DAM like a data warehouse. A living, useful, Asset Management system becomes much more relevant when it streamlines processes in production, helps define usage rights, shows employees what they need and does not become relegated to old projects and archives only. This is where you will truly see and ROI.

Searching & Reporting: This is reliant on good metadata and possibly good file naming conventions. Though I greatly prefer metadata over naming, both can be useful. Always remember that you need people in your organization to be responsible for both, beholden to all the other employees and have the ability to remember that the metadata they add is not just for today when everyone remembers it, but for a year, to years later, when everyone had forgotten what was going on. Archiving of outdated files (ROT) is an critical consideration as well.

Social Media Tracking: Few systems do this well, few systems are really focused on Social Media, but it is evolving quickly. If this is your primary focus, keep an eye on your core needs and partner with that vendor who will listen to your evolving business needs, seems to understand where social media is going and has a road map to improve.

Legal Issues: If the solution you are looking at does not handle Legal, Licensing and Intellectual Property issues well, and out of the box, don't get it. This area of Asset tracking will become essential as more companies realize the monetary potential of the assets they already own. You may have clients who have expectations on documented security needs, so don't forget to meet and exceed your clients expectations as well. Include your Legal Department in the decision making process.

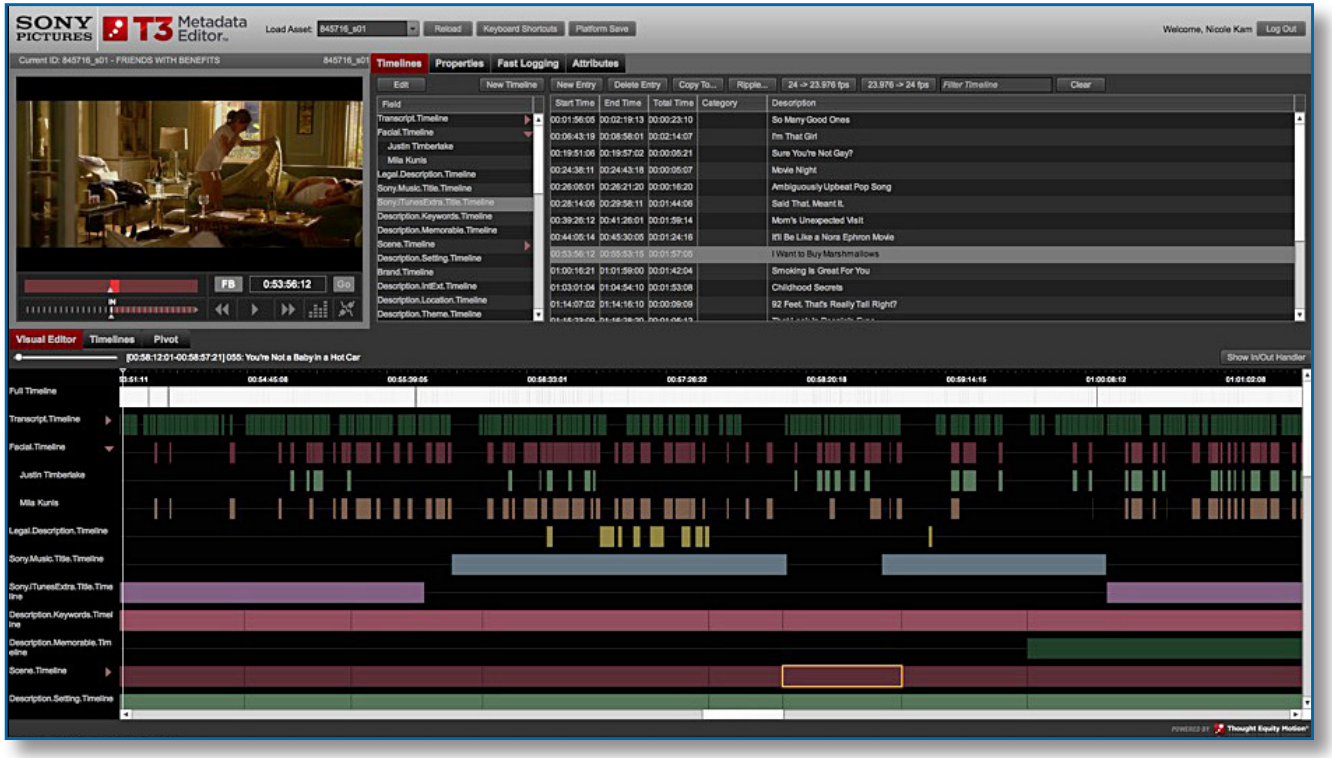
Ten Core Lessons in Digital Asset Management:

Lesson 6: How to Use DAM to Re-Monetize your Current Body of Work by Jason Lambert of Sony Corporation

Sony Pictures knew it had a problem. Apple called them when it was launching the first offering of its new iPhone and Asked "We are looking for video that has the actors saying "Hello". Can you tell us what you have?" After many days of work, they were only able to find 13 clips and out of those, Apple picked only one.

For any company working with, and monetizing media, program level metadata [data that defines the rights and descriptive information applicable to an entire program] has become an essential component of digital distribution operations. But as media companies look for new ways to exploit the individual scenes and moments that comprise those full-length programs, program-level metadata falls short. Time-based metadata [data tied to a specific scene, moment, or frame of a program] is key to unlocking the moment-to-moment context and secondary rights of content at a second by second level.

- At this time, Sony had no current DAM infrastructure and could find no products that easily tracked the myriad of licensing rights to a time-based motion picture tracking system, they partnered with Wazee Digital, who had developed a MAM IP tracking system to get what they needed.
- Each video is tagged with talent rights, actor identification, music rights, promotional rights, product rights and its contractual information across every second of video.
- Different rights and property licensing are visually represented by color information on the time-line to easily sort out the proper distribution rights and restrictions for each scene.
- With a fully tagged media library, requests for specific promotion materials increased 40 times over what they were currently experiencing in internal use and revenue form the re-licensing of current videos went up over 400%.



Taken from Jason Lambert, Executive Director of Content Licensing and Metadata Services, Sony Pictures Entertainment during the 2105 DAM LA show.
Image provided to me from Jason Lambert upon my request to keep a copy of his presentation.

Ten Core Lessons in Digital Asset Management:

Lesson 7: The 10 Core Characteristics of a DAM [by the DAM foundation]

1. DAM systems ingest assets individually or in mass sets, and allow for the manipulation of those assets and their metadata individually or with mass actions. This is accomplished in part by assigning a unique identifier to each asset on ingest.
2. DAM systems secure the assets they contain. Security in a DAM extends to defining access control lists (ACLs) for assets and defining roles for users accessing the system.
3. DAM systems store assets as both binaries and metadata. A DAM system can store multiple file types, and allows for the customization of metadata fields and the metadata in those fields attached to the stored files.
4. DAM systems render/transform assets on ingest into new forms, such as thumbnails or proxy files. The new forms generated on asset ingest via transformation should all be stored as asset parts of the original file uploaded.
5. DAM systems enrich assets through the extension of metadata and metrics regarding the use and reuse of the asset throughout its life cycle.
6. DAM systems relate assets by tracking the relationships between and among an original asset and versions/variants of the original. Version-ing and version control tools are central to an asset's life in a DAM system.
7. DAM systems regulate a structured process in the management, creation, and review of assets with workflow tools. Via programmed workflows, DAMs allow for a decentralized work force to collaborate together in a centralized system.
8. DAM systems allow for users to find assets and to retrieve those assets by facilitating search through metadata, collections, workflows, and access control tools. By increasing the discovery of assets that may not have been easily accessible before ingest, a DAM assists workers in leveraging existing content for maximum work potential.
9. DAM systems have a preview function that allows users to view assets before downloading or opening a file on their own device. By allowing users to take a look at assets in search quickly, without download, DAM systems reduce the amount of time users must spend in search.
10. DAM systems produce/publish content by providing methods whereby assets may be shared, linked to, or otherwise be distributed outside the system. This DAM function may be as simple as generating a URL on ingest or as complex as allowing users to build collections of items for sharing with a work group.

The following list was ratified by the DAM Foundation Board in Q4 of 2014 as defining the characteristics of a Digital Asset Management system. Systems that wish to gain a certification from the DAM Foundation as possessing all ten characteristics may apply to have their systems evaluated.

List of Vendors With 10 Core Certification

ADAM

Aetopia

Apollon

Bynder

Brandworkz

Bright Interactive: Asset Bank

Canto: Cumulus

celum

censhare

Comrads

Elvis: Woodwing

EnterMedia Software

eyebase

Fotoware

Equilibrium: Mediarich for Sharepoint

hyperCMS

IntelligenceBank

Marketing Content Hub

MerlinOne

NetXposure

North Plains Telescope

Nuxeo

OpenText
(Embeddable Metadata is a request)

Picturepark

Razuna

ResourceSpace

WAVE: Mediabank

WebDAM

Widen

Xinet

Note: Many brands marketed as DAM solution providers are not listed here because they did not make the cut or did not wish to be tested.

Ten Core Lessons in Digital Asset Management:

Lesson 8: Standards are Seriously Lacking Within the DAM Community and in General, Everywhere...

What is a DAM? Right now the only place on the planet that I have seen any kind of a definition of what a DAM should be exists with the DAM foundation. They are a small organization dedicated to bring DAM awareness to the corporate world with many resources at their disposal. The fact that 33% of the solutions providers that say they have a DAM solution do not meet the basic criteria of a DAM is somewhat indicative of the lack of standards.

- **Metadata:** While the ISO has implemented many metadata field and best practices papers, many DAM vendors do not support them fully, nor do many of the implement metadata extraction or embedding of metadata into their DAM solutions. The international community created metadata standards mostly for the tracking and documentation of journalistic activities and while the standards cover much of what, who, where, when and why. The creation of custom fields, and for the most part, custom data resides as an island resigned to each DAM solution. Custom metadata templates are difficult to implement and there is a disconnect between the way Google, Bing, Yahoo and other mainstream search engines find metadata and how DAM systems structure data.

- **File Format Support:** Each DAM provider decides what file formats it wants to support. While this could seem burdensome to support a certain list of formats, the larger point is - Why shouldn't all file formats conform to a standard for previewing and storing metadata within themselves? If there was a common preview format and metadata space that every file had to conform to, visually representing and searching for them across multiple DAM systems and search engines would become simple to support.

- **Web Standards:** Web browsers should have a group of broad standards that display uniformly. Web plug-ins should also conform to standards. Mozilla, Apple, Google and Microsoft should be forced to comply with the display and confirmation of HTML best coding practices based on the ISO. Websites should not have to be written multiple times to make themselves work on Internet Explorer or Google Chrome properly and the same with E-mail coding.

- **Video Standards:** There needs to be an international body that conforms manufactures, down to the Editing software, to standards for Video coding and codecs. Today, each manufacturer decides how to encode its raw camera video, metadata and compression algorithms. It is simply managed chaos. The only reason it works is because each manufacturer and each broadcaster dictates its specifications and creates plug-ins to decode their proprietary formats. In this major industry that moves terrabytes of data around daily, nearly 35% of industry time is spent on handling proprietary video formats.

- **Rights Management Standards:** The ability to embed rights & licensing information should exist in every digital file format.

- **OS Support Standards:** We have seen the web become the great equalizer for support of multiple OS's. The same needs to be true for file systems that work at the OS level. Apple, IBM, Google and Microsoft as well as the Unix/Linux community need to develop and institute a modern universal file system approach for file access.

- **Reporting Standards:** Many DAM solutions offer poor tools for gathering analytics on file use, trafficking and file reporting functions. Many of the solutions providers will help create the reports with additional cost and programming. This needs to be addressed. There should be a standard criteria that stipulates that all DAM's can run fairly robust reports that are generated from the database that drive their products.

- **Implementation Standards:** Easily accessible white papers should exist for those looking to implement DAM on the common things to look for, the personnel and the roles you will need to have in place, support questions to ask and the cost of owning a DAM. They should illustrate the benefits and drawbacks to certain solutions and be easily digestible by a fairly educated person.

Ten Core Lessons in Digital Asset Management:

Lesson 9: Networking is Incredibly Important

This lesson has a double meaning that I will illustrate. On the IT side of this statement, the network is an extremely important part to the successful implementation of any DAM system. You need to understand the difficulties of server workflows and not create undo difficulties on your user base to access their needs quickly. Also, you should have security systems in place so that you can segment the different DAM libraries for each groups usage needs. While many large corporations have good networking and security systems in place, many smaller and mid-sized companies do not.

The second meaning refers to networking with people in the DAM community. I witnessed how important it is for new-comers to the DAM community as well as the old-timers to share information on what is going on in their companies like: how different their needs are for DAM and what they plan to do with it, what issues they are having, why they are looking at certain solutions and how they plan to staff for managing their DAM. These discussions are invaluable.

The Company Network Infrastructure:

Invest in the key areas you need to be successful. If your DAM is largely cloud based, make sure you have access to high speed bandwidth with dedicated throughput to keep your employees productive. If your using uncompressed video and high resolution images in internal workflows, invest in fiber networks to maximize productivity and keep solid desktop/server/file permission structures in place to secure your data and protect your IP. Network lines, routers, networking security and virus software are often overlooked as being part of a well implemented DAM system.

The People Infrastructure:

Meeting and talking with representatives from The DAM Foundation, Sony Corporation, Disney, The Real Story Group, IO Integration and other vendors is priceless. The ideas you are exposed to and the thought and thoroughness of many of the presentations can be exceptional. Attend conferences and listen to consultants. Look to what other companies in your market have learned. You will find many examples of those who have failed to implement DAM well, many who have overspent and still more that have not figured out the correct staffing and procedures. This will lead you to an smoother implementation of the many ideas discussed in this document.

Image Credit (center left): Managed Services, Backup And Recovery, And Networking News From April 2015, by Mike Monocello, Business Solutions magazine
Image Credit (bottom left): Connecting With People That Matter To Your Business by Jason Aten. No original citation of the image was given in either case.

Ten Core Lessons in Digital Asset Management:

Lesson 10: Accurate Metadata is Critical to Your Success

Just because you bought a DAM doesn't mean that you are tracking the metadata you need to. Every company has its own acronyms, workflows, job processes and legal requirements. You will need to have a carefully vetted metadata schema to capture the information you need on a daily basis and you will need to realize that everyone should not have the ability to alter the data in the system. On top of that, not everyone needs to see the same information or finds it important for what they do.

- **Determine Your Metadata Needs**
  Work with your various departments to determine your metadata needs. Note that some departments may call the exact same title by a different name, or you may find that your various managers are tracking projects very differently and it may need to be adjusted to bring consensus. Don't be afraid to do what makes sense and helps to consolidate processes.

- **Listen to Your Department Leads**
  Listen to your core business managers who tell you what they have to be able to do, and how they need to do it. Try to use the DAM system to replace and remove other forms of tracking assets so that you can reduce time and paperwork. If the DAM is just another place to fill out redundant information, it will be a tough sell. Make sure they have vetted a list of requirements from their staff before they present their needs.

- **Keep and Compare a Metadata Schema with Your Department Managers and Your Clients**
  Keep an active list of the metadata schema you need to implement and work to keep it as small and simple as possible. Always remember to use defined lists of values wherever and whenever you can so that the data stays consistent and easy to search on. The more open text fields that are used, the more ambiguity on how to add data and find assets you will have. Work on bullet proofing your data and use taxonomy to help find relevant assets. Never forget that you are in business to serve your clients needs, not just your own.

- **You Should be Able to Easily Edit Your Metadata Schema**
  Pick a system that allows your internal staff to edit the metadata structures easily so that you are not paying programmers and spending months setting up a good schema and metadata templates. Your DAM System Administrator should have no problem doing this without consulting outside services. Changes will come to the metadata needs of your company, so be prepared to update your information in a timely way.

- **Set Up Metadata Forms for the Different Roles and Departments**
  Monitor the needs and priorities of the different departments so that they see and can edit what they are supposed to, and more importantly, they cannot change data they should not. Keep in mind that the Legal Department may want to have a metadata form that is very different from a Production Artist or Asset Librarian. Make sure to pick a DAM system that can accommodate the sharing of the metadata information but can tailor it to the users needs and your specifications. If this is a difficulty on the part of your solutions provider, you might want to consider looking at other systems. Look to your metadata to reduce the amount of work these departments have to do in order to save them time.

- **Stick to Metadata Standards**
  Stick to metadata standards whenever possible. The Dublin Core, EXIF and IPTC fields are interchangeable with many other systems and make it easier to share data to other departments, companies and to the public. If you need to use custom fields, you may want to consider these as in-house use only. If custom fields are mandated by your clients or your work, keep in mind that it may be difficult for others to use and see this data. The easy exchange of custom data still has a long way to evolve before it becomes simple to use.

Ten Core Lessons in Digital Asset Management:

Conclusions: The Hopes and Realization of What DAM will Bring in the Near Future...

Better consensus on how the handle metadata across multiple search engines, databases and files for the future...

New metadata schema to work across all platforms. The future will bring contextual data together from disparate systems to create a common cohesive answer to queries. Programmed agents will search through the schema and promote the weighted, relevant data to us providing the human experience to an un-centralized database. The Internet will become a relational database that the schema provides. This has already started to come true and it will lead to the better portability of assets and easier integration of DAM systems as well as seamlessly adding new feature sets for the end users.

Integration of Financial, PIM, MAM, KMS, PM and DAM systems together...

There are extensible markup languages (XML) that exist today, but in the near future there will be complete integration to Financial, Project Management, Marketing Analytics Systems and automated transfers of all this data into DAM systems through much simpler SDK's that leverage English like programming to talk to each other 24/7/365.

Automation tools and Artificial Intelligence (machine pattern matching) to handle the tagging of assets...

In the future there will be easier and more automated tools for tagging assets. More and more tagging of the assets will come from the data embedded inside them. More systems will come online that "recognize" faces, brand names, places, music rights, logos, emotional content and individual identities and will tag the files with this information automatically. It will then share the content out to the omni-channels in real time with about 90% accuracy to start. Most likely this will be a cloud based SaaS.

More companies will be utilizing DAM as a central component to their business strategy...

Tighter Focus of DAM into organizations to realize the potential of DAM. Ubiquitous use of metadata and crowd sourced information to tie together multiple DAM systems. There will be more concise road maps generated from the successful case studies of DAM implementations. Today, 60% of spending on DAM is done poorly. In the very near future, the spending on DAM will be concisely monitored and budgets on each step in the DAM process will be defined based on track records representing decades of experience. This will bring the cost to implement down drastically while also increasing the transparency of the benefits to DAM.

The buying of DAM solution providers by larger corporate entities will increase funding and focus on DAM solutions...

Recently, Esko (Pantone Corp.) purchased Media Beacon. This has already led to better support of packaging formats and is leading the way in revolutionizing packaging data printing and tracking. Northplains purchased Xinet and we are still waiting to see how this will change the DAM industry. This trend will continue with some surprising partnerships being created to battle the Google/Microsoft/Amazon juggernauts with most of the significant DAM providers being gobbled up.

Movement into cloud-based solutions...

While is it currently very difficult to leverage media production needs to cloud based DAM services, it is predicted to change. More DAM providers are offering cloud based solutions and partial cloud hybrid solutions (think Google drive). The key component here is networking file systems (AFP, SMB, NFS) to HTTP protocols based on URL structures. Adobe has already made the leap to cloud based production and if layout and video production tools are opened up to utilizing URL resources in a seamless fashion, your production server becomes the World Wide Web. In combination, all we need is an easy to integrate network compression technology that maximizes speeds out to the central communications backbone. This will deliver wired 1000Base-T networking speeds anywhere in the world. This is being tested is Russia and Isreal from the rumors.

The leveraging of Intellectual Property [IP] to maximize profit and visibility of assets...

Video, experiential, written, photographic and any examples of unique and worthy content will have its IP squeezed for every penny. DAM will be the center of tracking its usage and licensing to make sure that all revenue sources are fully utilized to maximize the profit potential for every asset. The populace will loose patience for old/not-relevant data more quickly.

Executive Actions:

Recommendations Based on Implementing DAM within your Company:

Its one thing to go and learn from the industry leaders on the latest potentials of DAM technology, but to apply it to in-house processes is the most important step to get the greatest ROI from Digital Asset Management, and its also the hardest part.

- **Build Relationships:**
  Use our current DAM, Production and Strategy personnel to create a team of technology minded stakeholders. Their job is to focus on DAM and reach out to the various consultants and sources listed in this agenda to stay current with best practices and learn internally from each other.

- **Ask for More Demonstrations:**
  Use your current partnerships and areas of interest to see the latest demonstrations. Bring in intersecting and thought provoking demonstrators to stay on top of the capabilities of the software you own and leverage it better to reduce the costs of upgrading and augment current capabilities.

- **Integrate Internal Systems:**
  Based on the lessons of the Real Story Consultant Group, integrate your DAM practices out to the CMS, Video and Documentation teams. Implement process governance to streamline the transfer of metadata and IP management across your departments and companies. Leverage the “Single Source of Truth”.

- **Staff for Success:**
  Make sure to have backup and cross-training between the various DAM/MAM/CMS administrators to find new ways of working, integrating and thinking about our “Sources of Truth” across our companies.

- **Keep New Developments Within Sight:**
  Keep practical and progressive thinking in place by following the DAM industry at the highest levels. Delegate internal staff to work together to keep you at the forefront of developing software and cloud based technologies. Always have a pool of internal knowledge at hand, to handle new business and organic growth opportunities that exist today, and in the near future. Push your current vendors to implement new feature requests that fit your business goals and your client needs as a group, at the top levels, as opposed to departmental individuals with separate agendas.

Thank You

I hope that you found this useful and can apply some of its ideas to your core responsibilities or at least have something completely different to talk about at your next cocktail party.

"If you can't figure out how to keep it, just DAM-it."

Glossary of Terms & Acronyms:

Terms from this document and from the Asset Management Community:

AFP - Apple Computer® File Protocol or Apple's network file sharing language.

Analytics - Tracking information that is the discovery, interpretation, and communication of meaningful patterns in data.

Asset Librarian - A person or persons who's task is to organize, share and tag the metadata on company assets and provide the relevant context of asset management.

The Cloud - A web accessed server that is maintained and owned by a cloud service provider like Amazon or Google.

CMS - Content Management Systems: This used to denote publishing systems that had the ability to re-code data to be used across the omni-channel, but it has de-evolved into mostly Web Content Management. I consider this to be a generic term with connotations in the Web Publishing business sector.

DAM - Digital Asset Management: A platform that allows the end users to search, manage and centralize assets to create a single source of truth in digital formats.

DAM Foundation - An organization dedicated to the development and evolution of Digital Asset Management.

Dublin Core - A subset of 15 standard metadata fields that are generic and usable in a wide range of applications.

DMS - Document Management System: A system that specializes in the collection, tagging and production of office/text based documents. Also called **DIS** (Document Information System).

EXIF - Digital photography metadata standards which stands for Exchangeable File Information Format.

Ingestion - the act of bringing an asset into a management system for tracking.

IP - Intellectual Property: The legal term for any/all files and assets that you have created or own the right to use.

KMS - Knowledge Management System: A generic term used to describe many varied file/data systems.

MAM - Media Asset Management: A server devoted to the creation and production of Video/Marketing content.

Omni-channel - The entire distribution and consumption of content across all publishing markets including social media, video markets, book markets, and electronic applications.

PIM - Product Information Management System: Platforms that specialize in tracking and tagging of product information and tying it to SKU/Serial/ID numbering to tie Engineering and customer data together.

PM - Project Management: A system that organizes and helps an organization track and manage its projects.

WCM - Web Content Management: A hybrid and subset of DAM and PIM that allows for the publishing and development of web browser based display of content.

Real Story Group - A consulting company that specializes in the discovery and classification of Asset Management Systems.

ROT - Redundant, Outdated and Tired information. It is a fact of life that databases become inefficient by inaccurate, incomplete or just plain wrong information. This greatly reduces their effectiveness and can undermine your entire effort.

SaaS - A software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. It is sometimes referred to as "on-demand software". SaaS is typically accessed by users using a thin client via a web browser.

Schema - A diagram or list of what your planning to implement. This is used to describe a metadata plan for the cascade of information and who has access to the metadata forms and what rights they have to see/edit the information.

SDK - Software Development Kit: a set of tools for interfacing between separate systems. Can also be called an **API** (Application Programming Interface)

SMB - Microsoft Windows® propriety network sharing language, also called Samba.

NFS - Network File System: A distributed file system protocol originally developed by Sun Microsystems® in 1984, allowing a client computer to access files over a computer network much like local storage.

Metadata - Information about the content and assets.

IPTC - A set of standard metadata fields that was developed by the International Press Communications Council.

OVP - Online Video Platform, i.e. YouTube and Vimeo are great examples.

VDP - Video Distribution Platform: A system to display video.

Versioning - The mechanism to track the changes of documents and files over time as they are revised.

XML - A standard for exchanging metadata information via the Extensible Markup Language.