Project #3

Working for a modest nonprofit focused on grantmaking, relationship-building, and storytelling collaborations that serve communities of color, it becomes clear that a Digital Asset Management (DAM) system is essential for preserving institutional knowledge. A DAM system safeguards valuable assets from potential risks in an ever-evolving, multiplatform, and often ambiguous digital landscape.

One key aspect of the organization's work in public television funding involves serving as a liaison between primary funders and independent producers. Beyond receiving and distributing grants, the organization ensures compliance by managing various types of media assets as deliverables, essential for audits and facilitating collaboration with stakeholders and broadcast system partners. However, this process grows increasingly complex due to multiplatform requirements and the intricate components involved in handling these assets.

Business Objectives

The primary business objectives of this DAM project plan include preserving institutional knowledge by organizing and making media assets—specifically audiovisual files, still photos, and text objects—discoverable across platforms. The strategy aims to maximize return on investment (ROI) by supporting marketing and communication needs through streamlined, multiplatform accessibility. The DAM system will facilitate efficient asset management for B2B public media broadcasting, support the marketing team in B2C digital content creation, and expedite content creation processes to improve productivity. Lastly, the DAM system will ensure the long-term preservation of media assets for legacy building and future use.

User Needs

The DAM system must address three critical user needs. First, it must streamline file organization and discovery through easy file retrieval using metadata and a standardized taxonomy for categorization and structure. Second, it must enable asset interoperability across multiple platforms to ensure smooth integration with external systems. Third, it must support cross-departmental collaboration by enabling efficient workflows to improve productivity and streamline communication.

Key Features

Given the limited team size, key features required in the DAM system include automated metadata generation, accessibility enhancements, intelligent categorization, and content editing capabilities or seamless integration with other creative software.

- Metadata Generation: Automated tagging and keyword creation will ensure accurate asset indexing while minimizing manual data entry.
- Accessibility Enhancements: AI-powered image, scene, and object recognition will generate alt text and descriptions for visually impaired users, ensuring compliance with accessibility standards.
- Content Editing & Integration: Real-time content editing capabilities or compatibility with creative software will reduce reliance on external resources and improve overall efficiency.

Current Digital Assets

The organization's existing digital assets include a diverse range of audiovisual, photographic, and textual materials, requiring a comprehensive DAM system to manage, organize, and preserve these valuable resources:

Summary Table - Project Plan File Types and Relevant Assets

File Type	Relevant Assets
Text/Documents	Contracts, Summaries, Reports, Financial Reports
Media Files (.mov/.mp4/.wav)	Video Files (Cuts, Trailers, Promos), Music Licenses
Image Files (.PSD/.TIF/.JPG)	Headshots, Publicity Stills, Posters, Photo Logs
Spreadsheets (.xls/.csv)	Financial Reports, Expense Ledgers, Rights Worksheets
Subtitles/CC Files (.cap/.scc/.stl/.txt)	Closed Caption Files, Transcripts

Supporting Documents (.PDF)	Contracts, Releases, Agreements, Certificates

Given the initiative's mission and its alignment with goals related to managing available digital assets, the 2025/2026 California Revealed metadata model and guidelines for audiovisual, still image, and text objects offer a standardized framework for asset management. This framework supports the effective tracking and management of objects throughout the program's lifecycle while enabling users to identify and access materials online.

This project plan references California Revealed's established metadata schemas to ensure precise and standardized descriptions of archival materials:

- Dublin Core Metadata Schema: Applied to still images and text objects, including photographs, newspapers, books, and ephemera. Dublin Core serves as a widely recognized standard for simple and generic resource descriptions.
- PBCore Metadata Schema: Used for audiovisual objects such as film, video, and audio recordings. PBCore was developed by the public broadcasting community specifically for managing audiovisual media assets.

By adopting these metadata schemas through adherence to the California Revealed metadata model, the DAM project plan ensures that metadata remains standardized, interoperable, and scalable. This approach supports efficient asset management, content discovery, and long-term preservation of California's cultural heritage materials.

Below is a summary of the metadata fields that will be applied to audiovisual objects as well as text and still photo objects:

Summary Table - California Revealed's Required Metadata Fields for Audiovisual Objects

Metadata Field	Number
Contributing Organization*	1.1
Title*	1.2

Call Number*	1.3
Temporary Identifier*	1.3
Created Date*	1.4
Creator Fields (1.5):	1.5
- Creator*	
- Producer*	
- Director*	
- Writer*	
- Editor*	
- Cinematographer*	
- Actor*	
- Artist*	
- Artistic Director*	
- Author*	
- Camera Operator*	
- Choreographer*	
- Commentator*	
- Composer*	
- Conductor*	
- Costume Designer*	
- Filmmaker*	

- Host*	
- Interviewee*	
- Interviewer*	
- Moderator*	
- Musician*	
- Narrator*	
- Panelist*	
- Performer*	
- Photographer*	
- Recording Engineer*	
- Reporter*	
- Set Designer*	
- Sound Designer*	
- Speaker*	
- Technical Director*	
Significance*	1.6
Description*	1.7
Condition Value*	1.8
Condition Notes*	1.8
Media Type*	1.9
Gauge and Format*	1.10

Total Number of Items*	1.11
Copyright Statement*	1.12
Duration*	1.13

Summary Table - California Revealed's Required Metadata Fields for Still Photos and Text Objects

Metadata Field	Number
Contributing Organization	1.1
Title	1.2
Partner-supplied Identifier (Call Number -or- Temporary Identifier)	1.3
Created Date	1.4
Creators and Contributors	1.5
Significance	1.6
Description	1.7
Condition Value and Condition Notes	1.8
Media Type	1.9
Format	1.10
Total Number of Parts and Type of Parts	1.11
Length and Width and Unit of Measurement (Dimensions of Object)	1.12
Copyright Statement	1.13

For structure and classification, the framework outlined below facilitates efficient storage, management, search, and retrieval of assets while honoring the 2025/2026 California Revealed metadata model, as well as the Dublin Core and PBCore metadata schemas, ensuring interoperability, taking into considerations the storage systems in place:

Summary Table: Folder Structure - Digital Asset Deliverables

Main Category	Subcategory	Deliverables/Assets
Legal & Administrative Docs	Insurance	General Liability Insurance, E&O Policy, Certificates of Insurance
	Financial & Tax Docs	W-9 Form, Financial Report, Final Financial Report, General Ledger, Final General Ledger, Certificate of Final Financial Accounting
	Copyright & Legal Clearances	Copyright Registration, Title Research Report, Acquired Footage Cue Sheet, Visual Arts Cue Sheet, Music Cue Sheet, Supporting Docs
	Supporting Documentation	Contracts, Releases, Agreements
Production Deliverables	Program Cuts	Rough Cut, Fine Cut, Digital Submission Version (.mov)
	Broadcast Deliverables	File Delivery (Masters), Closed Caption Files (.cap, .scc, .stl, .txt), Credits & Packaging, Flag List, Transcript

Publicity & Marketing Assets	Program Summaries	Two-Page Summary, One-Paragraph Summary
	Visual Assets	Headshots (300 dpi, PSD/TIF), Publicity Stills, Poster, Photo Log
	Promos & Trailers	On-Air Promos (.mov), Program Trailer (.mov), Rights Summary Worksheet
Project Management & Reports	Narrative Reports	Narrative Progress Report, Final Narrative Report
	Administrative Lists	Cast and Crew Contact List, Cast and Crew Biographies
Funding & Underwriting Info	Underwriter List	Final List of Program Underwriters (contributions, descriptions)

The primary goal of selecting a Digital Asset Management (DAM) system is to optimize existing workflows, automate repetitive tasks, and streamline digital asset management while ensuring ease of use and facilitating cross-departmental collaboration for marketing and digital content production within a small nonprofit team. After conducting research and competitive analysis, several DAM vendors emerged as potential solutions, offering varying degrees of functionality, scalability, and affordability. Vendors such as Iconik, Canto, Bynder, and Preservica stood out due to their robust metadata management capabilities and user-friendly interfaces.

Top DAM Vendor Options:

Solution	Best For	Why It Stands Out	Pricing
Iconik	Video/Film-heavy teams	AI-powered video tagging & cloud	Pay-per-use

Canto	Media-rich organizations	Image auto-tagging, easy UI	~$600/month
Bynder	Full marketing teams	Advanced AI metadata customization	Custom Quote
Preservica	Archives & Preservation	Metadata extraction for archives	Free & Paid

Another option is to leverage an integrated DAM solution by optimizing existing platforms. The proposed workflow utilizes FileMaker Pro, QNAP NAS, and Google Drive for seamless asset management, metadata synchronization, and remote collaboration.

Proposed Optimized DAM Workflow Overview:

1. Asset Ingestion & Sync

- Files are uploaded to Google Drive for cloud access.
- QNAP HybridMount syncs Google Drive folders with QNAP NAS in real-time.
- Local production teams upload files directly to the NAS for local editing.

2. Automated Metadata Tagging (AI-Driven)

- QNAP Qumagie AI automatically tags files with metadata like file type, object/facial recognition, file size, format, and creation date.
- Metadata records are synced from QNAP NAS to FileMaker Pro for centralized tracking.

3. Metadata Management in FileMaker Pro

- Pre-built custom fields include Project Name, Asset Title, File Type, Tags/Keywords, File Path, and Approval Status.
- New file uploads to the NAS trigger automatic metadata records in FileMaker Pro.

4. Search & Retrieval

- QNAP Qsirch supports AI-powered file searches using tags, objects, and date ranges.
- FileMaker Pro allows project-based searches using metadata fields.

5. File Management & Collaboration

- Editors access files from the NAS using high-speed connections.

- Remote collaborators access files via Google Drive or QNAP Remote Access (myQNAPcloud).

6. Backup & Data Security

- Primary Backup: Files are backed up using QNAP Hybrid Backup Sync to cloud storage or external drives.
- Redundant Backup: Google Drive files are secured using Google Workspace Security Tools.
- Data Security Tools include AES-256 Encryption, Firewall & 2FA Security.

DAM Workflow Considerations

Regarding possible workflow issues, implementing a DAM solution involving QNAP NAS, FileMaker Pro, and Google Drive can present several system compatibility and integration challenges. Potential issues include API integration complexity, as custom API integrations between QNAP NAS and FileMaker Pro may require skilled developers. Additionally, version mismatches caused by software updates in QNAP NAS, FileMaker Pro, or Google Drive could create compatibility problems.

Workflow automation limits may also arise if automation tools like Zapier or Make encounter data transfer or connection restrictions. To mitigate these challenges, organizations should consider working with certified developers or Claris FileMaker Partners for API-based custom integrations. Enabling automatic updates or scheduling routine compatibility checks can prevent software conflicts. For enhanced stability, custom scripts using QNAP's API or FileMaker's Data API can be developed for seamless integrations.

Data Storage and Capacity Management

Data storage and capacity management are critical considerations when managing large digital assets. Potential issues include storage overload, particularly when handling large video files that may exceed available storage on QNAP NAS or Google Drive. Data duplication across platforms can also increase storage costs, while file organization complexity may result in clutter or lost files.

To mitigate these issues, organizations should plan storage capacity carefully by selecting appropriate NAS drives and scalable cloud plans, such as Google Workspace Business plans. Additionally, defining and enforcing consistent file organization policies will ensure files are stored efficiently and remain easily accessible.

Security and Data Privacy Risks

Security and data privacy risks pose significant challenges in a multiplatform DAM environment. Potential issues include data breaches, where sensitive files might be exposed during cloud synchronization, and remote access vulnerabilities, as QNAP NAS's remote access features could be exploited if not properly secured. Additionally, unauthorized file access may occur if permissions are not correctly managed.

To mitigate these risks, organizations should use AES-256 encryption on QNAP NAS and enable SSL/TLS for Google Drive transfers. Role-based permissions should be set on all connected platforms to ensure only authorized users can access files. Furthermore, enabling Two-Factor Authentication (2FA) and scheduling automatic backups will provide additional layers of security and data protection.

Digital Preservation Strategy

This project plan intends to implement a digital preservation strategy aligned with California Revealed's established practices. California Revealed, a State Library initiative, supports public libraries and local heritage organizations in digitizing, preserving, and sharing historically significant Californiana, including books, documents, and audiovisual recordings. Participating institutions create discovery and rights metadata for selected materials and submit both assets and metadata to a digital preservation repository, ensuring long-term access to California's cultural heritage.

Licensing and Legal Considerations

The project's licensing and legal strategy follows California Revealed's Permissions Guidelines, which promote a practical approach to identifying and managing rights associated with digitizing non-commercial archival materials. The goal is to ensure that materials are accessible online for educational purposes while respecting copyright, privacy, and publicity rights. Since many archival works have uncertain copyright statuses, the permissions process will involve a reasonable, good-faith effort to locate copyright holders and secure permission without incurring prohibitive time or costs.

Strategic Program Goals

Overall, the program plan aims to enhance asset discoverability and facilitate multiplatform distributions, whether through packaging for B2B partnerships or preparing content for B2C creation. By establishing a standardized metadata framework, implementing an efficient asset management workflow, and ensuring long-term digital preservation, the plan seeks to streamline asset handling while maximizing accessibility and usability across diverse platforms. This approach not only supports operational efficiency but also

strengthens the organization’s ability to share stories, engage audiences, and build lasting partnerships in an ever-evolving media landscape.