An Evolphin Software Technology White Paper

Digital Asset Production Management System

Primer for Creative Organizations

Contents

What is Digital Asset Management

Digital Asset Management (DAM) has traditionally been defined as is activities associated with:

- Ingestion - importing files to a server while extracting thumbnails and metadata
- Storage - efficient centralized storage of digital assets
- Retrieval - browsing and searching for files based on extensive search criteria
- Distribution – repurposing, converting digital assets to suitable formats for distribution to internal and external users.

A digital asset is any multimedia content produced during the creative workflow. These include images, structured design files such as Photoshop and InDesign, audio/video files, animation, and text files.

Historically, DAM has been used to distribute published content such as logos, stock images or video footage to the wider organization, beyond the creative group producing it.

Automating the entire create-review-reject-iterate-approve cycle for digital assets is critical in ensuring the on-time delivery of creative projects. This is where the next generation **D**igital **A**sset **P**roduction **M**anagement (**DAPM**) solutions with production oriented user interfaces, automated-workflows, integrated version control are gaining traction with creative groups as well as the traditional users of DAM.

Types of DAM Solutions

Making it confusing for the uninitiated, there are a wide range of DAM solutions in the marketplace. These solutions can be put into five major categories:

- **Workgroup DAM**: Designed essentially as a web based image gallery, they are suitable for photographers or small workgroups with less than 10K files.
- **SaaS/Cloud-based DAM**: Riding the cloud computing hype, they provide digital asset storage on the cloud with a web based front-end. For digital files over 10MB, due to slow network transfer speeds, this is not a viable option.
- **Enterprise DAM**: Focus is on cataloging and distribution of static, published files. For an integrated company with creative teams actively producing assets does not offer the necessary production functions.
- **Version Control System**: After the demise of Adobe Version Cue, many version control systems for creative designers have appeared in the marketplace. These lack critical DAM functions such as visual search, asset repurposing, scalable storage architecture for large size and quantity of files.
- **Digital Asset Production Management (DAPM) system**: This is the new breed of DAM solution with production oriented user interfaces, automated-workflows, integrated version control, highly scalable back-end architecture. For an organization with an active creative group, this option allows entire creative process from brief to production, all the way into distribution to be streamlined.

DAM Category	Value	Cost	ROI
Workgroup DAM	**	$	$$
Cloud-based DAM	*	$$	$$
Enterprise DAM	***	$$$$	$$$
Version Control System	*	$	$
Digital Asset Production Management	*****	$$$	$$$$

Challenges for Creative Organizations

Growing Complexity

Creative design today requires multi-disciplinary teams composed of illustrators, graphic designers, art directors, animation artists, motion graphics specialists, account managers, copy-writers and external partners to collaborate.

In addition, reaching a global market implies factoring in cultural nuances to create great designs making the creative design workflow even more complex.

Productivity

The global economic climate is going through a volatile phase with organizations reluctant to increase headcount. Creative teams are particularly hard hit because creative process tends to labor intensive. Other aggravating factors such as poor collaboration between stakeholders leads to confusion, unnecessary work iterations, unbalanced workload amongst creative resources, and poor visibility into current creative jobs leads to misaligned priorities and thus, missed deadlines. The pressure to deliver projects on time with limited resources has managers focused on making the creative team even more productive.

New Content/New Channels

Targeting multiple channels including mobile, web, kiosks, eBooks and print simultaneously requires creative groups to keep the fidelity of digital assets on multiple devices and platforms intact. Multiple versions of a digital asset linked to the same master document need to be tracked. Ad-hoc file workflows based on naming conventions make it difficult to keep assets for multiple channels in sync.

Tools That Don't Scale

On average, $8,200 is spent per person, per annum on file management activities in the creative world as per the industry analysts. Asset management tools that do not scale with the explosion in asset size and volume aggravate the file management burden on both the creative teams and their IT support staff. Corrupt repository implies time spend restoring from slower archives/backups and possible loss of data as well as downtime that can cause project delays. Lack of archiving support means regular storage upgrades, which often require renaming file paths and links causing excessive disruption to the creative workflow.

Trouble Finding Assets

According to industry analysts, an average creative professional looks for an asset 83 times per week and fails 35% of the time. (DAM solutions drop the fail rate below 5%). Besides the time spent searching assets, inability to find the correct files leads to effort duplication – same artwork may need to be re-created.

Lack of Visual Versioning

During the creative process, designers may go through 20 or more concepts that they need to brainstorm with the creative directors. Based on customer feedback, the creative team often needs to rollback changes. Without a robust visual version control system, teams resort to copying, renaming files around. Too much time is spent in opening the file, previewing it in high resolution, to make sure it is the correct version. Delivery of wrong asset version to the end customer leads to poor end client satisfaction.

What to Look for in a DAM Solution

A DAM solution for a creative organization must include:

Robust Search

Without a visual search facility creative teams will find it a challenge to find the right assets. Many DAM systems provide only a browse option which doesn't work when thousands of folders need to be searched for to find the correct version of an asset. The DAPM solution provides searching in two dimensions – horizontal search across all the files and a vertical search through all the versions of a single file. A DAM without a fast, robust search is not much more than a pretty image gallery.

Visual Asset Management

Modern DAM provide a Visual Asset browsers with ability to track and display asset evolution over time; visual diff tools to visually compare asset versions, ability to render and cache high resolution previews of standard file types such as JPEG, PNG images as well as proprietary formats such as InDesign, Flash, Photoshop. Metadata management to allow automatic extraction of metadata, ability to search and modify metadata including custom fields is essential for any large creative workflow.

Integration with Creative Tools

Must provide extensions and plug-ins for popular creative applications like Adobe CS, After Effects, Cinema4D etc. to minimize context switching overheads and keep the creative workflow humming at digital speed.

Integration with the Desktop

Creative professionals need to work on multiple projects with a large number of files, a desktop user interface with tight integration with platform file browser like Mac Finder or Windows Explorer that allows the user to perform bulk operations like check-in or import is critical to enhancing productivity. A modern DAM should also provide configurable system tray alerts directly on the desktop to keep the user informed about changes to project assets.

Visual Version Control

For every version that is saved, the DAM should automatically generate a preview/thumbnail and version that as well, on the server. DAM should provide a desktop and a web based visual browser, that allows any user to zip through visual previews of each version without installing the creative application. Unlike traditional DAM systems, next-generation DAM must version thumbnails on the server. This allows for powerful visual search through asset versions from any desktop. In addition, a modern DAM has a preview server that renders and caches high-res previews for fast access.

Version Compression

Deduplication or adaptive version compression technology allows DAPM systems to store multiple versions of a large digital asset in a fraction of disk space required by traditional DAM.

For instance, evolphin Zoom can store for instance 20 versions of a 1GB Photoshop file in as little as 1.5GB, allowing for over 99% lossless version compression. Many version control systems from software world store textual differences but those do not have the speed and compression that deduplication technology built into DAPM provides.

Easy Collaboration

For robust collaboration in a multi-user global deployment, the solution must include the ability to track and manage exclusive locks to digital assets and to avoid conflicts as assets are modified. Change notifications via email or desktop alerts are a must, as well as the ability to preview changes made by team members without downloading the full file.

Workflow Automation Engine

Workflow Module that integrates tightly with asset versioning and asset repository is essential. The module should provide a Workflow Design tool – visual editor to allow project managers to model business processes as workflow templates, setup jobs with automatic asset assignment rules, alter a running job; Workflow Task Manager application to allow team members to browse tasks and their assets, sign-in/off tasks, check workflow job progress; web based workflow approval tool with a web editor to allow end clients the ability to review jobs and annotate visually the asset revisions generated during the creative workflow.

Archiving

Digital asset tend to be large compared to documents or software files. The volume can exceed 1 TB for even modest sized teams. Storing all the historical projects on the primary disk with this file tsunami can be costly for IT. Next generation DAPM provide an archive

manager that integrates with secondary storage such as LTO tapes. With this integration, miniscule amount of metadata is left on the DAPM server, while the file-data can be purged and safely stored in the archive. Using a restore workflow, IT administrators can approve or reject restore petitions.

Performance & Scalability

Must have a scalable database system optimized for efficient storage, searching & retrieval of digital assets. While it's possible to build many of the DAM features using traditional database technology, to achieve the scale and performance required by a large organization, a solution needs to go beyond off the shelf database systems like RDBMS/SQL abases.

Summary

Implementing a Digital Asset Production management (DAPM) system can bestow competitive advantage to the creative organization. It is a great opportunity for house cleaning – creative organizations need to address the immediate paint-points such as version control or asset distribution as well as take a more holistic approach to asset management. Failure to do so often entails revisiting the purchase decision and replacing the existing DAM system, which can be prohibitively costly as users need to be trained, existing data needs to be migrated and current workflows need to be reestablished.

Creative organizations need to look carefully beyond the traditional DAM systems that are optimized for finished or published files. This is where the next generation DAPM shines as it automates the entire creative lifecycle from brief through production to published assets.

Resources

Please contact our sales team and they can arrange for our technical experts to answer any questions you may have.

Our sales team can also provide customer case studies, business ROI reports upon request.