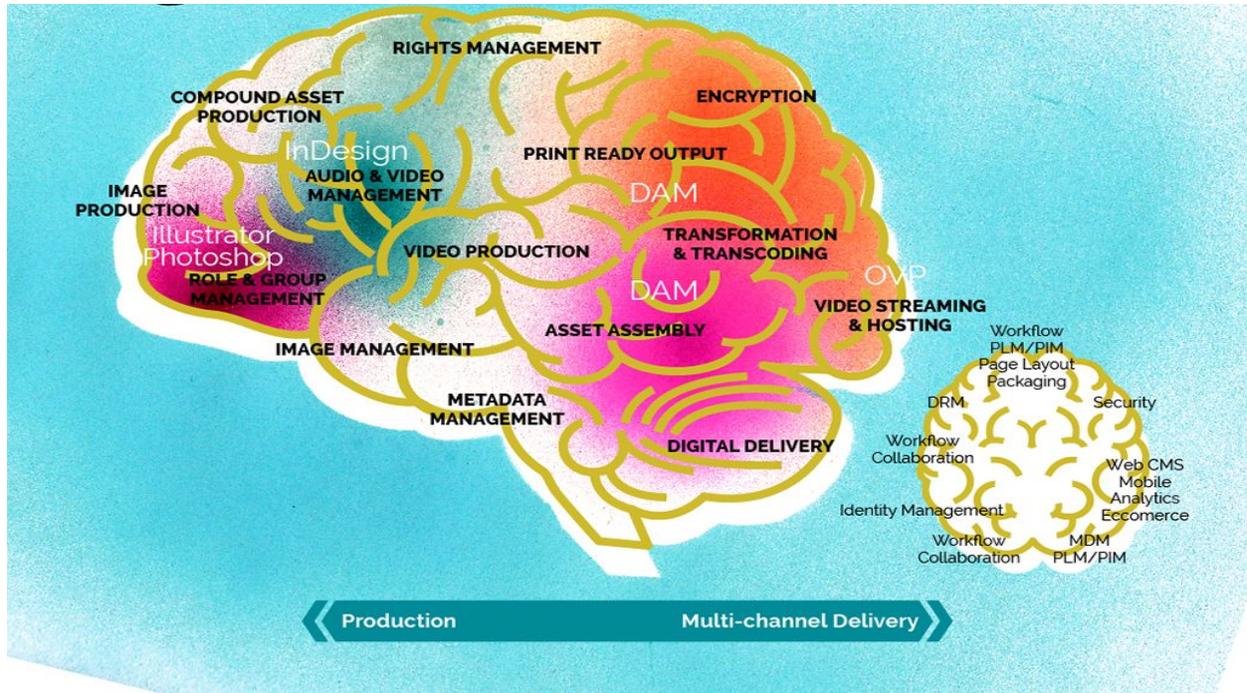


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Ten Core strategies to reduce risk when selecting DAM software

- Understand key components of DAM technology
- Align DAM software standards to your business strategy
- Reduce risk and optimise your business operations

INTRODUCTION

For modern organisations to excel at what they do, then the content they create, commission or license, needs to be mobile-ready, responsive, and readily consumed. The technology at the core of making this possible is Digital Asset Management (DAM). Digital Asset Management is software that when coupled with strategy helps organisations ensure their content is future-ready, flexible and reusable. DAM, when used correctly, is the foundation of an organisation's Content Information Architecture (CIA). Content Information Architecture is software infrastructure that aids content development and curation-- coupled with a strategy-- for distributing smart content across the web.

DAM software manages, utilises, and delivers data--specifically metadata. Using metadata strategically means that an organisation can rely on its information intelligence and track it as a

single source of the truth--ever more critical in the current zeitgeist of misinformation and 'fake news'. DAM can be thought of as a managed metadata engine that networks, connects, indexes, analyses, assesses, abstracts, categorises, organises, relates and presents digital media files.

As the relevance of DAM technology to all verticals, in all industries, has become apparent, larger analyst firms have started to cover the technology but focus on DAM as an add-on to marketing technologies. Buyers of DAM software should be aware that this analysis is by no means broad, comprehensive, or necessarily vendor agnostic and tends to cater to large enterprises with deep pockets. The plethora of comparison sites driven by crowd-sourced customer reviews, jumping on the DAM bandwagon while struggling to combat algorithm gaming, only compounds the confusion. One of the persisting and fundamental problems with DAM is that, though it is no longer an immature industry, standards have not been promoted sufficiently for DAM to gain as much traction as it should.

Buyers of DAM software can reduce risk if they are aware of the Ten Core characteristics of Digital Asset Management technology.

Any organisation, both small and large, cannot function optimally unless it has a bottom-up strategy with data at its core, guided by the needs and expertise of its employees. All too often we see the exact opposite: a top-down solution where money is thrown at the problem, there's no strategy in place and no consideration for the underlying data or the people within the company.

Numerous products in the content management marketplace have some features that have similar functionalities to those of Digital Asset Management software, and are often advertised and sold as such, when in reality they simply don't have core DAM functionality. This matters because the metadata engine that is DAM, is at the heart of, and holding up, overarching and vital business information.

When selecting DAM technology it's good practice to be aware of key DAM functionalities so you can relate this to how you will govern use of the technology and how your people will manage it; as well as how it relates to your business critical workflows. This paper lays out the ten basic functionalities DAM software must be capable of to be truly considered DAM and how it relates to your people, information, systems and processes.

THE TEN CORE DAM STANDARD

Ten Core is a standard, possibly the only recognised standard, in the Digital Asset Management industry. Back in 2014, discussions between leading industry professionals and the DAM Foundation¹ led to "The Ten Core Characteristics of a DAM System", an agreed upon

¹ Short description of DAM Foundation

conclusive list of functionality necessary for software to be truly considered Digital Asset Management software. IQ Equity ² devised a certification process and in collaboration with the DAM Foundation, have accredited 35 vendors since September 2014. [A list of these Ten Core accredited vendors can be found here.](#)

Ten Core has gained traction amongst DAM professionals, within the DAM 'blogosphere' and vendor community. As was intended Ten Core has become a reference point for DAM functionality, which users can look to for guidance and vendors can reference to demonstrate competence.

The fact that Ten Core covers the fundamentals of DAM means that it should be part of your strategy when it comes to DAM selection, especially in a 'Bake Off' situation.

TEN CORE AS A STRATEGY

One of the toughest challenges for marketers, creatives, archivists, brand managers, and the C-Suite is learning the language of DAM. We don't mean there's an actual language barrier—although sometimes technical language and acronyms can be daunting--but it is useful to have a basic understanding of the key functionalities of Digital Asset Management solutions.

This will help you communicate the benefits of DAM within your organisation and will aid you when asking questions about the software in your dealings with vendors.

DAM is central to marketing technology. DAM is the engine that underpins everything you might want to do with the content your organisation owns, centralising and managing content, rich media, and image files as single source operational master files from which all things flow--whether it's distributing web ready content to your CMS, pushing visual content to your Product Information System or making strategic business decisions based on data.

Workflow or what we call Beyond Core³ is what you need to consider to decide which DAM system will serve your unique use case. Beyond Core includes Product Information Management, Work In Progress tools, Creative Operations, Marketing Automation, Web Publishing, Machine Learning, Content Based Image Recognition, Brand Management and Collections Management. It doesn't really matter what your workflows are, because if the system you are looking at doesn't have core DAM functionalities, ultimately it will not serve your needs effectively now or in the future.

² IQ Equity is a digital transformation consultancy based in the UK, headed by DAM expert Mark Davey.

³ Beyond Core is a component of The Codified Consultant™

What we focus on here are the ten common functionalities that any DAM system must be capable of to be considered Digital Asset Management software.

THE TEN CORE CRITERIA

Although DAM systems differ hugely in *how* they carry out these functions, the following list lays out *what* any true DAM software should be capable of doing.

- DAM systems **ingest** digital assets individually or in mass sets, and allow for the manipulation of those digital assets and their metadata individually or with mass actions. This is accomplished in part by assigning a unique identifier to each digital asset on ingest.
- DAM systems **secure** the digital assets they contain. Security in a DAM extends to defining access control lists (ACLs) for digital assets and defining roles for users accessing the system.
- DAM systems **store** digital 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.
- DAM systems **render/transform** digital 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.
- DAM systems **enrich** digital assets through the extension of metadata and metrics regarding the use and reuse of the digital asset throughout its lifecycle.
- DAM systems **relate** digital assets by tracking the relationships between and among an original digital asset and versions/variants of the original. Versioning and version control tools are central to a digital asset's lifecycle in a DAM system.
- DAM systems regulate a structured **process** in the management, creation, and review of digital assets with workflow tools. Via programmed workflows, DAMs allow for a decentralized workforce to collaborate together in a centralized system.
- DAM systems allow for users to **find** digital assets and to retrieve those digital assets by facilitating search through metadata, collections, workflows, and access control tools. By increasing the discovery of digital assets that may not have been easily accessible before ingest, a DAM system assists workers in leveraging existing content for maximum work potential.
- DAM systems have a **preview** function that allows users to view digital assets before downloading or opening a file on their own device. By allowing users to take a look at digital assets in search quickly, without download, DAM systems reduce the amount of time users must spend in search.
- DAM systems **produce/publish** content by providing methods whereby digital 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.

We will outline what each criterion means in terms of functionality and discuss how it relates strategically to your business operations. We will frequently refer to the DAM Maturity Model⁴ --an open source tool for companies and organisations to measure their Digital Asset Management effectiveness across four categories: People, Information, Systems and Processes. This will help you understand how the Ten Core relates to your business strategy and why it is a critical starting point in your Digital Asset Management selection.

INGEST

DAM systems ingest digital assets individually or in mass sets, and allow for the manipulation of those digital assets and their metadata individually or with mass actions. This is accomplished in part by assigning a unique identifier to each digital asset on ingest.

Ten Core certified vendors have demonstrated:

- There are different methods by which digital assets and metadata can be uploaded to the DAM
- Embedded metadata writing and extraction
- Bulk / batch actions and ingestion workflows

CONSIDERATIONS

Different methods of ingestion can be important strategic variables. We live in a rapidly changing world when it comes to social media and how we ingest data, so why should DAM be any different? Increasingly we expect personalised experiences, from the way we setup our smartphones to the algorithm-driven social media profiles we use that are effectively tailored to us.

The people in an organisation who use the DAM system are a fundamentally important consideration in any DAM project. Our first interaction with the DAM is often ingestion--are we an admin, a photographer, a partner, a creative and how does this impact the way we ingest content? Long gone are the days that FTP (File Transfer Protocol) was considered innovative,

⁴ dammaturitymodel.org

nowadays we want drag and drop, cloud access from a mobile app on 4G, we want to link Dropbox or Google Drive to the DAM system so we can search through our written content, we want to use the API to drag in content from the company CMS.

The DAM Maturity Model outlines the importance of information and particularly metadata, which impacts heavily on other parts of Ten Core, including *Relate, Find, Secure and Store*.

Without a strategic plan for metadata, which is enforced from day one of any DAM project, you will fail to truly reap the benefits of DAM. Without properly marked up content, you will continue to operate a disorganized silo, pay money to reproduce digital assets, your staff will waste time looking for content and you will have little to no control over what happens to your content once it has left the DAM.

One of the most common reasons a vendor's solution fails the Ten Core evaluation is the inability to embed metadata. Embedded metadata is fundamental in that information assigned to a digital asset remains with it throughout its lifecycle. Without the ability to embed metadata the digital asset only really has meaning within the DAM environment. Without embedded metadata we can't really call something a digital asset; it is not an asset to us, merely a file, as useful as any disorganized, hard to find, meaningless file that we might shove into a shared folder or leave on an external hard drive in a drawer. It is more important than just adding a few keywords for SEO. Metadata, in fact all data, is part of the story we want to tell about our content and is the basis on which all successful, mature businesses ensure that important content, digital assets and information are not destroyed. Some of the more innovative DAM vendors are starting to think of digital assets as entities, with information intrinsically associated, we must also start to think this way, and the first step is embedding metadata into our digital files.

Take away points

- Different ingestion methods cater to the differing work practices of your staff
- Ingestion from other software can be a crucial piece of the workflow puzzle and allow you to 'connect silos'
- Metadata is absolutely critical to any content driven organization
- Embedded metadata is the key to extending a digital asset's usefulness along its entire lifecycle
- Embedded metadata is increasingly used as an automation process, driving workflow, rights management, governance, creative actions and many other downstream processes

SECURE

DAM systems secure the digital assets they contain. Security in a DAM extends to defining access control lists (ACLs) for digital assets and defining roles for users accessing the system.

Ten Core certified vendors have demonstrated:

- Methods by which different users / user groups can be given differing levels of capability to perform actions on the DAM
- Admins are able to securely add new users and non-named users and/or that they have facility for SSO (Single Sign On)
- Rights can be managed via embedded metadata, notifications and expiration dates

CONSIDERATIONS

System security, firewalls and suchlike are important in DAM, however, in Ten Core security is about access, permissions and user management on the one hand, and rights management on the other. They are intrinsically related because both involve restricting what people can see and do. They differ in that access and permissions relate to what users can do in the DAM environment, whereas rights management also applies to what users can do outside of the DAM environment. We suggest that you should be thinking about both when it comes to strategy.

Any reasonably sized business needs to place restrictions on the release and accessibility of its content and therefore readily configurable internal permissions and secure access are essential. Users expect some single sign on functionality, temporary access and 'user types'; this takes us back to the idea of personalised experiences which can be tailored with permissions. More than that, it gives you control. We need to get out of a silo mentality where we throw all the content into a shared drive and forget about it. Control at the user and digital asset level has knock on effects when it comes to consistency (brand and otherwise), quality control, digital asset misuse and of course the wider issue of rights management.

Unfortunately extensive rights management is something that is missing from a majority of DAM systems. We are seeing more of the industry starting to integrate and develop rights management tools, highlighting its importance in your strategy. If we are truly to utilise DAM as the foundational technology in the storage and delivery of content, then it's important that we know where our content is being delivered to, who's using it and what they are using it for. Some DAM vendors are doing this, some are starting to, it's your responsibility to know where you're going on your DAM journey and act accordingly. In an ever more interconnected future

you need to know about your content even when it no longer resides in the DAM. Many enterprises have been subjected to multiple lawsuits for copyright infringement that they never suspected they were committing, that could have been avoided with a bottom-up rights management solution driven by DAM

Take away points

- Security starts with the fundamentals, if you tightly regulate your DAM, your digital assets and metadata from the word go, you will avoid issues later on
- User management can be an important component of user experience
- With the right strategy on DAM security you can maintain control for the entire digital asset lifecycle

STORE

DAM systems store digital 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.

Ten Core certified vendors have demonstrated:

- A range of digital asset types can be ingested and supported by the DAM
- Users are able to utilize metadata to turn content into digital assets via various means

CONSIDERATIONS

Storage is perhaps what you first think of when it comes to DAM. In the Ten Core we focus on the ability to handle different types of digital assets and metadata, and on customization. Customization refers to the ways in which it is possible to use metadata on the system. How the DAM handles digital assets and metadata is the foundational point for everything that comes after.

Many DAM systems started life specialising in one digital asset type and often DAMs will still lean towards a certain asset type when it comes to storing and interacting with digital assets in the DAM. These days, we expect some functionality with all common digital asset types,

however don't overlook its importance. Part of a successful strategy is knowing what digital assets you have, what format they take and then which DAM vendor aligns best with your needs.

We have already touched on the importance of metadata. Any DAM worth its salt will have ingestion workflows that allow you to markup digital assets in bulk. The more able DAMs will have what we'll call metadata profiling, which is any technique which aims to streamline the process of metadata markup, or personalize the experience based on asset type, user permissions or suchlike. We see long-established DAMs that are powerful but extremely complex and metadata configuration that requires extensive technical knowledge. DAM is no longer restricted to the tech-savvy IT professional or archivist, end users are often less technically-capable but require a similar degree of control over metadata administration. Your strategy is to decide where your business sits when it comes to complexity, flexibility and ease of use.

Take away points

- Be sure you know which digital asset types are most important to you and how well your vendor supports them
- Be aware of the type of people who use your DAM and their individual experience in storing and applying metadata
- An extensive capacity to apply an array of descriptive and instructive metadata should be considered alongside the ease with which metadata can be applied

RENDER / TRANSFORM

DAM systems render / transform digital 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.

Ten Core certified vendors have demonstrated:

- Thumbnail and proxy creation
- Some capacity for asset editing such as cropping
- Multiple transcodes / transformations are produced on ingest and/or can be requested on download

CONSIDERATIONS

All DAM systems must be capable of converting file types, changing image sizes and resolutions and making at least simple edits such as cropping. A level of automation of these processes is also required, the most obvious example of this is the automatic creation of thumbnails and video previews. The more capable DAMs have advanced editing tools and integrations and the ability to transform digital assets on mass.

This is the first area where you really need to focus on 'one version of the truth'. Successful operation of a DAM and use of your digital assets, requires a high level of iteration. The ability to create multiple versions, derivatives and renditions of digital assets is fundamental to making the best use of your digital assets and the tools at your disposal. What used to be specialist uses for DAM are now becoming ubiquitous--the creative process is a perfect example, with DAM now performing a central role in the production of rich content. In order to have a successful collaborative process, everyone needs to be on the same page, which is why we place such importance on inherent associations between the original asset and all versions and renditions thereafter.

Automation, to a large extent, creates these associations for you. Thumbnailing and the creation of low resolution previews are essential and have knock on effects when it comes to findability, preservation of high resolution originals and 'one version of the truth'. Some DAMs are capable of bulk editing tasks and some vendors are experimenting with machine learning initiatives to automate processes like metadata markup and editing. Although some of this may seem unnecessary now, you need to look 5 or 10 years down the line and decide which vendors are ready to take you on that journey.

Take away points

- The ability to convert files into different forms is no longer a 'nice to have' it's a fundamental DAM capability
- You should have a 'one version of the truth' mentality where digital assets and their versions, renditions and derivatives are all associated
- Creative workflows are fast becoming ubiquitous in DAM and you'll need to consider which DAMs will support your creative process be it through proprietary tools or through integration
- As automated actions in DAM become more numerous and innovative, you need to consider which vendors will continue to innovate and make your DAM more efficient and useful in the future

ENRICH

DAM systems enrich digital assets through the extension of metadata and metrics regarding the use and reuse of the asset throughout its lifecycle.

Ten Core certified vendors have demonstrated:

- Global data is held on site usage (downloads, traffic etc.) and preferably data on digital assets and individual users as well.
- As a minimum; that this data is available for download and preferably that this data can be used to create reports, graphs and tables in the DAM system, or by utilising a third party integration

CONSIDERATIONS

The term enrich is easy to misinterpret, obviously there are multiple ways that your experience can be enriched, through metadata and user interfaces for example. In Ten Core the focus is on the way that the DAM gathers data and how this data is used. It must be possible to access data on the system and the usage (downloads, uploads, versioning etc) of digital assets at the bare minimum. DAMs that perform better here have integrated analytical software, have developed proprietary tools and are tracking content in integrated software or through embeds.

To improve the operation of your DAM system you need to gather data on how it's being used. This goes further than simply looking at uploads, downloads and user logins, you need to track individual user activities, look at how easily people find content, look at what your content is being used for, who is using it and a multitude of other complex queries. The rise of 'Big Data' and Data Science in the wider world highlights just how important data is to organisations. With the right tools you can discover what is not immediately obvious, improve working practices and improve the way your content is delivered.

Reporting and analytics is an area in which many established DAM vendors score low. It's important for you to know what data the DAM captures, what form that data is stored in and whether the DAM has tools available to analyse and report upon it. Depending on how complex your workflow requirements are you may also need to find out what data is being captured from external sources as well as integrated software. Don't assume that all DAMs are made the same, the depth of integration, strength of the APIs and the use of certain architectural components like Elasticsearch all contribute to a vendor's success here.

Take away points

- The capturing and analysis of data in your DAM system should play an important role in improving how the DAM is operated and inform how your content is utilised
- DAM systems vary wildly in their ability in this area, so you need to be aware of which tools are available and what sort of data is gathered
- With the right tools and data you can answer complex queries and improve usage in ways that are not immediately apparent

RELATE

DAM systems relate digital assets by tracking the relationships between and among an original asset and versions/variants of the original. Versioning and version control tools are central to a digital asset's life in a DAM system.

Ten Core certified vendors have demonstrated:

- Digital assets can be saved as versions, accessible from the original digital asset, which can be viewed and reinstated.
- Other ways in which relationships can be created between digital assets
- UIDs are in use and how different versions are linked via these IDs

CONSIDERATIONS

Version control is a core feature that we expect from DAM systems. As we mentioned earlier, in true version control there is one version of the truth, i.e. one asset which might have multiple versions which can be accessed if required. Each asset must have a Unique ID number, versions will either share a UID or part of a UID, or the UIDs will be linked physically on the back end in some way. There must also be facility to create other types of relationships between digital assets.

DAM systems often fail Ten Core certification because they lack true version control. In order to collaborate effectively, version control must be present. Without it you end up in a disorganised situation where digital assets are misused, branding is inconsistent and nobody can find anything. Without it your DAM is little more than a storage medium and it's difficult to monitor the creative process. The relationships we create between digital assets during workflow, collaboration and creation are what drives a continued creative process in the form of reuse and repurposing but also tells part of the 'story' of the asset lifecycle. We don't just have a finished piece of content that is opaque and isolated, we have a record of all the constituent parts, all those involved in its creation and a wealth of other related content to access for anyone who might be interested. The most immediate benefit of versioning is that by having 'one version of

the truth' we know which asset is the version to use. Yes we can look at all the work that has been carried out up to this point but we remove the risk of people using old branding or unfinished content and a whole host of other issues relating to consistency.

Relationships outside of version control are important as well. Usually we create relationships with shared metadata, taxonomy and controlled vocabularies. We should also be able to construct more complex relationships so that less obvious associations are highlighted. For example we might want documentation to always travel with a digital asset, we might want to associate all the digital assets in a particular campaign, assign owners, link digital assets to external databases and a whole array of other relationships. This is another way to enrich our content, to encourage reuse and to share ideas more readily.

Take away points

- UIDs form the basis of maintaining associations between digital assets, versions and relationships throughout the asset lifecycle
- Versioning is a key part of knowing the 'story' behind digital assets, it is a form of audit trail for creative processes it is also central to having 'one version of the truth'
- Without true version control there is a greater risk of digital assets being misused or lost and greater chance of time and resources being wasted
- Encouraging complex relationships can have numerous unforeseen benefits around reuse and repurposing of content

PROCESS

DAM systems regulate a structured process in the management, creation, and review of digital assets with workflow tools. Via programmed workflows, DAMs allow for a decentralized workforce to collaborate together in a centralized system.

Ten Core certified vendors have demonstrated:

- Processes can be streamlined utilising workflows such as ingestion or review and approval workflows but preferably that there are multiple workflow options.
- Workflows can be tracked, regulated and assigned to different users (emailing notifications to users being the bare minimum)

CONSIDERATIONS

All DAM systems must have workflow capacity, although the complexity and form that this takes varies widely. Some form of ingest workflow and review and approval workflow should be

possible. Management of workflow is varied across the industry, but you should expect to be able to assign tasks to users and inform them of the fact. Traditionally DAM has been less workflow driven than other software, but organisations that manage their content optimally, have realised that DAM is the foundation of business strategy-- and that workflow is therefore a key consideration when selecting a DAM system.

The exact nature of your workflow requirements obviously depends on the nature of your business. Your main decision when it comes to workflow is how much of this you intend DAM to be in control of; this decision must be made regardless of whether the workflow tools are proprietary or integrated. Many DAM systems have a sweet spot in one particular area, be it marketing, packaged goods or audiovisual management, and vendors either develop proprietary tools, or focus on integrating a particular subset of third party workflow tools. It isn't always immediately obvious how proficient a DAM system's workflow tools are and we would recommend in-depth assessment later in the procurement process. First, however, you must establish primary areas of suitability, such as the ability to handle particular file formats and metadata standards, the underlying technological architecture, your existing workflow software and whether the vendor supports it, as well as things like geography and potential cost of ownership. You then need to compare solutions side by side, look at how well integrated software is and how pervasive workflow is in terms of versioning, relating content, metadata markup, user administration and the capturing of data. All of this will help you to maintain 'one version of the truth'.

The management of workflow is another important consideration. Every vendor will claim to have workflow tools, but the ability to offer a dedicated space for workflow which encourages collaboration and allows tight grained administrative control is less common. Something we increasingly see is integration with creative operations, proofing, and project management software such as ProofHQ, Workfront and ConceptShare, which provide annotations, and review and approval capabilities, among others. Some vendors rely more on their own 'Workflow Dashboard', in both cases you need to look at users' ability to communicate and call to action, how easily and to what depth workflow can be tracked and monitored, as well as the level of automation and workflow 'triggers' available. The Ten Core can only take you so far with workflow and this is an area we go into more detail with elsewhere in 'Beyond Core' ⁵.

Take away points

- Workflow is moving from downstream technologies such as CMS and PIM, and is increasingly under the remit of DAM activities
- Part of realising DAM's potential as the foundation of your technological stack should be to realise that workflow should be managed by DAM even if the legwork of the workflow process is carried out elsewhere

⁵ Beyond Core is a component of The Codified Consultant™ where Ten Core certified vendors' DAM software is evaluated for workflow.

- Workflow is complex and it is more difficult to make comparisons between vendors, so we suggest that you reach a shortlist of vendors who satisfy your fundamental requirements before in-depth workflow assessments are carried out

FIND

DAM systems allow for users to find digital assets and to retrieve those digital assets by facilitating search through metadata, collections, workflows, and access control tools. By increasing the discovery of digital assets that may not have been easily accessible before ingest, a DAM assists workers in leveraging existing content for maximum work potential.

Ten Core certified vendors have demonstrated:

- All metadata can be searched for and that it is possible to set up advanced searches and/or search queries (boolean logic for example).
- There are multiple ways to organize digital assets and then to navigate through the system. Taxonomies, lightboxes and saved searches are examples of features that aid in navigation.

CONSIDERATIONS

DAM systems have a search facility built in. We are looking for a little more than simple search. Filters, queries and boolean operators are examples of the type of things we now expect. Search should also be made more efficient with stemming, 'fuzzy search', and search facets. In terms of navigation, we expect that there is some fluidity in navigating around the DAM--that there is more than one way to move from one place to another. Navigation is also affected by the UI, with dashboards, widgets and more personalized user experiences becoming ever more common throughout the industry. Thus the ability to 'find' is less straightforward than it might seem and is an important consideration.

Your search requirements rely to an extent on your workflows and the nature of your business. Knowing the functionality you require will again involve looking to your staff and the way they locate content, for example a photographer and product manager are likely to have very different ways of finding content. The underlying technology should be considered, ElasticSearch⁶ and other recent iterations of Lucene and Solr are expanding search from a locate and return medium to something more intelligent that captures and utilises data, increasing your ability to enrich and improve the DAM.

⁶ Elasticsearch is a distributed, RESTful search and analytics engine.

Vendors are experimenting with machine learning; recognising features within images, reading text from scanned documents and speech to text on video. These are all examples of tools which increase the findability of content without human input. You might need to consider how useful these cutting edge technologies are to you, but perhaps more importantly how useful they will be in a few years. We are moving away from the keyword-driven search of Web 2.0 and into a more semantically driven, intelligent search. Perhaps a simple search will do for now, but innovative and forward thinking customers and vendors will be looking for where they want to be further down the line. Finally remember that both pre-and-post implementation, proper metadata management and establishing the correct relationships must be a major part of your strategy when it comes to finding content.

The Ten Core looks at core functionality and focuses less on UI/UX and other more intangible considerations. The ability to navigate around the DAM has functional considerations such as those outlined above, but relies also upon the 'look and feel' of a DAM system. As mentioned previously, you will need to strike a balance between functionality and usability and nowhere is this more apparent than in the way someone navigates the DAM. All too often a lack of navigational structures and a reliance on rigid folder structures makes a DAM system feel dated, even if the DAM is functionally capable. In a reasonably sized organization you will have a spectrum of user types and UI/UX must try to support the needs of the entire spectrum.

Take away points

- You must once again look to the people in your organization to discover the tools and technology they need to find content
- UI/UX can be an important consideration with user buy-in and is likely to be as big a driving force as is functionality within certain user groups
- Search is evolving and you might need to be forward thinking in your approach here, working with vendors who are innovating rather than catching up

PREVIEW

DAM systems have a preview function that allows users to view digital assets before downloading or opening a file on their own device. By allowing users to take a look at digital assets in search quickly, without download, DAM systems reduce the amount of time users must spend in search.

Ten Core certified vendors have demonstrated:

- Images, documents and audiovisual digital assets can be previewed in some fashion on the DAM system

- Batches of digital assets can be grouped into lightboxes / presentation areas that can be shared internally and externally

CONSIDERATIONS

Once you've found a digital asset, you want to look at it. It must be possible to preview images, documents and audiovisual files in the DAM. Without this capacity DAM is nothing more than a file storage system where you need additional software to actually access your digital assets. Thumbnails and low resolution previews save both time and computational power as well as increasing findability, thus encouraging reuse and repurposing.

Depending on the typical use cases that a DAM vendor serves you might also be able to preview less common digital asset types, such as 3D files, dynamic Adobe ID and PS files, or scroll through multi page documents and single frames in video. There are organisations where such functionality is crucial, for example news publishing scenarios might require a fast turnover of prepress to postpress content and so need more advanced document preview capabilities. Another example is in creative-heavy and/or product-centric organizations where the need for Adobe ID and PS files would be much greater. For most organisations these are not essential and would be considered 'nice to haves' or something promised on the vendor roadmap.

Most DAM systems have a way in which a space can be created to look at batches of digital assets, it comes with many names, but lightbox is perhaps the most common. Lightboxes tie in with your ability to provide access to external users, along with workflow, as part of the approval process. It has long been a feature of DAM, but is starting to expand into more of a 'showcasing' feature and ecommerce space for purchasing marketing content. In the past this functionality might have occurred elsewhere but as we've said, DAM is expanding in its reach and what it's capable of.

Take away points

- The ability to preview and interact with a range of asset types is a crucial part of what makes DAM much more than just a storage medium
- More complex previewing capabilities should really be 'nice to haves' unless your organisational constraints demand it
- Previewing digital assets is an important factor to consider when it comes to workflow and the creative process

PRODUCE / PUBLISH

DAM systems produce/publish content by providing methods whereby digital 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.

Ten Core certified vendors have demonstrated:

- Facilities by which digital assets can be published or content utilizing digital assets can be produced on the DAM or via an integration or plugin.
- Digital assets can be published externally using embeds, unique links. Ideally these embedded assets should be managed, monitored and tracked by the DAM.

CONSIDERATIONS

Our final port of call looks towards the end of the digital asset lifecycle--the production of content for release and curation. As with search and workflow there is a lot of variety here, but we expect there to be production or publishing software within the DAM, or via an integration, and that there is a way to push content to a website (via an embed) or software system (such as a Content Management System).

The ability to produce and publish can be an aspect of workflow but also the endpoint, if this is the case, the specific tools you require will be linked to your workflow requirements. Possibly the most common publishing medium is CMS, indeed many DAMs were built from CMS and many others alongside one. The more proficient vendors are those who can pass content and metadata between DAM and CMS but maintain 'one version of the truth', where the DAM manages the content on the CMS. This is true of other mediums and highlights again the fundamental strengths that metadata, particularly embedded metadata offers all the way through the digital asset lifecycle. You need to assess how well your current publishing / production mediums are supported and how tightly linked the digital assets are to the DAM.

Embedding digital assets in integrated software, web pages and so forth reaps the same benefits as embedding metadata. Your digital asset has now left the DAM but you remain in control, your efforts in enriching that asset with metadata now dictates its usage. Taking inspiration from Martech software some vendors now track and monitor digital assets, gaining sentiment from social media and measuring success by views or downloads. This is certainly a growth area for the industry and should be something to consider if analytics and reporting are important to you. This all goes back to the idea of DAM as a foundation, the main control centre for all of your operations.

Take away points

- The endpoint of the asset lifecycle--the publication or production of content, should be governed by the DAM
- Successful production and publishing relies on you getting the fundamentals of DAM right - metadata management, user management and version control
- The information we can gain from embedded digital assets can be used to monitor success and sentiment, enriching our ability to produce more engaging content and deliver that content more effectively in the future

THE CODIFIED CONSULTANT

The Codified Consultant™ is an automated metric-based application and toolkit that aggregates DAM product, services and consultancy knowledge in one place. It limits itself to the DAM ecosystem, recognising DAM technology as the foundation stone of today's digital strategies. Technologies relevant to DAM are also covered but only in so much as they need to interoperate with DAM to realise distinct use cases.

The Codified Consultant™ uses Ten Core scoring and ranking data and provides a thorough fact driven drill down on DAM vendors and their solutions/systems. It uses the DAM Maturity Model to assess your start point then takes you on a journey from point A (no idea what I need, where I am or how to find out) to point B (I know what I want and I know where to go to get it). The best DAM for you will depend on what you want to do with it. The Codified Consultant™ uses the Ten Core functionalities of DAM as a strategy and then takes you 'Beyond Core' for your workflows. It helps you assess, plan, evaluate, purchase, implement, and govern DAM technologies and activities in a straightforward, cost effective and efficient manner--and according to your specific use cases.

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