

WHITE PAPER

Five Things You Should Know About DAM for Broadcasting



DAM, an acronym for *Digital Asset Management*, describes a process that creates a centralized repository for digital files containing non-textual content such as video recordings, still pictures, audio clips, and graphical images. DAM provides tools that allow the content (assets) held in those files to be archived, searched, and retrieved. The digital files are stored in *asset repositories* while associated *metadata* describing the content - including file locations, assigned IDs, durations, titles, descriptions, annotations, key words, and usage rights, along with low-resolution thumbnail images or proxy copies - are stored in *asset databases*.

Digital Asset Management is also known as *media asset management* (MAM), *digital asset warehousing*, or simply *content management*.

This definition is not specific to broadcasting, and in fact DAM found its early adopters in publishing long before it arrived at the broadcast facility.

While broadcasters have used asset management systems in the form of program tape libraries and news clip archives since the beginning of television, the advent of digital files as the primary media for video and increasing requirements for the repurposing of video assets have created a demand for more sophisticated asset management tools. In response to this demand, solution providers from several distinct application areas are now offering products for *broadcast Digital Asset Management*. Among them are enterprise DAM companies, automation software providers, editing and production system vendors, newsroom system suppliers, resource scheduling system providers, and video storage system manufacturers.

From these diverse perspectives, the scope and required features of broadcast DAM have been interpreted differently to leverage the technology found within each company's products. This has resulted in a wide range of products labeled as broadcast DAM, and a challenging evaluation process for the broadcaster. This scenario has both good and bad aspects. Good in that all broadcasters are not the same and therefore have different requirements for asset management, and bad since matching product

capabilities to operational requirements can be difficult, especially when many products claim end-to-end reach.

In that context, the objective here is to provide assistance in the DAM requirements and selection process. Not by evaluating or categorizing specific products, but by listing some issues to consider in deciding on a broadcast DAM solution.

These observations and recommendations are based on two years of focus on broadcast DAM as a product manager and solution architect. To the extent that it colors my perspective, you should also know that prior to offering broadcast DAM solutions my company's primary expertise has been in playout automation for transmission and news.

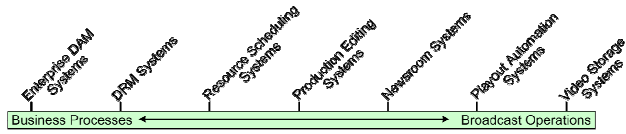
Here then are five things you should know about DAM for broadcasters:

(1) **DAM is a database *and* a media manager**

DAM solutions for broadcasters are offered by companies with several different views on what DAM should be. Understanding what the potential supplier sees as DAM is essential in selecting a company and product that can meet your current, as well as, future requirements.

At one end of this range are "enterprise DAM" providers whose solutions emphasize database capabilities, sophisticated indexing and search tools, and inclusion of or integration with business systems such as rights management. Their solutions are designed for use primarily in business and planning processes, not for broadcast operations or content production.

With few exceptions, enterprise DAM products do not control video storage, playback, or routing equipment, and normally do not provide content acquisition (i.e. ingest). In other words, they are designed to track and distribute information about content, not manage the content itself.



Focus of DAM by Type of Solution Provider

At the other end are video storage system manufacturers. Their stake in the DAM landscape is found in broadcast operations where their storage devices are located. From this perspective, DAM is primarily a media management tool and an extension of video storage technology. It emphasizes access performance, large storage capacity, and multi-format support. In the movement to IT platforms, video storage systems have added enhanced database capabilities and options for proxy creation. However, their capabilities in these areas are often severely limited as compared to database-centric and client-server platform DAM solutions.

In choosing a DAM provider, decide where your requirements and intended usage fall on this scale. There are always some uses (and users) that are exceptions in any broadcast operation, but your primary use of DAM should match the perspective of the solution provider.

(2) In broadcast DAM, the “A” is not just video

In parallel with the demand for repurposing of assets, broadcasters are faced with increasing competition within their traditional markets. For each distribution path and market (e.g. broadcast television in a major city), product differentiation has become an important tool for maintaining market share. Besides local news, branding in all its forms is one of the few options available to enhance the broadcast product. By branding in this context we mean not just the “bug” but also animated graphics, overlays, voice-overs, and effects sequences that make their mark in the viewer’s mind.

Many of the components of branding (stills, graphics, logos, animations, audio clips) are digital assets in their own right and should be part of your plans for DAM. While the media management capabilities of the devices that store and deliver these components currently lag behind those of video servers, that gap is closing. In other words, a solution for broadcast DAM today should include both video and non-video assets.



Next: NUMB3RS . . .



CBS “Eyeliner” uses logo, text and still with animated reveal

(3) Upstairs-Downstairs in broadcasting or what we can learn from enterprise DAM

In a broadcast business, the needs and objectives of management, planning, production, news, and operations define a widely diverse set of requirements for the use of DAM.

From their origins in other applications, enterprise DAM systems have developed advanced methods of database organization and indexing to provide sophisticated search capabilities such as keyword cross-referencing (i.e. “see”, “see also”), phonetic matching, Thesaurus, and word proximity criteria.

<p><u>Bush, George W</u></p> <ul style="list-style-type: none"> ▶ See: Bush, George W ▶ See also: Bush, George H W <p>...</p> <p><u>President Bush</u></p> <ul style="list-style-type: none"> ▶ See: Bush, George W ▶ See also: Bush, George H W; President of the United States <p>...</p> <p><u>President of the United States</u></p> <ul style="list-style-type: none"> ▶ See also: Bush, George W ▶ See also: Clinton, Bill ▶ See also: Bush, George H W ▶ See also: Past U.S. Presidents <p>...</p> <p><u>U.S. President</u></p> <ul style="list-style-type: none"> ▶ See: President of the United States
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Keywords Table with Cross-Referencing

Likewise, because of their wide deployment within an organization, many of these systems provide multiple forms of user interface (e.g. web browser or application GUI), and in some cases they include the ability to integrate DAM access components within related applications (e.g. a window to find and view an asset from within a rights management system).

These techniques from enterprise DAM provide a roadmap for broadcast DAM to deliver the capabilities required by each department via the existing IT infrastructure and systems.

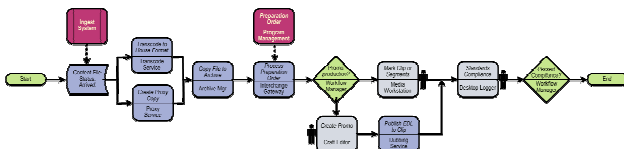
(4) Is DAM for the big guys the same as DAM for a small operator?

More *and* less...DAM provides tools that are effective for both large and small broadcasters, but the volume of content and the percentage of content in each category can vary widely.

The key to adapting DAM to each broadcaster’s requirements lies in workflow, or more correctly, *automated workflow*. Most DAM systems include some form of workflow management providing tools to define a sequence of processing steps (tasks) using the capabilities of the DAM system. Beyond defining a workflow of tasks within the DAM system, more advanced workflow managers provide automatic initiation of tasks, monitoring of jobs through the workflow, and the ability to include steps in the workflow that request tasks be performed by external systems.

For example, a workflow to acquire and prepare content for air will use several functions of the DAM system (e.g. content registration, metadata capture, proxy creation), but also requires tasks from other systems to control ingest, check scheduled air dates, verify standards compliance, and cache content files for playout.

A comprehensive, automated workflow manager within the DAM system is an invaluable tool in optimizing the use of generalized solutions to specific requirements.



A well-designed workflow makes the shoe fit

(5) Much of DAM is old news

From using index cards and tape to databases and video servers, news operations have always found ways to store and catalog their clips. With or without the acronym, this is DAM.

The ability to locate and reuse clips on a specific topic, or showing a particular person or location is a core part of news production. As with any “mission critical” function used by many people within an operation, these tools must work reliably and be usable without specialized knowledge. These requirements from news – both the functions themselves and the effectiveness of their implementation – will be essential for broadcast DAM overall.

The message here is to use the experience of your news department to assist in the evaluation of a proposed DAM solution. Even if initially they have no plans to replace their current news library system with the DAM system, their input on required functionality and ease-of-use can be invaluable. Many of the features that news requires are (or will be) among the features needed for DAM throughout your operation.

Some conclusions

DAM for broadcasters is here, although recent, and examples of successful deployments are still few. As broadcast technology merges with information technology, the proven benefits of digital asset management are close behind. Once all solutions for broadcasting are based on IT platforms, the access to and use of assets become business decisions, not technical hurdles.

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