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A Phased DAM Approach

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Abstract

InfoTrends contends that organizations should approach Digital Asset Management (DAM) in small increments at a time, addressing the most pressing requirements and growing the solution to meet additional needs and provide more capabilities to users. This approach alleviates the planning and implementation hurdles encountered when implementing these systems, which are critical given the number and complexity of digital assets today.

To leverage this approach, organizations must select a DAM solution (and vendor) that minimizes the re-work and penalties associated with older DAM systems. This paper discusses the advantages of implementing a solution in a bite-wise manner and provides a sample strategy for DAM implementation, referencing WAVE Corporation's MediaBank solution as one suitable offering.

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Introduction

As the number and complexity of digital assets have increased, Digital Asset Management (DAM) has evolved from a compelling investment to a requirement for organizations to remain competitive and sustainable. From an infrastructure perspective, DAM is also a pre-requisite for the organization and efficient presentation of digital assets across fast-growing electronic channels (including Web, e-mail, and mobile touchpoints) as well as print.

Productivity and Hard Costs

Classic measures of DAM return-on-investment (ROI) focus on benefits related to worker productivity and basic asset management:

- Analyst firms estimate that 25-50% of knowledge workers' time is wasted searching for content, generally due to inefficient search capabilities.[1]
- These workers fail to find their content as often as 40% of the time, and as a result, users are forced to re-create a substantial amount of their content at exorbitant costs! [2]

As much as 70% of useful content is re-created![3]

Without a structured, robust, and automated system in place to manage digital assets, finding and using these objects requires substantial user time and expense:

- Searching for digital assets across traditional network stores is painfully expensive and inefficient given standard desktop search capabilities.
- Content is re-created time and time again at the expense of knowledge workers' valuable efforts.
- Transforming assets into usable formats requires knowledge workers to utilize several applications.

[1] InfoTrends, Butler Group, Forrester, Gistics Inc, et al.
[2] Ibid.
[3] Ibid.

- Users must manually manage versions of each object and continuously monitor this maelstrom of assets.
- Collaboration over digital assets must be handled manually – versioning and even the simplest review and approval workflows are managed by users.
- Comprehensive reporting on digital asset workflows, asset updates, and other changes requires significant time from knowledge workers.

By deploying a solution that provides a central repository, specialized search capabilities, and basic library services,[4] organizations can expect to drastically reduce most of these soft costs!

DAM has also been shown to reduce the hard costs associated with printing, storage, and archiving of digital assets. A solution that provides electronic annotation capabilities will reduce paper waste, and a central repository for assets negates the requirement for inefficient network stores. This repository, coupled with integrated archiving capabilities, also takes the burden off IT to locate and back-up these business-critical assets, which may have been previously distributed across several PC and network drives.

Revenue-Generating Activities

DAM is not only a cost-saving requirement for maintaining competitiveness, however. It is also the cornerstone for many revenue-generating activities associated with electronic channels:

- Web-based (remote) access to assets for printers and partners reduces "shipping" costs and presents the opportunity to leverage assets in novel ways more efficiently.
- Multi-channel publishing (e.g. print, Web, e-mail, mobile) presents significant savings to asset reuse and a sizeable opportunity for new revenue stream generation.
- Brand value is an increasingly important intangible for businesses, and DAM provides the brand consistency and agility to maximize this critical business asset.
- Leveraging richer digital assets such as Web-based video and Flash objects requires a content management solution that supports these assets without "add-ons," expensive custom development, or frustrating workflows for users.
- Solutions for digital asset-based processes, such as collaboration and publishing workflows, further reduce knowledge worker costs, boost business efficiency, and increase overall agility and innovation potential.

Despite the vast opportunities derived from complex implementations, the most immediately compelling "sell" for DAM continues to derive from the centralization and basic management of digital assets – store, search, and share. Driven by market factors such as globalization, multi-channel communications, and a faster pace of business in the modern economy, these capabilities are today absolute requirements for a sustainable organization.

[4] Basic library services (or basic content services) include check-in/out, versioning, object-level security, and basic auditing capabilities.

That said, most organizations are overwhelmed when they first consider DAM, especially when considering where to start. Do you implement a "point" solution for specific departments (marketing) or specific publishing processes (print production)? Is it necessary to develop an extensive (and expensive) content, process / workflow and metadata blueprint prior to deployment? More generally perhaps, what vendor selection and implementation strategies can deliver fast and significant returns without hindering future development opportunities?

With respect to DAM, InfoTrends contends that organizations should consider approaching small increments at a time, addressing the most pressing requirements and growing the solution to meet additional needs and provide more capabilities to more users. To accomplish this goal, they must demand a viable DAM solution that allows this approach without the penalties and re-work seen in the past. The following analysis discusses this argument in more detail and examines one vendor, WAVE Corporation, whose MediaBank DAM solution has been successfully deployed, developed, and integrated using this implementation strategy.

A Phased DAM Approach.

Modern, "loosely-coupled" IT infrastructures allow for content management projects to be broken down into specific requirements (such as basic content services) that can be addressed in turn without the penalties or significant re-work associated with heritage technologies.

Consider service-oriented architectures (SOA) in which IT systems and applications expose and share content, data, and services. Standard protocols such as SOAP and JMS (Java) provide the necessary communications between systems. Leveraging standard protocols such as these ensures the long-term viability and scalability of a DAM solution. Organizations can address the most compelling DAM requirements first – basic object management – and expand a solution as user adoption builds and more complex DAM-based applications can be developed.

Justification

There are several reasons an organization may be better suited to a phased DAM approach:

- **Budget**: A lower initial investment doesn't weigh down expenses, and executive buy-in can be easier to obtain.
- **ROI**: Solutions with native DAM applications demonstrate a clearer ROI model for initial implementations.
- **Initial Deployment**: An organization can grow a solution from a departmental repository to a business-wide corporate publishing solution as buy-in reaches a tipping point.
- **User Adoption**: Phasing in technologies gives users a chance to adapt; moreover, technology "champions" are more likely develop and act as conduits for further adoption.
- **Agility**: A solution based on open standards can adapt to more complex DAM applications and evolving infrastructures as an organization grows and changes.
- **Lock-In**: Open standards and a budget-friendly initial deployment prevent financial and technological lock-in.

Finally, DAM provides core functionality unique from that of other content management technologies:

- Search capabilities specifically tuned to digital assets increase search success rates and decrease search time.
- Asset transformation and conversion capabilities for images and rich-media encourage and speed the re-use of this content.
- DAM applications provide the previews, flexible layouts, and specialized tools for manipulating and leveraging digital assets in corporate communications.

It is unlikely that other content management technologies (document management solutions, for example) would include such capabilities. For this reason, it is critical to a business's competitiveness and sustainability to add these core features. By phasing in a solution that includes a robust native DAM application and relies on open standards, an organization can take fast advantage of substantial cost savings in basic object management without becoming overanxious about long-term DAM infrastructure requirements.

Vendor and Solution Requirements

The approach described above implies several requirements. Foremost, selecting a customer-focused DAM vendor with proven experience providing professional services and support is crucial. It is important to have a partner that understands your goals and objectives and remains by your side to accomplish them. Vendors that advance the use of their solutions by providing training, user conferences, or other customer-centric investments, for example, should be valued. Moreover, vendors with a background in printing and publishing will be especially helpful for organizations that plan on integrating upstream creative and downstream publishing solutions with DAM.

From a technology standpoint, a DAM solution that is phased in to the infrastructure must be based on an open architecture that can scale and integrate with the organization. While explicit support for SOA is preferable, a solution that provides a rich set of Web services or other SDKs and APIs[5] is absolutely crucial. To deliver fast results and ease initial implementation requirements, organizations should also consider the importance of highly-configurable and robust native applications for basic object management.

[5] Software Development Kits (SDKs) and Application Program Interfaces (APIs)

Implementation Strategy: Start with Object Management

Initially, an organization should establish a centralized repository and access point for digital assets, one fulfilling the "Manage" phase of the digital asset lifecycle. Capabilities necessary for this phase include the following:

- Basic content services, including centralized access to assets, check-in/out, versioning, auditing, and object-level security and permissions.
- Digital asset-specific metadata – image resolution, audio file length, or video proportions, for example.
- Collaboration capabilities for annotation or mark-up and basic review / approval workflows.
- Digital asset transformation services to speed re-use of assets across documents and channels.
- User interface appropriate for digital assets, including thumbnails and native asset preview support.
- Powerful search capabilities with a focus on digital assets.

At this point, native DAM applications provide the core functionality required to achieve the productivity results described in the Introduction. Moreover, digital assets are finally being organized, audited, and maintained under a centralized and managed model, a significant long-term benefit.

The Digital Asset Lifecycle

There are four broad phases to the lifecycle of any digital asset:

- **Creation**, including design of assets in creative software, asset capture (i.e. scanning or photography), and other methods of asset acquisition
- **Management,** including the storage, maintenance, accessibility, and sharing of digital assets.
- **Publishing**, including multi-channel distribution and production-specific needs such as JDF, proofing, and layout software support)
- **Archiving**, including asset expiration and destruction in accordance with corporate policies

Tying these phases together are workflow capabilities that, in a manual or automated manner, drive asset updates, collaboration and review / approval processes, and publishing campaigns to one or multiple channels. Finally, it should be noted that security requirements must be met throughout the digital asset lifecycle.

Once a DAM solution has been deployed and user adoption has passed a tipping point, an organization can expand its solution into the "Creation," "Publishing," or "Archiving" phases of the digital asset lifecycle:

- Extranets for partner and third-party agent access.
- Integration with design software, layout and publishing applications, and records management solutions, achieved using the aforementioned public interfaces and protocols or native capabilities.
- Process management engines and workflow capabilities to drive digital assets between lifecycle phases.
- Integration with downstream solutions, including catalog, e-commerce, marketing campaign management, and Web content management technologies.

WAVE and the MediaBank DAM Solution

One vendor that has demonstrated success with the aforementioned approach is WAVE Corporation, which offers its MediaBank DAM solution as well as integrated cataloging and publishing technologies. MediaBank provides the application architecture and content services that we have been describing as immediate requirements for DAM:

- Check-in/out, versioning and rendition capabilities[6] with granular security and permissions.
- Support for all file types with intelligent extraction of metadata (XMP, EXIF, IPTC, and Dicom) from ingested files.
- Specialized digital asset transformations and conversions (for example, supporting ICC profiles and watermarks).
- Sophisticated search based on full-text content, metadata, asset-related events, and asset auditing history; MediaBank's extensible full-text searching supports Quark and Adobe InDesign documents, PDFs, Microsoft Office files, et al.
- Collaboration tools featuring online annotation and mark-up capabilities.
- Extensible Client and Server support in all standard operating environments, including:
  - Windows, UNIX, OS X
  - Oracle DB, Microsoft SQL Server, MySQL
  - Web-based Java (J2EE) Applications
- Native desktop (Windows and OS X) and Web-based clients to expose digital assets across the organization and to third-party agents.
- Flexible interface includes an intuitive thumbnails-and-preview-based window for multi-page documents; support for video streaming; localization capabilities; and configurable icons, "tool-tips", and menus.
- A complete set of APIs, a full SDK for application development, and several hooks and access points to facilitate adaptation and integration with other IT systems.

[6] Renditions are published and approved versions of assets.

Two-tiers of the MediaBank solution – workgroup and enterprise – allow an organization to "build out" a successful DAM implementation without penalties or re-work, as user adoption and application complexity increase. MediaBank's open architecture allows extensive customization and flexibility in integration, and WAVE's exceptional professional services, customer support, and user training play an integral role in helping organizations get the most out of their DAM investment in the short- and long-term.

Organizations taking advantage of MediaBank can extend the solution to include more content and users as well as enabling more complex and efficient workflows. Digital assets can be exposed to third-party workflow engines and content management solutions; open archive and restore functions can connect to external data stores; and integration with layout and publishing tools maximize efficiency during the "Publishing" phase of the digital asset lifecycle. Finally, native support for JDF, VDP, remote proofing, and OPI are testaments to WAVE's printing and publishing experience.

InfoTrends' Perspective

The tremendous growth of electronic channels (and ongoing necessity for print media) has hastened the creation and use of digital assets within organizations. These assets today include a wide range of graphics, audio, video, and immersive multimedia content. Notwithstanding this explosion in content, organizations are still struggling to manage these assets in a cost-efficient manner. Additionally, because digital assets require functionality unavailable in other content technologies (document management, for example), DAM capabilities are a current requirement for businesses to remain competitive.

Once assets are "managed," however, additional steps can be taken to yield more benefits from DAM. Integrating upstream and downstream applications and IT systems; exposing digital assets to more users (internal and third-party); and automating more complex, process-based DAM workflows takes the burden off users to manage the imbroglio of digital assets and digital asset-based processes that are required for the most innovative, revenue-generating projects, especially those leveraging electronic channels.

Organizations examining DAM technologies can approach the most compelling investments without worrying too much about long-term requirements. Such a strategy can provide substantial short-term returns without hindering long-term development opportunities, assuming that the selected solution is based on open standards and the providing vendor has a history of proven services, support, and training. Unlike the older generation of DAM technologies, a viable DAM solution such as WAVE's MediaBank, allows the bite-wise approach discussed by minimizing the re-work and penalties necessary to grow a solution as system complexity and the number of users gradually increase.