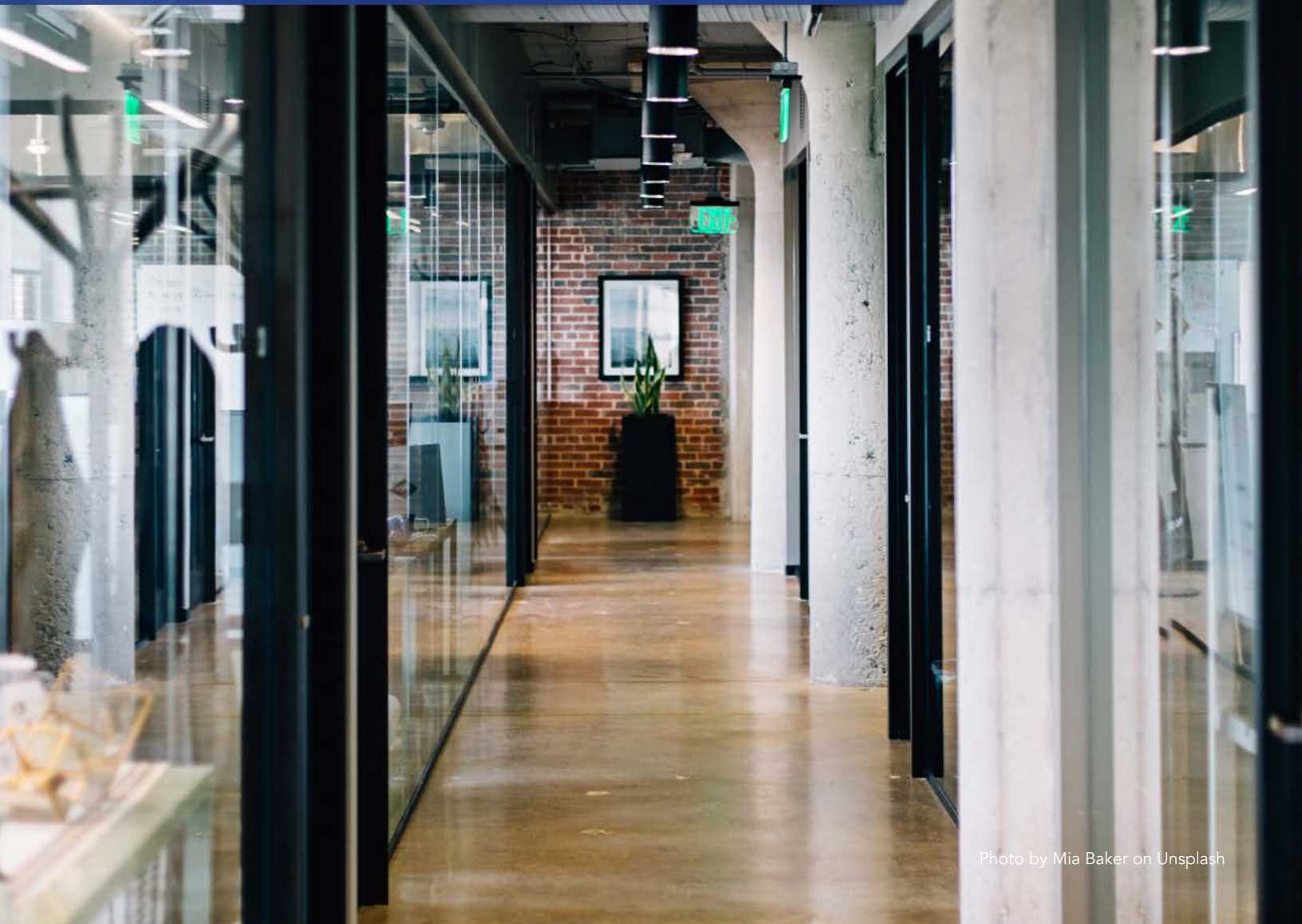


Brand & Marketing DAM Solution for Startups

Software Requirements Specification
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Brand & Marketing DAM Solution for Startups

Introduction

So you have just begun your journey running your own business and you have this great product and brand to share with the world. You may have even already started your e-commerce store, website, social media presence, as well as establishing your own branding material. But how are you storing, managing, and distributing all your hard-working digital assets to ensure consistency and security for your business and brand? Are you prepared for your business to grow, and are you ready to hand-off roles and responsibilities to prospective employees that will handle your digital assets and ultimately influence the culture of your brand? The Brand & Marketing Digital Asset Management Solution that is described in this document will help to answer those questions and provide you with a bulletproof formula to managing and marketing your company's digital assets in this modern business world.

Disclaimer: This System Requirements Specification document was designed for a Digital Asset Management graduate level course at the University of Central Florida. It does not reflect a real business or business solution; however, it provides a systems breakdown with supporting references from the *Journal of Digital Asset Management* for a potential solution that a Startup could utilize to manage the brand and marketing material of their digital assets within a workflow based system.

Project Overview

This document provides a solution for storing, managing, creating and distributing digital assets for an entrepreneurial type business plan. This solution is intended to assist startups that may not have a very large team, or a lot of funds immediately but are anticipating their company to grow. The key features that are incorporated in this solution are as follows: brand identity management, naming conventions for easy asset storage and retrieval, metadata and rights data management, content creation and approval workflows, conversion and editing capabilities, content distribution gateways to company website and social media channels, version control, user account management and user roles.

Users

The users are the individuals or small groups of people that are designated to create and manage the startup's digital assets. The DAM system is intended to make it easy for individuals who design graphical content, or manage/edit textual content, to keep track of their company's digital assets, from maintaining brand identity, to creating new content and distributing that content to their website or social media platforms.

Administrator

This user group is the top-level administrator of the DAM and its users.

- Requires a password to log in to the DAM system
- Manages all user accounts and roles within the DAM system
- Ability to track all user interactions and activity
- Ability to track all changes of digital assets within the DAM
- Ability to approve content for distribution to all channels
- Ability to distribute content to all distribution channels
- Ability to create, edit, lock, upload, download, and delete digital assets
- Ability to create, edit, lock, and delete metadata
- Ability to create, edit, lock, and delete rights data
- Ability to create, edit, lock, and delete asset keywords

Lead Graphic Designer

This user group includes the lead graphic designers/content creators.

- Requires a password to log in to the DAM system
- Manages user roles for assistant graphic designers
- Manages logo files, stock photos, stock videos, project files and all other brand assets within the marketing workflow
- Ability to track all changes of digital assets within the DAM
- Ability to create, edit, lock, upload, download, and delete digital assets
- Ability to create, edit, and delete metadata
- Ability to create, edit, and delete rights data
- Ability to create, edit, and delete asset keywords

- Ability to approve content for distribution to all channels
- Ability to distribute content to all distribution channels
 - Marketing/social media teams
 - Website
 - Print
 - All social media outlets

Assistant Graphic Designer

This user group includes the assistant graphic designers/content creators.

- Requires a password to log in to the DAM system
- Access to logo files, stock photos, stock videos, project files and all other brand assets within the marketing workflow
- Ability to track all changes of digital assets within the DAM
- Ability to create, edit, upload, download, and soft delete digital assets
- Ability to create, edit (their own) asset keywords
- Ability to request approval of content for distribution
- Additional access can be granted from the Lead Graphic Designer or Admin accounts

Lead Web Designer

This user group includes the lead web designers.

- Requires a password to log in to the DAM system
- Manages user roles for assistant web designers
- Manages website files, and all other web assets within the web publishing workflow
- Ability to track all changes of digital assets within the DAM
- Ability to create, edit, lock, upload, download, and delete digital assets
- Ability to create, edit, and delete metadata
- Ability to create, edit, and delete rights data
- Ability to create, edit, and delete asset keywords
- Ability to approve content for distribution to company website

- Ability to distribute content to company website

Assistant Web Designer

This user group includes the assistant web designers.

- Requires a password to log in to the DAM system
- Access to website files, and all other web assets within the web publishing workflow
- Ability to track all changes of digital assets within the DAM
- Ability to create, edit, upload, download, and soft delete digital assets
- Ability to create, edit (their own) asset keywords
- Ability to request approval of content for distribution
- Additional access can be granted from the Lead Web Designer or Admin

Lead Content Editor/Writer

This user group includes the lead content editors/writers.

- Requires a password to log in to the DAM system
- Manages user roles for assistant content editors/writers
- Manages text-based digital assets or textual content that accompanies various visual digital assets
- Ability to track all changes of digital assets within the DAM
- Ability to create, edit, lock, upload, download, and delete digital assets
- Ability to create, edit, lock, and delete metadata
- Ability to create, edit, lock, and delete rights data
- Ability to create, edit, lock, and delete asset keywords
- Ability to approve textual content for distribution to all channels

Assistant Content Editor/Writer

This user group includes the assistant content editors/writers.

- Requires a password to log in to the DAM system
- Ability to track all changes of text, and text-based digital assets within the DAM
- Ability to edit, upload, download, and soft delete text-based digital assets

- Ability to create, edit (their own) asset keywords
- Ability to request approval of content for distribution
- Additional access can be granted from the Lead Content Editor/Writer or Admin accounts

Photographer

This user group includes the photographers who are hired to take product images or marketing/branding images

- Requires a password to log in to the DAM system
- Ability to upload images into the DAM
- Ability to manage the grouping of the image uploads
- Ability to create, edit (their own) image metadata
- Ability to create, edit (their own) asset keywords
- Additional access can be granted from the Admin account

Social Media Manager

This user group includes the social media managers.

- Requires a password to log in to the DAM system
- Manages all social media posts
 - Access to Hootsuite (social media management software)
- Ability to track all changes of digital assets within the DAM
- Ability to provide input on the creation of content intended for social media
- Ability to create, edit, and delete textual content for social media posts
- Ability to curate and schedule social media posts
- Ability to approve content for distribution to all social media channels
- Ability to distribute content to all social media channels

Marketing Manager

This user group includes the marketing managers.

- Requires a password to log in to the DAM system

- Manages all marketing material
- Ability to track all changes of digital assets within the DAM
- Ability to provide input on the creation of all marketing content
- Ability to create, edit, and delete textual content for all marketing content
- Ability to approve content for distribution to all marketing channels
- Ability to distribute content to all marketing channels

Stakeholders

Initial Investors

Initial investors could include any of the DAM Users or not interact with the DAM at all.

Sponsors

Sponsors do not interact with the DAM but may have some policies that they would like followed to continue sponsoring the company.

Customers

Customers do not interact with the DAM.

Suppliers

Suppliers could interact with the DAM. A photographer could be a supplier in which they would be able to upload their image assets to the DAM. Otherwise, suppliers of other digital content such as stock art would not have direct access to the DAM.

CEO/Startup Company Owner

The CEO could be the user in the DAM Administrator role or not interact with the DAM at all.

Content

Digital Assets

The digital assets will consist of images, videos, audio, Adobe CC files, fonts, and text-based files. The DAM would also include a space for the brand identity information and assets to be stored; this includes items like fonts and colors. A space would also be

designated to store Adobe template files with document presets for Instagram, Facebook, and other marketing platforms. This would ensure consistency and ease of publishing content to all the distribution channels.

Types of Assets	Images	Videos/Audio	Adobe Project Files	Text-based Files	Fonts
Types of Content	<ul style="list-style-type: none"> ▪ In-house photographic images ▪ Stock photographic images ▪ In-house vector graphics/icons ▪ Stock vector graphics/icons ▪ Logos ▪ Social media avatars ▪ Website/social media advertising and branding content 	<ul style="list-style-type: none"> ▪ In-house videos ▪ Stock videos ▪ Animations ▪ Audio Files 	<ul style="list-style-type: none"> ▪ Photoshop ▪ Illustrator ▪ InDesign ▪ After Effects ▪ Edge Animate ▪ Adobe XD ▪ Premier ▪ Lightroom ▪ Templates for various distribution channels ▪ Artwork for apparel ▪ Website mockup files ▪ Business cards 	<ul style="list-style-type: none"> ▪ Word ▪ PDF ▪ PowerPoint ▪ Excel ▪ Letterheads ▪ Brand color guidelines 	<ul style="list-style-type: none"> ▪ Brand font files ▪ Typography guidelines
Allowable Extensions	.png, .jpg, .jpeg, .gif, .tiff, .bmp, .svg	.avi, .m4v, .mov, .mp4, .mkv, .gif	.ai, .eps, .psd, .aep, .an, .Lr, .prproj, .indd	.doc, .docx, .docm, .pdf, .ppt, .pptx, .xls, .xlsx	.otf, .ttf, .fnt, .woff
Metadata	Default fields: <ul style="list-style-type: none"> • Title • Alt • Copyright Additional: <ul style="list-style-type: none"> • Keywords • Description • Date Created • Date Modified • File Size • Format • Location • License 	Default fields: <ul style="list-style-type: none"> • Title • Alt • Copyright Additional: <ul style="list-style-type: none"> • Keywords • Description • Date Created • Date Modified • File Size • Format • Location 	Default fields: <ul style="list-style-type: none"> • Title • Alt • Copyright Additional: <ul style="list-style-type: none"> • Keywords • Description • Date Created • Date Modified • File Size • Format • Location 	Default fields: <ul style="list-style-type: none"> • Title • Alt • Copyright Additional: <ul style="list-style-type: none"> • Keywords • Description • Date Created • Date Modified • File Size • Format • Location 	Default fields: <ul style="list-style-type: none"> • Title • Alt • Copyright Additional: <ul style="list-style-type: none"> • Keywords • Description • Date Created • Date Modified • File Size • Format • Location

		• License	• License	• License	• License
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Figure 1: Digital Assets: Types, Extensions, and Metadata

Metadata

All assets within the DAM system come with predefined/default fields. In addition, Predefined Asset Metadata can be defined in the Admin portal. Adding a new metadata type includes defining the: Name, Description, Type, Value, Configuration, Language, and Target Type. Under Target Type, you can decide if the metadata field will be defined for an image, text, audio, video, document, archive, or unknown. The Type field can be defined as an: Input, Textarea, Document, Asset, Object, Date, Checkbox, or Select. The additional File Metadata in Figure 1 was recommended and provided by David Diamond in *DAM Survival Guide* (Diamond, 2012).

Pimcore Reference:

https://pimcore.com/docs/4.6.x/Development_Documentation/Assets/Working_with_PHP_API.html

Technology & Software Specifications

Pimcore

This is the DAM software that will facilitate the e-Branding DAM Solution. Pimcore is an open source DAM for any type of digital asset and its metadata. It is 100% API driven so it can be integrated with many other applications. It is feature rich, visually aesthetic, and has highly configurable metadata and product information management capabilities.

Features

- Access Controls/Permissions
- Asset Categorization
- Asset Library
- Asset Sharing
- Customizable Branding
- Metadata Management
- Reporting/Analytics
- Search/Filter
- Version Control
- Workflow Management

Hootsuite

Hootsuite is a social media management software. It manages scheduling posts, has outlets to multiple social media accounts, and has a rich user interface to manage content. This software will be integrated with the Pimcore DAM. Hootsuite allows for ease of publishing, which is an important aspect in our current automation era to assist DAM technologies (Liles, 2007).

Adobe CC Products

Being that these products are industry standard, Adobe Creative Cloud products will be used as the tools for content creation.

Google Docs / Google Sheets

Google Docs and Google Sheets can be utilized for document creation and ease of editing on the fly between groups. The final versions of any document created in Google Docs or Google Sheets will then need to be exported as a Word, PDF, or Excel file and imported into the DAM.

Stock Assets

Shutterstock and Envato Market have licensed assets that can be purchased and utilized for brand and marketing material. These assets will need to be purchased and uploaded into the DAM along with their licensing information. Unsplash is a free repository of high resolutions stock photography. These photography assets can be downloaded from the Unsplash.com site and imported into the DAM system for use in any marketing material under the Unsplash license.

Functional Requirements

The DAM production pipeline is set up in such a way that the Administrator has full access and rights to do every aspect of the production pipeline on their own. They can create, edit, approve, and push content to all distribution channels. The sub-users assist in breaking down each role to the appropriate skill set, so the Administrator can hand off the responsibilities to the company artists, and/or managers.

Use Cases

1. DAM Administrator – Use Case: Managing Users

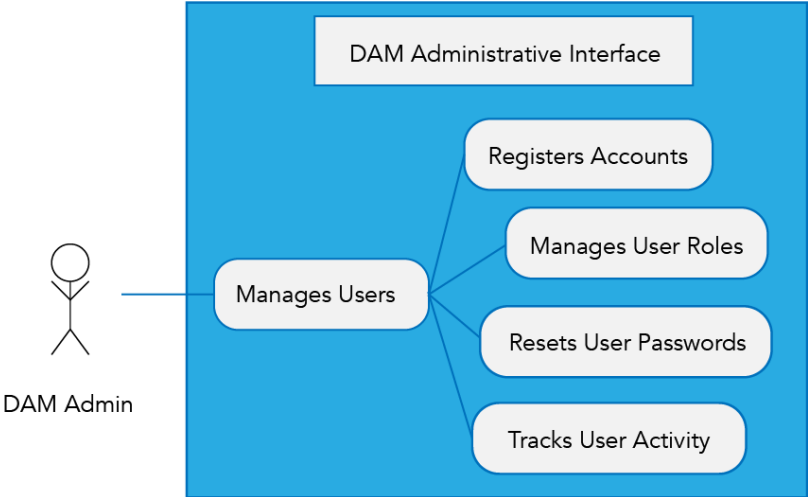


Figure 2: Use Case: DAM Admin Managing Users

2. Lead Graphic Designer – Use Case: Creates new file from template

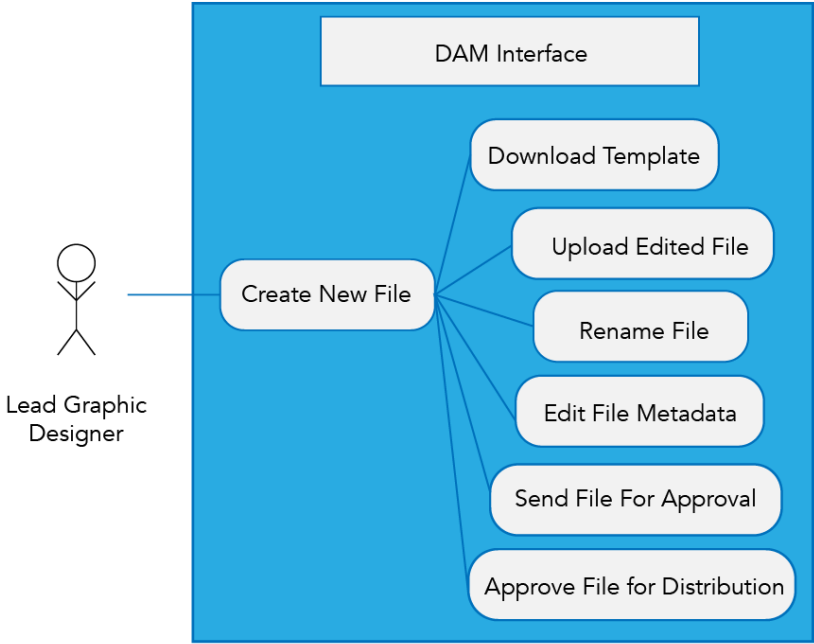


Figure 3: Use Case: Lead Graphic Designer Creating New File

3. Assistant Graphic Designer – Use Case: Creates new file from template

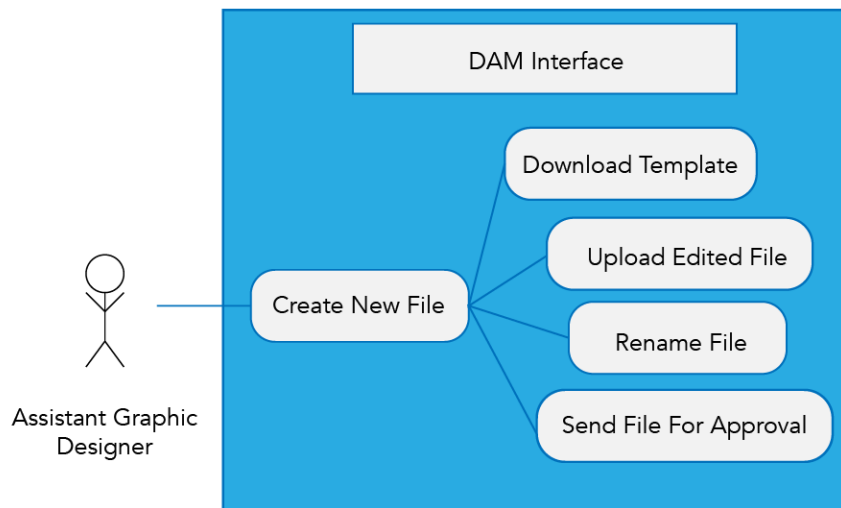


Figure 4: Use Case: Assistant Graphic Designer Creating New File

4. Lead Content Editor – Use Case: Edits Text in File

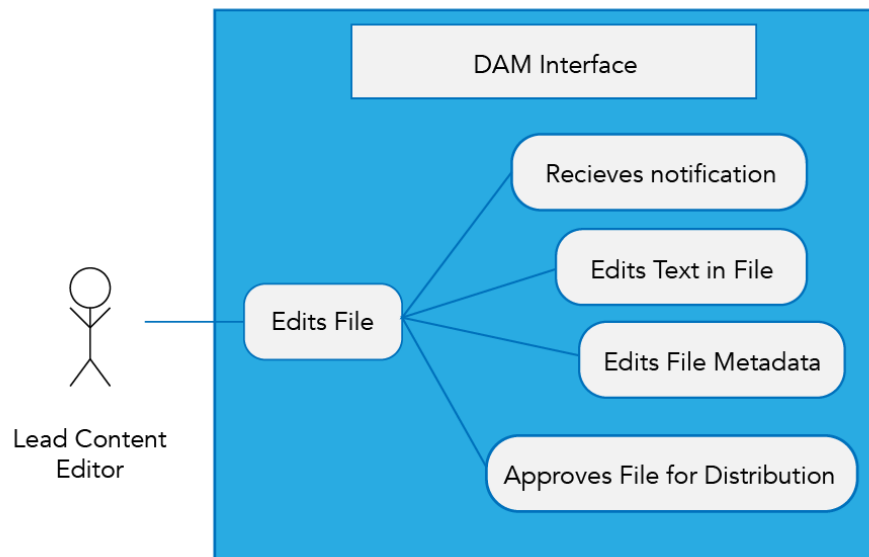


Figure 5: Use Case: Lead Content Editor Editing Text in File

5. Assistant Content Editor – Use Case: Edits Text in File

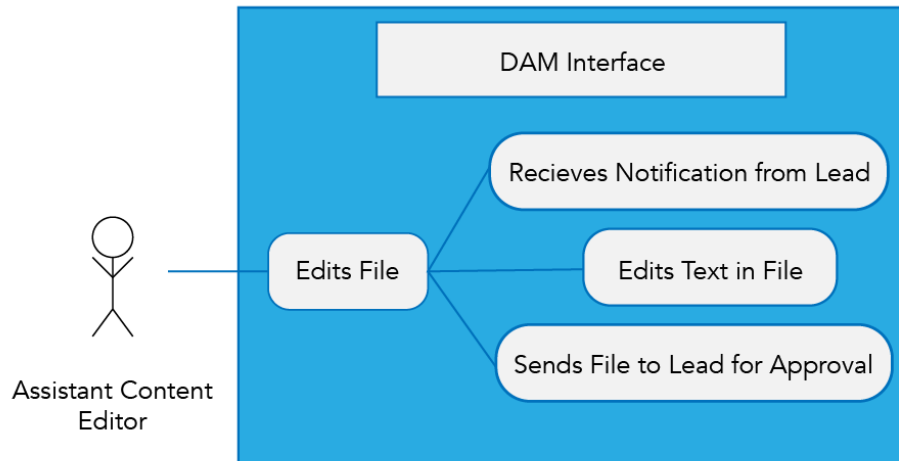


Figure 6: Use Case: Assistant Content Editor Editing Text in File

6. Photographer – Use Case: Adds New Photos

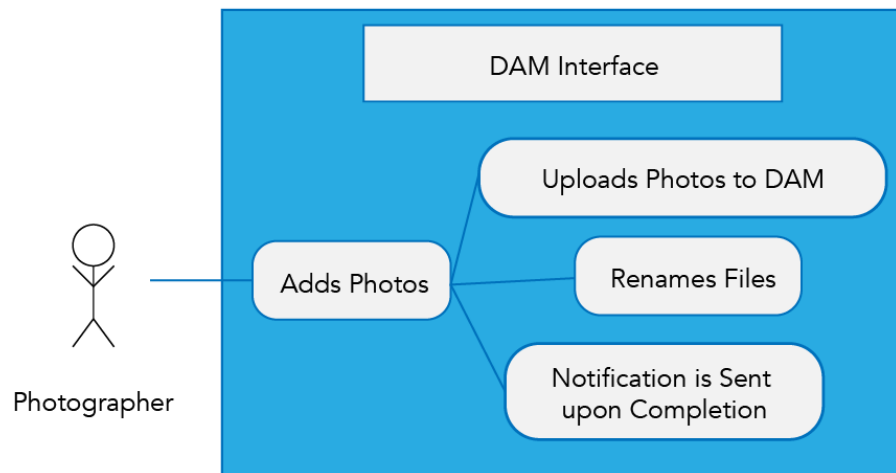


Figure 7: Use Case: Photographer Adds New Photos

7. Social Media Manager– Use Case: Manages Social Media Content

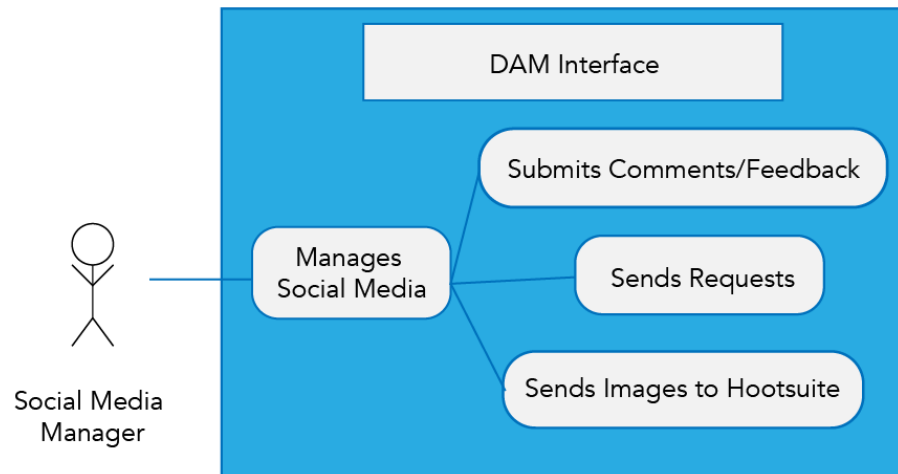


Figure 8: Use Case: Social Media Manager Manages Content

Business Process

The business process described in Figure 9 is that of a Lead Graphic Designer creating a new social media post, with the end goal of distributing that file on social media.

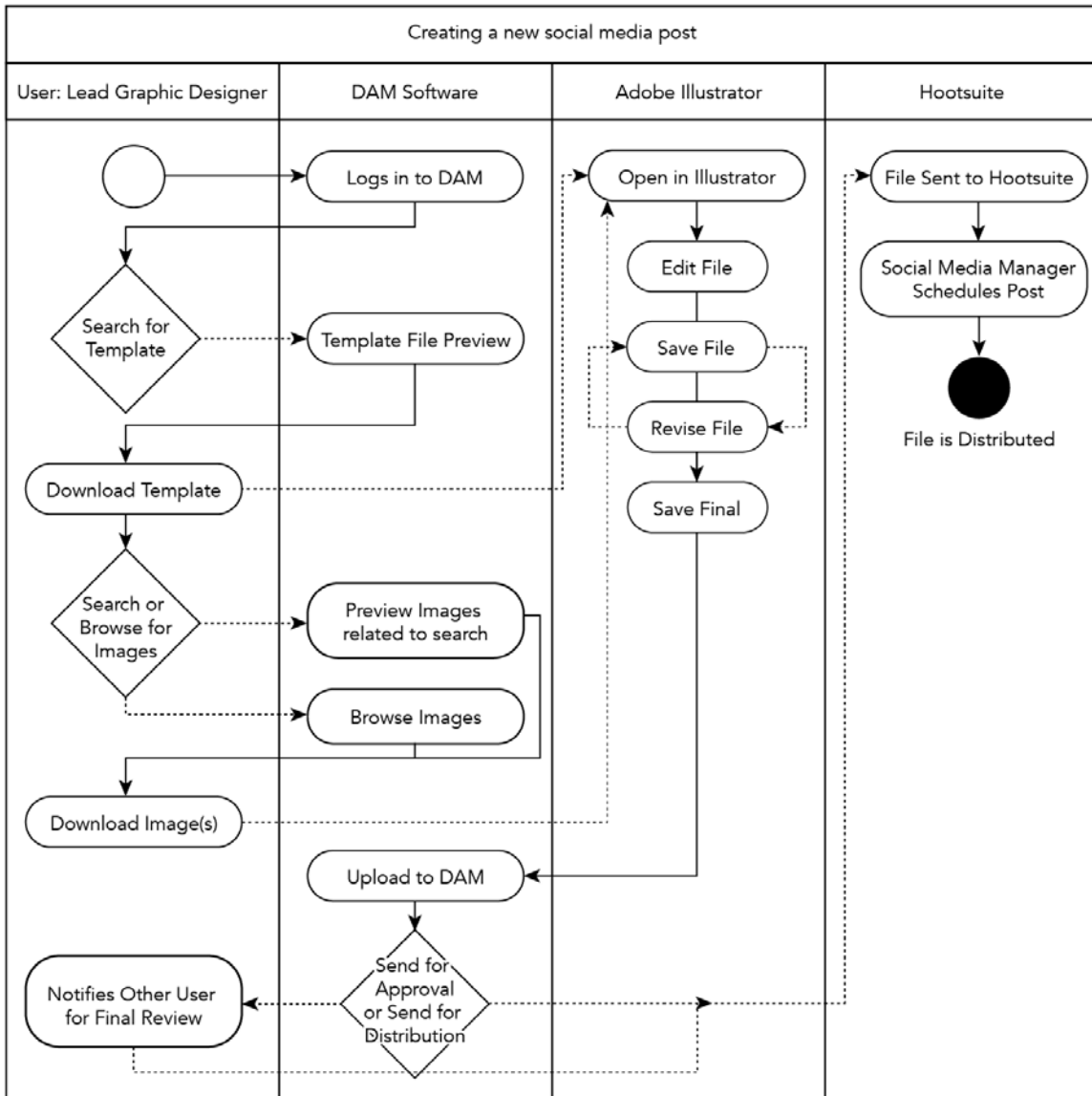


Figure 9: Business Process of Lead Graphic Designer

Internal Environment

The internal environment will be set up in such a way to ensure that all digital content is reviewed and authorized before it is distributed. For example, if a new post is created for Facebook that includes an image and text, the posting will have to be reviewed and authorized before it is published immediately. The same individual who created the post could do this if they are in a Lead role, or another designated user could be notified to review/edit the post as shown in Figure 9. The system will essentially be designed to ensure that all the content that is saved and published

reflects that of the brand identity and is being used legally. Social media content will also be scheduled to ensure it is posted at the right day/time, and to allow a business to get ahead so they don't have to be manually posting content around the clock. The ability for the DAM admin to be able to set up roles and permissions for individuals working in this internal environment will be a key factor into ensuring the start-up will run smoothly as the company grows and more people are hired. Being able to lock or restrict access to certain aspects of the creation, deletion, and managing of these digital assets will ensure security in the DAM process.

External Environment

The sourcing for certain digital assets such as stock video or photography could be that of third party companies. For the digital assets that are sourced, a copy of the licensing will be attached to that asset in the DAM. The DAM will be cloud based. This will allow for 24/7 access to all the digital assets and make it easier to connect to its distribution channels. The distribution channels will be connected to the business's social media accounts and website so publishing can be scheduled.

Non-Functional Requirements

Controlled Vocabulary

The Brand & Marketing DAM solution will utilize the Thesaurus for Graphic Materials (TGM) II taxonomy to organize and manage the allowable keywords for the asset metadata. Slawsky discusses the importance of utilizing a keyword library through thesaurus software to successfully manage and search for visual assets in a DAM system (Slawsky, 2007). The taxonomy selected for this solution is provided by the Taxonomy Warehouse website and published by the Library of Congress.

Taxonomy: Thesaurus for Graphic Materials (TGM) II

Publisher: Library of Congress

Vocabulary Type: Thesaurus

Description: The Thesaurus for Graphic Materials is a tool for indexing visual materials by subject and genre/format. The thesaurus includes more than 7000 subject terms to index topics shown or reflected in pictures, and 650 genre/format terms to index types of photographs, prints, design drawings, ephemera and other categories.

Provided by: <http://www.taxonomywarehouse.com/details.aspx?vunid=106469>

The DAM Administrator and Project Leads will be responsible for adding keywords to digital assets and will be aware of the taxonomy library in place.

Naming Conventions

- All digital assets, files and folders will be named with dashes to separate titles
 - (ex. Company-logo.png)
- All image file types will be named with a preceding "img-"
 - (ex. img-people-laughing.jpg)
- All icon file types will precede with "icon-"
 - (ex. Icon-arrow.png)

Security

The system requires password protection for any user to access the DAM. For Pimcore, this is built upon the Symfony Security Component to handle complex authentication/authorization scenarios. The Administrator is the only user that has the ability to update user passwords. Otherwise, individual users will manage their own account passwords.

Depending on the role of the user, Administrators and Project Leads are able to lock certain metadata fields and files from access by other users.

Pimcore Reference:

https://pimcore.com/docs/5.x/Development_Documentation/Development_Tools_and_Details/Security_Authentication/index.html

IP and Copyright

Intellectual Property and Copyright information for all digital assets will be included in the asset metadata. This will be managed and stored by the DAM Administrator and Project Leads. The DAM solution, Pimcore, has Digital Rights Management (DRM) software built in that will help assist with this process. This is a great benefit to ensuring the IP rights are maintained and managed properly (Mullins, 2005).

All licensing, contracts, and copyright documents will be stored in a special folder location within the DAM and linked from the asset metadata. The DAM Administrator

and Project Leads will manage this rights folder structure.

Digital Asset Licensing

All the assets created for this Brand & Marketing DAM are intended to be sole property of the company utilizing the solution. Items such as logos, brand identity, in-house photography and so forth should not be copied or redistributed as derivatives. The goal for these assets are to be distributed and shared to promote a product and a brand identity. It is very important then that they not be tampered with as to discredit the brand and their original purpose.

All content created for the company, and stored within the Brand & Marketing DAM solution will be initially copyrighted as all rights reserved. The designers and artists creating the work will be paid for their labor as compensation, so the rights of the content remain with the company.

For distribution purposes the Creative Commons license will be used:
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0)

You are free to:

Share – copy and redistribute the materials in any medium or format

Under the following terms:

Attribution – You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NonCommercial – You may not use the material for commercial purposes

NoDerivatives – If you remix, transform, or build upon the material, you may not distribute the modified material.

Sharing is an important aspect to marketing. Most of the digital assets within this DAM solution will be distributed on social media channels and the company website. People will have access to copy images, take screenshots, and re-post content, so the above CC license will help protect the rights of that content.

Storage and Archive

The DAM system features a version control on all digital assets. This will help maintain record of when assets were last modified, by whom, and restore a file to an old version if an item needs to be restored.

All digital assets will be backed up in the cloud as well as an external hardware device on a daily basis.

Terms of Service

The DAM Administrator will be in charge of managing all software terms of service agreements and purchases. The licensing model that will be used for most of the software is the Software-as-a-Service (SaaS) model (Diamond, 2012). This model has many advantages for its flexibility, stability, and allows for more extensibility if custom layers are added to the base software (xSaaS). That custom layer that companies are able to bring to their SaaS solutions make it easier to maintain and at a lower cost (Gray, 2010).

- Pimcore will be available as Platform as a Service (PaaS) in late 2018.
- The Adobe Creative Cloud plan for small businesses will be purchased as Software as a Service (SaaS).
- Hootsuite will be purchased as Software as a Service (SaaS).

Implementation and Maintenance Costs

Pimcore is a free, open source software. However, there are some implementation and integration services that could be very beneficial in setting up the initial installation, as well as professional services and support that can be purchased for an additional cost. The SaaS solution does incur an annual fee and that can be determined by a quote from the provider.

- Cloud Edition – By quote (annual subscription)
 - Provided by: <https://reviews.financesonline.com/p/pimcore/>
- Additional support fees could be incurred on a need basis

The Adobe CC license for all applications intended for small businesses includes all desktop apps and Creative Cloud services for US\$79.99/mo per license.

- 6 licenses would cost roughly US\$5,759.28 / yr

Hootsuite offers various plans depending on the amount of users the platform will require, which also depends on the size of the business using it. For the Brand & Marketing Solution for Start-ups, we will initialize with the Professional (1 user) plan.

- Professional – 1 user, 10 social profiles, unlimited scheduling for US\$29/ mo

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