Creating the ALHFAM Knowledge Base

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By

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CREATING THE ALHFAM KNOWLEDGE BASE

SUNYIT
DEPARTMENT of
CERTIFICATE OF APPROVAL

Approved and recommend for acceptance as a thesis in partial fulfillment of the requirements for the Degree of Master of Science in Information Design and Technology

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ABSTRACT

This project addressed the knowledge management needs of the Association of Living History, Farm and Agricultural Museums (ALHFAM), developing a strategy that will facilitate their ongoing efforts to dynamically capture, index, catalog, archive, and share their knowledge assets through a clear process.

The recommendations contained in this final report center on a Knowledge Management System which would manage the development and maintenance of the Knowledge Base. This system includes processes and procedures which will dictate each step in the process from the activity to be documented to sharing that with the desired audience. It also includes the technical aspects of these activities, including software recommendations.
III. Final Report

CREATING THE ALHFAM KNOWLEDGE BASE

Prepared for: ALHFAM
Prepared by: Gretchen L. Kiesen | SUNYIT
Executive Summary

Digital media is reshaping how information is captured, stored, used, and shared and, consequently, how that information is transformed into knowledge. This shift is having a profound impact on the shape of an organization’s Knowledge Base which is the combination of both asset objects (e.g., digital media, print materials, physical objects) and individual knowledge. Given the affordances of digital media, it is now easier than ever for organizations to convert individual knowledge into an asset which can be archived and referenced to become a permanent part of the organization’s Knowledge Base.

Building and maintaining a deep and developing Knowledge Base is no easy task. It takes deliberate effort, guided by processes, procedures, and technologies set in place to consistently capture this information and transform it into knowledge. ALHFAM is aware of the potential benefits of developing their Knowledge Base and have created the following strategic objective in response:

“Provide highly valued skill training to a growing membership using a range of existing and new delivery methods” and “Provide quality content that addresses member preferences in a professional format that demonstrates our unique identity, using a range of media.”

ALHFAM has asked SUNYIT to work with them to develop a strategy that will facilitate their ongoing efforts to dynamically capture, index, catalog, archive, and share their Knowledge assets through a process that is clear.

In response to this request, we have researched the association, its current web presence, existing assets and how those assets are organized and accessed by members and non-members. From there, we have developed recommendations which we think best meet ALHFAM’s needs (determined from both the stated need as well as those which became clear though interviews and research).

Our conclusion is that ALHFAM would benefit from a Knowledge Management System which would manage the development and maintenance of the Knowledge Base. This system includes processes and procedures which will dictate each step in the process from the activity to be documented to sharing that with the desired audience. It also includes the technical aspects of these activities, including software recommendations.

The Process

At a high level, the Knowledge Management System will follow the process depicted in Figure 1.

Each activity in which ALHFAM engages and wants to add to the Knowledge Base starts with the creation of an asset. This can take a variety of media forms, from video to static images, to writing. The Knowledge Base should encompass several media types so that there is flexibility in both how an activity is presented (some may be better suited to one type over another) as well as how the viewer prefers to learn.
Once created, an asset needs to be organized which includes both the desired editing process as well as how the asset is tagged and archived for easy retrieval. Following that process, the asset is presented on a particular platform so that members and/or non-members may view it. The final step of the Knowledge Management System process is to allow for sharing of the asset. This can be done through RSS feeds, sharing on social media pages, etc. This increases the exposure of the asset, making it more valuable.

We do not recommend that the association try to develop a single website for all of its assets. The Knowledge Base is not a location. It is the collection of content from all of ALHFAM’s websites and pages. By looking at the Knowledge Base in this way, the association is able to leverage the strengths of different platforms without trying to recreate those affordances on a single site. For example, ALHFAM’s Facebook page was highly active following the 2012 Conference as many members posted reactions, links, and photos. Rather than trying to migrate these assets, ALFHAM needs a system that pulls them seamlessly into the Knowledge Base. Our recommendations allow for this. Figure 2 depicts this.

Recommended Elements

Each step of the process follows guidelines to ensure that the Knowledge Base is populated with quality content that is accessible to the desired parties. In order for ALHFAM to develop an effective process, we recommend the following:

- Creation of a digital asset repository
- Implementation of a federated search engine
- Setting up a digital asset management system
The digital repository will serve two purposes.

1. It will categorize and manage information about assets. These assets are not necessarily owned by ALHFAM (likely generated by someone who has made the material accessible to the public but hasn’t been “given” to ALHFAM to archive) and deemed important enough for the association to capture data about and point members to them.

2. It will house objects which do not logically make sense to house elsewhere. For example, videos ALHFAM wishes to share with the public are likely to be best housed on the ALHFAM YouTube channel while white papers which should be made available only to ALHFAM members are best made available on a restricted-access repository.

The Repository will need to host a variety of media objects, offer sound, customizable folder structure, the ability to scan asset content, and offer tagging and advanced search options such that users can easily find relevant results.

The federated search engine should all multiple, pre-determined sites to be searched such that a search will yield results from ALFHAM’s entire online presence, not just one site and yet not the entire internet either (as a regular search would do).

Finally, digital asset management will require the development of various policies and procedures, the taxonomy which will help organize content, as well as ongoing monitoring to ensure the Knowledge Base is growing and being populated with assets that meet the association’s high standards for quality content.

We have also included recommendations which go beyond our initial scope, recommendations which we think will increase the efficacy of the system. These include updating the dedicated ALHFAM website, including better integration of administrative tasks, as well as ideas on asset development (media diversification, method diversification, and technical assistance for users).
CREATING THE ALHFAM KNOWLEDGE BASE

Together, these elements will help to set up the Knowledge Management System and will yield a quality Knowledge Base.

In addition to our recommendations, we have developed RFPs for the repository and federated search needs which may be issued to vendors. We have also developed a job description for the digital asset manager which may be used to guide the staffing of this position. These are found at the end of the report.
Project Overview (Problem Background)

(From initial proposal)

The Association of Living History, Farm and Agricultural Museums (ALHFAM) is seeking to gather, capture, and organize its digital resources and create an online Knowledge Base to serve current and prospective members, as well as external constituencies. This mechanism should support the organization’s mission “to share practical knowledge and skills among those who make history relevant to others.” This project is undertaken with the objective of meeting the organization’s strategic objectives to “Provide highly valued skill training to a growing membership using a range of existing and new delivery methods” and “Provide quality content that addresses member preferences in a professional format that demonstrates our unique identity, using a range of media.” (See Appendix A for complete Strategic Plan.)

This online Knowledge Base will need to effectively engage both younger, more tech savvy members of the organization as well as serve those who may not be as computer literate. This site should include the following characteristics:

- Easy-to-use search functionality that presents clusters of information based on criteria such as subject matter, data type, and date.
- Comprehensive access to legacy resources (this will involve continued digitization of archived print materials to ensure the Knowledge Base is as robust as possible).
- Member-only areas which include:
  - Full access to the organizations resources
  - Ability to easily contribute to the Knowledge Base (comments, documents, metadata, multimedia, etc.)

Nomenclature

Throughout this article we use certain terminology that can be interpreted differently depending on the reader’s knowledge and experience as well as the context in which the terms are used. To ensure clarity, we wish to clarify a few key terms.

- Platforms, pages, and sites
  - We consider a software platform to be any software system which hosts pages for third parties. For the purposes of this report, the platforms are the social networking sites with which ALHFAM has a presence (Facebook, LinkedIn, Twitter, Wordpress, YouTube).
  - A page is the ALHFAM area on the platforms noted above (e.g. ALHFAM’s official Facebook page).
  - A site is an entire site produced by a single author. Examples include ALHFAM’s dedicated website (alhfam.org) and the Midwest Open Air Museums Coordinating Council (momcc.org).
- Media Type
  - The format of the digital asset (e.g., animation, photo, text, video, etc.)
CREATING THE ALHFAM KNOWLEDGE BASE

• Digital Asset Management (DAM)
  o The systematic organization (includes folder structure, access, and tagging) of electronic files.

• Knowledge Base
  o The combined intellectual capital of a group which is made up of assets, both digital and print, and human capital. An effective Knowledge Base is managed by a Knowledge Management System.

• Knowledge Management System
  o The processes and mechanisms/software that are designed to systematically create, gather, evaluate, organize, store, and share information and knowledge so as to increase individual and organizational knowledge capital.
Methodology

In order to intimately understand ALHFAM’s needs and culture, the researcher attended the 2012 ALHFAM Annual Conference in Farmers Branch, Texas. This multi-day event allowed the researcher to immerse herself in the association, gaining first-hand experience of the types of activities, topics, and issues members are interested in. In addition to attending various workshops, demonstrations, and lectures, the researcher engaged in large round-table, small-group, and one-on-one discussions about the project with various members, including the Board of Directors. (Notes from these conversations can be found in Appendix B). This experience as well as subsequent conversations and virtual group discussions formed the basis of the findings and recommendations contained in this report.
Theoretical Foundations

The project is rooted in two strands of communications theory: Activity Theory and Information Interaction Design Theory. Working from these foundations as well as various best practices of digital archiving and knowledge management, a basic knowledge management system process was adopted to determine how the proposed Knowledge Base would be populated and managed.

An overview of these foundations is provided below with specific applications found in the Findings and Recommendations section.

Building a System Based on Activity | Activity Theory

Our approach to designing an effective solution for ALHFAM’s request is based in Activity Theory. Activity Theory provides a means to view a system, taking into account the activity creator(s), their objects (what the subject is trying to create) and goals (what is the purpose/ultimate achievement of the activity), as well as the tools (software, hardware, processes, theories, etc.) used to achieve those goals. In short, it focuses on building a system of inter-related information objects based on what the relevant parties are doing.

The research generated a list of information activities ALHFAM members engage in, often after performing research — often a pre-activity required for authenticity and accuracy when engaging in the following:

- **Demonstrating**: A teaching technique in which a presenter shows how to properly perform a process or procedure
- **Discussing**: Verbal (or textual) conversations about a topic in which participants share knowledge by asking and answering questions
- **Interpreting**: “[Translating] material culture and human or natural phenomenon to the public in a meaningful, provocative, and interesting way (includes First- and Third-Person Interpreting)” (Roth, n.d.)
- **Lecturing**: Presenting scholarly material orally
- **Reenacting**: “The restaging of a historical or proto-typical event. Also, common term for battle reenactments and other re-enactor activities” (Roth, n.d.)
- **Site Visiting**: Going to locations relevant to ALHFAM interests (e.g., historic sites, living history museums, historic farms, etc.)
- **Writing**: Scholarly writing based on research (e.g., journal articles, professional papers) and casual writing based on observations or experiences (e.g., blogs, updates)
Transforming Assets Into Knowledge | Information Interaction Design Theory

The proposed solution will also focus heavily on Information Interaction Design theory, which frames communication solutions by applying three design approaches to content (See Figure 3. Information Interaction Design for a graphic illustration of the theory). These approaches are:

1. **Information Design**: applying logical, organizational structures to content
2. **Interaction Design**: applying elements that involve the receiver in the content, sometimes conceptualized as “storytelling” (Shedroff 2000)
3. **Sensorial Design**: applying elements that appeal to the five senses to the design

![Figure 3. Information Interaction Design (recreated from Shedroff, 2000, p. 268)](image)

For ALHFAM’s purposes, it is not enough to simply have a digital asset. “To have value, [data] must be organized, transformed, and presented in a way that gives it meaning and makes it valuable.” (Shedroff, 2000, p. 270). This holistic theory tends to the different needs and preferences individuals have when absorbing, processing, and ultimately understanding information — needs that ALHFAM will need to take into consideration when building the Knowledge Base. *Figure 4. The Understanding Spectrum* depicts the movement from data production through the attainment of wisdom. Shedroff asserts that the key to this progression of understanding is increased participation and experience with the information, something that ALHFAM does well with its focus on hands-on, living history experiences.
Information, Interaction, and Sensorial Design factor into the solutions that push the content along the Understanding Spectrum. Consider the following examples of each approach and how it relates to digital assets:

- **Information Design**: Assets heavy in information design are data sets best represent by logical organization and simple, clear design.
  - Existing Asset Example: The *Proceedings Index* is a clear, logical, intuitive list and doesn’t need, nor would it likely benefit from, further design.

- **Interaction Design**: Assets heavy on interaction design would focus on storytelling features that engage the viewer/reader in the content; examples of assets with heavy interaction design include recorded interpretations and re-enactments.
  - Existing Asset Example: *Ron Carnegie as George Washington*.

- **Sensorial Design**: These assets appeal to the senses; for digital assets, that would mean visual and aural assets, including podcasts or videos of musical performances or aesthetically pleasing graphic designs of processes or procedures or well-produced images or video of events.
  - Existing Asset Example: *Katie Boardman playing the Erben Organ*.

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*Figure 4. The Understanding Spectrum (recreated from Shedroff, 2000, p. 271)*
Knowledge Management Systems

A Knowledge Management System is the processes and mechanisms/software that are designed to systematically create, gather, evaluate, organize, store, and share information and knowledge so as to increase individual and organizational knowledge capital. “Functionally, a [Knowledge Management System] is a complex set of systematically coordinated human and organization processes” (Fibuch & Van Way, 2011, p. 34). It should be noted that this project is focused on determining a solution that is concerned with digital assets and how those assets will be ultimately made accessible to various constituents of ALHFAM. However, a full Knowledge Management System involves the procedures for systematically gathering and creating assets as well as continuous review and updating of said assets to ensure relevance. While those aspects are outside the scope of this project, some ideas relative to those areas are offered.

The general process that the proposed ALHFAM Knowledge Management System will start with an activity from which a digital asset is created, organized, presented, and shared (see Figure 5). The Knowledge Base is made up of the assets in the system. Each step in this process is explained below.

![Diagram of the proposed Knowledge Management System process]

Figure 5. The Proposed Knowledge Management System Process
CREATING

Creating is the process of generating a digital asset as a result of an ALHFAM activity using a specified MIME type (also known as a content type). MIME types include text, video, audio, presentation, video, graphic, and animation formats (e.g., JPGs, TIFFs, WMVs, PPTs, DOCs, WAVs, etc.).

Once a digital asset has been created, it will be entered into the Knowledge Base and proceed through the various steps outlined below.

Every digital asset will be created in at least one medium. The following list of media types are recommended:

- Animation
- Audio
- Cybertext
- Illustration
- Photo
- Text
- Video

Media Selection

In some cases, the medium will be pre-determined or the asset already created. For example, an article for publication, such as The Bulletin or a paper written for a lecture would be text-based.

However, in other cases there may be an opportunity to select the medium. This selection can be based on a number of criteria, including, but not limited to, the following:

- **Time:** Are there deadlines or other timing issues that make one medium more preferable than another?
  - Images documenting a workshop may be loaded quickly while writing a reflective blog may take a bit more time and delay publication

- **Budget:** Are their budget constraints that will have an impact on the media type selected?
  - Well-produced videos may require renting sound equipment and/or money spent on post-production

- **Hardware/Software:** Does the person creating the asset have or lack specific software/hardware that eliminates one medium or facilitates another?
  - If the person selected to visually document an event has a great still camera with poor video recording options, the better option may be to go with still photography over video

- **Content:** Does the content lend itself better to one medium over another?
  - Demonstrations might be best served by video; discussions might be best served by text; procedures might be best served by illustrations

- **Audience:** Who is the intended end-user? Is that group more apt to respond to a specific medium?
  - People learn in different ways – some preferring a live experience to a recorded one, some may prefer to discuss a topic rather than to read an article, and some may prefer to read printed materials while others won’t bother with anything they can’t access in their iPads; an effective Knowledge Base will include various media types to meet as many learning styles as possible
ORGANIZING

Organizing is the process involved in transforming created digital assets into knowledge for the benefit of members and guests by ensuring the product is of acceptable quality and can be intuitively and easily found by users.

Tagging and Metadata

Tagging and metadata are used to help categorization so that users can easily find desired (and related) objects (assets). Metadata, drawn during the creating process, falls into three categories:

1. Immutable: data about the asset that will not change
   a. E.g., Author, creation date

2. Content-Neutral: data about the asset that is content neutral
   a. E.g., media type, MIME type

3. Content-Based: data about the asset’s subject matter
   a. E.g., Open-hearth cooking

Some metadata is generated automatically through algorithms (indexing) and some generated by hand, using human interpretation. Over time, and as the number of assets increases, it’s more desirable to have as much automatic metadata generation as possible to minimize the time needed for individuals to enter this information.

Tagging can be done individually or collaboratively, using keywords related to content and/or characteristics of the object.

Editorial Process

Another aspect of organizing is the editorial process applied to an asset. There are three levels which can be applied:

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<th>Open Publishing</th>
<th>Light Review</th>
<th>Peer Review</th>
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<td>1</td>
<td>Assets are posted with no editorial control or input.</td>
<td>Assets are posted after a designated person(s) reviews for general appropriateness and possibly light editing (for typos or glaring errors) but does not do a full copyedit/proof.</td>
<td>Assets are posted after going through a formal editing process (such as that currently used for The Bulletin) in which work may be copyedited, peer reviewed, revised, and proofread.</td>
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Some common considerations and questions surrounding the editorial approaches include:

- Can some assets be assumed to represent the association’s professional standards in terms of both writing (grammar, structure, spelling, etc.) as well as accuracy?
- Do different publishing platforms (e.g., a scholarly journal vs. a blog) carry with them different quality expectations?
- Do different activities or topics present lower levels of risk if the asset is of questionable quality or accuracy (e.g., pictures from a conference event vs. articles in Proceedings)?
- How much time/effort is the association interested in dedicating to the editorial process? Is there a risk of bottlenecks which will deter submissions and/or slow down momentum in building and expanding the Knowledge Base?
- If work is not reviewed prior to posting, will members effectively self-regulate? That is, if someone posts something that is inaccurate, will another be able to note this so others are aware and/or flag it for review by an editorial board?
- Should there be an association “seal of approval” offered to items in the Knowledge Base that are considered especially relevant, reliable, etc.? If so, what does this do to the other content? Does it create another administrative layer that the group doesn’t have time for?

PRESENTING

Presenting is the process of making digital assets accessible to members and guests. Assets can be hosted on a dedicated site or on a social media platform such as Facebook or LinkedIn.

Traditionally, the presenting stage is focused on a single website. However, in ALHFAM’s case, we suggest creating an integrated web presence, drawing feeds and assets from all of ALHFAM’s web presences as well as pointing visitors to those locations. Figure 6 shows this relationship.

![Figure 6. The ALHFAM Knowledge Base](image-url)
While there will be a location from which the assets can be accessed, not all assets will be housed in a single location. For example, instead of migrating all YouTube videos or Facebook images over to a single site, our solution would involve collecting metadata from the assets posted to the ALHFAM pages on these platforms. That metadata would be housed in the Knowledge Base so that a search there would yield results that could take the user to a variety of websites.

The Knowledge Base would ideally also have feeds from the various pages/sites, so that updates are automatically loaded to the Knowledge Base.

**SHARING**

Sharing is the process of allowing members to add value (e.g., comments, tags, additional information, etc.) to digital assets in the Knowledge Base as well as drawing attention to these assets through various methods of reposting. Sharing involves such activities as “liking,” commenting, reposting, and following.

One aspect of sharing which will be especially relevant to the ALHFAM Knowledge Base is reposting. Reposting allows a user to post a link to an asset to his or her social media platform of choice. For example, Figure 7 shows a blog from ALHFAM’s Wordpress site with the sharing options displayed. If the user clicks the “Share” button, he or she can opt to share the article link on Facebook, LinkedIn, or Twitter. In a sense, this person is advertising the article to those who have access to his or her page, increasing the exposure of the article. For ALHFAM, the sharing/reposting option is a means to increasing the number of ways assets can be accessed (e.g., linking from an ALHFAM site, linking from a member’s personal Facebook page, member-to-member email, etc.) as well as widening the association’s overall web presence. (Note that this increased exposure could result in attracting new members who might not have been aware of the association previously.)

Sharing also allows others to engage with the asset, either through adding additional content, asking questions which generate further discussion, offering up links to related or more-in-depth information, or adding tags which aid in the asset’s organization.

![Figure 7. Article sharing/reposting options](image-url)
Project Findings

In order to understand where ALHFAM wants to go with their Knowledge Base, it’s important to understand their current state and readiness to move to their desired future state. Mapping this yields gaps which need to be addressed to achieve success. Table 1 shows the current and future state. It should be noted that ALHFAM’s Strategic Plan has goals in place to close several of these gaps.
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**Table 1. ALHFAM Knowledge Base Current and Future State**

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<td>Provide unique, relevant, and quality skill</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Birdsall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Website</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New, Regional sites, email list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Twitter, LinkedIn, Facebook, YouTube) (New)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many websites/platforms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**What Do You Do? | Activity Categories**

Using Activity Theory to guide solution development, the researchers began to map out the activities members engage in. The following list has been developed and will be added to as additional activities are discovered or created (see the Activity Theory section for a description of each):

- Demonstrating
- Discussing
- Interpreting
- Lecturing
- Reenacting
- Site Visiting
- Writing

The above-listed information activities are those in which ALHFAM members engage, and which yield a digital asset that can (should) be included in the Knowledge Base. By focusing on what members do, we hope to identify the full range of potential information assets that are available (and/or can be created) for inclusion.
What Are You and/or Your Audience Learning About? |
Topic Categories

Every activity is focused on at least one of the association’s topics of interest. In order to build a logical structure for categorizing assets, we developed the following list of topics that would be covered in the Knowledge Base. These suggested topics were drawn from the content categories used for Bulletin and Conference articles, the Professional Interest Groups, as well as those areas of interest noted in the 2012 Skills Survey (See Appendix C). This is only a draft taxonomy and should be revisited and refined during the development process.

- **Topic:** ALHFAM
- **Topic:** Apparel and Textile Techniques/Methods
  - **Sub-Topic:** Garment Construction
  - **Sub-Topic:** Mending Techniques
  - **Sub-Topic:** Millinery
  - **Sub-Topic:** Shoemaking
  - **Sub-Topic:** Tailoring
- **Topic:** Artifacts, Collections, Exhibits
  - **Sub-Topic:** Artifact Replication
  - **Sub-Topic:** Collections Care and Management
  - **Sub-Topic:** Collections Storage
  - **Sub-Topic:** Furnishing Plans
  - **Sub-Topic:** Historic Housekeeping
  - **Sub-Topic:** Historic Structure Care
  - **Sub-Topic:** Exhibit Design
  - **Sub-Topic:** Interactive Exhibits
  - **Sub-Topic:** Online Exhibits
- **Topic:** Conferences
- **Topic:** Digital Narratives
- **Topic:** Historic (Heirloom) Farming/Gardening
  - **Sub-Topic:** Crop Processing
  - **Sub-Topic:** Kitchen Gardens
  - **Sub-Topic:** Plowing
  - **Sub-Topic:** Pruning
  - **Sub-Topic:** Sheep Shearing
  - **Sub-Topic:** Sustainable Agriculture
- **Topic:** Historic Cooking
  - **Sub-Topic:** Cidermaking
  - **Sub-Topic:** Hearth Cooking
  - **Sub-Topic:** Herbal Uses
  - **Sub-Topic:** Kitchen Gardens
  - **Sub-Topic:** Preserving
- **Topic:** Interpretation
  - **Sub-Topic:** First-Person Interpretation
  - **Sub-Topic:** Interpretive Planning
  - **Sub-Topic:** Program Development
  - **Sub-Topic:** Third-Person Interpretation
- **Topic:** Living History Museology
- **Topic:** Museum Administration
  - **Sub-Topic:** Management Skills
  - **Sub-Topic:** Technology
  - **Sub-Topic:** Visitor Evaluations
- **Topic:** Re-enacting
- **Topic:** Skilled Trades (non-apparel or textile)
  - **Sub-Topic:** Basketmaking
  - **Sub-Topic:** Blacksmithing
  - **Sub-Topic:** Coopering
  - **Sub-Topic:** Leatherworking
  - **Sub-Topic:** Timber Framing
  - **Sub-Topic:** Tinsmithing
- **Topic:** Site Visits
- **Topic:** Writing and Research Skills
  - **Sub-Topic:** Electronic Media
  - **Sub-Topic:** Grant Writing
ALHFAM’s Online Presence

Because ALHFAM is heavily based in live events (reenactments, interpretation, live demonstrations) as well as object-centric activities (e.g., museums, curation, etc.), the role of new media and digital assets has not always been a primary concern. However, the board recognizes that to stay relevant, the association needs to embrace the opportunities availed by technological innovations, using them to further their mission. ALHFAM has already established a large online presence, through dedicated sites as well as hosting pages on various social media platforms. Table 2 outlines ALHFAM’s online presence as well as noting the types of assets posted on each.

In addition to ALHFAM’s official presence, there are many members with their own websites and social media pages on which they host various assets which may be of interest to ALHFAM and considered for inclusion in the Knowledge Base.
<table>
<thead>
<tr>
<th>Site Name</th>
<th>Online Presence and Asset Types</th>
<th>Platform</th>
<th>Social Media Type</th>
<th>Description</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHFAM</td>
<td>Dedicated website</td>
<td>Platform</td>
<td>YouTube</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest Open Air Museums</td>
<td>Dedicated website</td>
<td>Platform</td>
<td>Wordpress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALHFAM R List Serve</td>
<td>Email discussion list</td>
<td>Platform</td>
<td>LinkedIn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALHFAM</td>
<td>Facebook page</td>
<td>Platform</td>
<td>Facebook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALHFAM</td>
<td>Twitter feed</td>
<td>Platform</td>
<td>Twitter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALHFAM</td>
<td>Wordpress blog</td>
<td>Platform</td>
<td>Wordpress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALHFAM</td>
<td>YouTube page</td>
<td>Platform</td>
<td>YouTube</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: ALHFAM’s Online Presence and Asset Types
The Current State of ALHFAM’s Digital Assets

The initial phase of building the Knowledge Base will be gathering existing assets while also creating new ones. As the project matures, it’s likely that the focus will be more on creation than merely moving assets from various locations into the system. Note that the current project for which SUNY is contracted will yield recommended methods and specifications ALHAM can use to execute this phase rather than completing this phase itself.

Below is a brief overview of the assets noted in Table 2.

TEXT ASSETS

Currently, the most prevalent digital assets are texts, delivered via HTML/XML, Word documents, and searchable and non-searchable PDF formats. As such, the most prevalent activity captured is writing and discussing, both scholarly and informal.

Scholarly Texts. ALHFAM currently has a respected publication, The Bulletin, published quarterly since the summer of 1992. Articles in this publication are scholarly and formal, and have benefitted from a peer review and editing process. Based on feedback from the publications committee regarding issues with getting enough quality content to fill the issue four times a year, it would seem that seeking to expand the number of articles of this nature might not be fruitful. Currently, The Bulletin is available in PDF format going back to 2007. There is a sortable, searchable online index that goes back to 1992 which includes year, issue, volume, title, author, and content category metadata for 518 articles.

The other outlet for scholarly writing is Proceedings, the printed collection of papers that are delivered at the annual conference. Currently, Proceedings is available in print format only (no PDFs), however there is a sortable, searchable index of proceedings articles on the ALHFAM website (here) which includes year, title, author, and content category metadata for 1104 papers presented from 1974 through 2010.

Informal Texts. Currently, the association hosts a Wordpress page on which four members are able to post blogs, updates, photos, etc. Any member who would like to write a blog would be allowed to, but there is no communication that this opportunity is open to them. In addition to the Wordpress blog, informal writing can be found on the association’s social media pages (LinkedIn, Twitter, and Facebook) as well as in the ALHFAM monthly newsletter, the eUpdate. The eUpdate was launched in 2012 and focuses on news and updates. Prior to this, such updates were included in the The Bulletin.

Discussion Texts. ALHFAM also has a social media presence on LinkedIn and Facebook members and non-members can communicate with each other. There is a Yahoo Group for ALHFAM Interpreters. The ALHFAM-L (ListServ email list) is the most prevalent means of member discussion.

Membership List. The current membership list has contact information only and is not searchable. The database slated to be developed per the Strategic Plan is intended to be searchable and accessible to members.
CREATING THE ALHFAM KNOWLEDGE BASE

PHOTO ASSETS
Already, there is a plethora of images related to ALHFAM, many posted on Facebook with others hosted on various sites and platforms, including ALHFAM’s websites and social media presences as well as member (both corporate and individual) websites and pages. However, these assets are not easily searchable and are often more social in nature.

VIDEO ASSETS
While a YouTube account has been created in July of 2012, most digital content is on members’ personal YouTube pages and is therefore harder to find as well as at risk of being removed at the member’s discretion, thus lost to the proposed ALHFAM Knowledge Base.

AUDIO, ILLUSTRATION, AND ANIMATION ASSETS
These are the most limited digital assets the association has online.
Recommendations

ALHFAM is seeking a technology solution which will enable the association to, “to gather, capture, and organize its digital resources and create an online Knowledge Base to serve current and prospective members, as well as external constituencies” as stated in the project proposal submitted to SUNYIT. The following pages detail recommendations for that technology solution.

Overall, our recommended solution is a Knowledge Base that includes content housed on multiple platforms and sites (ALHFAM’s web presence as well as any additional pages/sites deemed appropriate) and managed by a set of digital asset policies and procedures (a Knowledge Management System) developed for the association. This solution involves three key areas:

- **Document Repository Implementation.** The document repository is a place to manage assets (organizing) and house objects (publishing).
- **Federated Search Implementation.** A federated search examines multiple, specified locations rather than a single site or the entire internet.
- **Digital Asset Management (Policies and Oversight).** This activity involves the development of the policies and procedures which will be integral to managing ALHFAM’s Knowledge Management System.

*Note: during our research and analysis of ALHFAM’s digital presence, we have concluded that the association would benefit from some updates to the dedicated website’s functionality, updates which would increase access to ALHFAM’s presence on various platforms and incorporate features for such administrative services as membership management. Though it is out of the scope of our project, we have included suggestions for a website refactor that would increase overall effectiveness and better integrate the digital activities and databases related to the association.*

The successful ALHFAM Knowledge Base will be the result of effective development and implementation of these areas and will have the following characteristics:

- Integrate a variety of media types
- Be easy to populate, update, and organize/categorize
- Allow for more than one administrator to make changes to the system (to avoid bottlenecking)
- Foster member interactivity and submissions, including various discussion groups and commenting
- Allow for various levels of access (e.g., public, member-only, board-member-only, regional-representative-only)
- Integrate ALHFAM’s other Web presences
- Be properly branded as an ALHFAM site or page
- Use clear organization with a user-friendly interface that fosters browsing in addition to directed searching
- Have a reliable system for administrators to receive technical help
- Be flexible and scalable in order to respond to the association’s changing needs
Creating the ALHFAM Knowledge Base

These are characteristics that should describe the Knowledge Base as a whole and may not be reflected on every ALHFAM site or social media pages.

On the following pages, we’ve outlined the requirements and considerations for each of these areas, specifications which would form the backbone of an RFP issued to potential vendors who would carry out the development and implementation of ALHFAM’s selected solutions. We have also included recommendations for Knowledge Base content.

Finding the Right Investment for ALHFAM

For each area, we offer three solutions from which the association can select to meet their needs. Each solution is categorized on its level of effectiveness at meeting ALHFAM’s stated project needs while balancing financial and human capital/resource investments in the solution development and maintenance. Our recommended solutions are labeled, “The Right Investment.” All of the options are specific to ALHFAM’s needs; therefore the recommended option for each area is the one which takes into consideration ALHFAM’s audience, content, strategic objectives and financial and human resources as understood by the researchers.

Appendix D: Requests for Proposals includes complete Requests for Proposals (RFPs) for the recommended options. ALHFAM can issue these RFPs to potential vendors for bidding.
Asset Repository Implementation

Currently, ALHFAM’s digital assets are housed in various locations, including their main website, social media pages, and member sites. In addition to these existing assets, strategic goals include development and gathering of relevant content as well as digitizing conference proceedings and possibly older versions of The Bulletin. While the current methods of housing content is functional, dissatisfaction over ease of finding and posting content has been voiced, a sentiment that is likely to persist and intensify as the amount of content increases (as planned) if no changes are made. The strategic goal to provide quality content to members involves both the content itself and making it easily accessible to members. To meet the latter need, the association would benefit from a software system that is specifically geared to house large amounts of content in various formats with easy methods for uploading, organizing, searching, and interaction.

Table 3 shows the list of characteristics potential software should be evaluated against.

Table 3. Asset Repository Software Option Considerations

Options in bold are highly recommended and constitute the best solution for ALHFAM. Other items are deemed not critical to success and/or may or may not be options ALHFAM wishes to include in the repository.

<table>
<thead>
<tr>
<th>ASSET REPOSITORY FUNCTIONALITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESTING THE SOFTWARE</td>
<td></td>
</tr>
<tr>
<td>• Free Trial</td>
<td>The software can be tested out to determine if it meets the association’s needs before any money is committed.</td>
</tr>
<tr>
<td>• Money-Back Period / no contract</td>
<td>If, after development, the software is determined to not meet the association’s needs, ALHFAM can discontinue use and get money back.</td>
</tr>
<tr>
<td>HOSTING OPTIONS</td>
<td></td>
</tr>
<tr>
<td>• Self-hosted</td>
<td>Site lives on local servers that ALHFAM owns and maintains.</td>
</tr>
<tr>
<td>• Hosted</td>
<td>Site lives in the cloud, hosted by other servers.</td>
</tr>
<tr>
<td>ASSET ORGANIZATION</td>
<td></td>
</tr>
<tr>
<td>• Intuitive structure</td>
<td>Interface and organization is logical and easy to use for browsing.</td>
</tr>
<tr>
<td>• Tagging</td>
<td>Has options for both manual and automated tagging. Offers administrators to set up options for tagging which will contribute to consistency and better organization.</td>
</tr>
<tr>
<td>• Member-Only Access</td>
<td>The software allows for controlled access</td>
</tr>
<tr>
<td>LAYOUT/APPEARANCE OPTIONS</td>
<td></td>
</tr>
<tr>
<td>• Custom Development</td>
<td>Total custom development, usually at a cost, which results in the exact look and feel desired.</td>
</tr>
<tr>
<td><strong>ASSET REPOSITORY FUNCTIONALITY</strong></td>
<td><strong>NOTES</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Standard Layout</td>
<td>Layout is basically the same for all users of the software.</td>
</tr>
<tr>
<td>Templates</td>
<td>Templates are available to customize the look and feel of the site (some at a cost, some are free).</td>
</tr>
<tr>
<td>Ad-free (non-branded) option</td>
<td>Software branding is not present on the site.</td>
</tr>
</tbody>
</table>

**TECH SUPPORT AND EASE OF USE**

<table>
<thead>
<tr>
<th><strong>User-to-user support</strong></th>
<th>Discussion groups and forums where users help each other. Can mean issues are unresolved or advice is incorrect/unreliable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official documentation/Knowledge Base</strong></td>
<td>Reliable information from the developer but can be somewhat static and not answer all questions.</td>
</tr>
<tr>
<td><strong>Live support and/or support tickets</strong></td>
<td>Often comes at a cost to the user but can be very helpful during start up when admins are setting up and learning the software.</td>
</tr>
<tr>
<td><strong>Members/Users</strong></td>
<td>Software is intuitive to use and help is easy to find.</td>
</tr>
<tr>
<td><strong>Administrators</strong></td>
<td>Administrators can easily learn how to perform necessary activities.</td>
</tr>
</tbody>
</table>

**EXPANSION OPTIONS**

<table>
<thead>
<tr>
<th><strong>Extra Storage</strong></th>
<th>If more space is needed as assets are developed, the repository can be expanded to house them.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple products/services</strong></td>
<td>The software maker offers other products which might benefit ALHFAM such as website development and hosting.</td>
</tr>
</tbody>
</table>

**SUPPORTED FORMATS**

<table>
<thead>
<tr>
<th><strong>Hosts most common MIME types</strong></th>
<th>The repository can host any type of asset (e.g., doc, jpg, wma, html).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ability to view assets without downloading</strong></td>
<td>Assets can be viewed in the browser window in addition to downloading.</td>
</tr>
</tbody>
</table>

**ACCESSIBILITY**

<table>
<thead>
<tr>
<th><strong>Multi-platform</strong></th>
<th>The software should run on as many devices as possible to meet ALHFAM’s technically diverse user base.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobile-Friendly Versions</strong></td>
<td>Software that has versions specifically formatted for smaller screens on mobile devices such as smart phones and tablets.</td>
</tr>
</tbody>
</table>

**ASSET CREATION AND USER COLLABORATION**

<table>
<thead>
<tr>
<th><strong>Creation</strong></th>
<th>Documents can be created and updated within the software. Software offers “WYSIWYG” (What You See Is What You Get) to make it clear how the end product will look.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaboration</strong></td>
<td>Software allows people to work together to develop an asset.</td>
</tr>
<tr>
<td><strong>Versioning</strong></td>
<td>Software tracks file updates vs. simple overwriting.</td>
</tr>
<tr>
<td>ASSET REPOSITORY FUNCTIONALITY</td>
<td>NOTES</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Discussion groups/Forums</td>
<td>Site hosts forums for discussion (would replace the email list; if not</td>
</tr>
<tr>
<td></td>
<td>present on the repository, it should be integrated into the ALHFAM</td>
</tr>
<tr>
<td></td>
<td>website to have a logical, central location for discussions).</td>
</tr>
<tr>
<td>• Commenting Features</td>
<td>Users can comments on articles/posts.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSTOM/ADVANCED SEARCH FUNCTIONALITY</td>
<td></td>
</tr>
<tr>
<td>(see also Federated Search requirements;</td>
<td></td>
</tr>
<tr>
<td>if the digital repository software has</td>
<td></td>
</tr>
<tr>
<td>adequate search functionality to meet</td>
<td></td>
</tr>
<tr>
<td>those needs, a separate solution need</td>
<td></td>
</tr>
<tr>
<td>not be developed and implemented)</td>
<td></td>
</tr>
<tr>
<td>• Advanced search options</td>
<td>Built-in search functionality offers advanced search options (or the</td>
</tr>
<tr>
<td></td>
<td>ability to modify code to insert alternate search options).</td>
</tr>
<tr>
<td>• Search customization</td>
<td>Search functionality can be expanded to include other ALHFAM-</td>
</tr>
<tr>
<td></td>
<td>related sites.</td>
</tr>
<tr>
<td>• Full-text and document meta data search</td>
<td>Search looks at full document text, title, author and tags as well as</td>
</tr>
<tr>
<td></td>
<td>automated metadata (such as posting date, time, platform, etc.)</td>
</tr>
<tr>
<td>• Scans multiple media types</td>
<td>Search scans multiple file types, such as doc, pdf, xls, ppt, etc.</td>
</tr>
<tr>
<td>OTHER</td>
<td></td>
</tr>
<tr>
<td>Open Source Software</td>
<td>Software is open source (free and able to be enhanced by the public,</td>
</tr>
<tr>
<td></td>
<td>including the development of apps which work with the software)</td>
</tr>
<tr>
<td></td>
<td>instead of proprietary.</td>
</tr>
<tr>
<td>Custom Domain Name</td>
<td>The address of the repository can be ALHFAM specific (e.g. alhfam.org</td>
</tr>
<tr>
<td></td>
<td>vs. alhfam.wordpress.org).</td>
</tr>
<tr>
<td>Non-profit discounts</td>
<td>Software company offers discounts for non-profits that ALHFAM could</td>
</tr>
<tr>
<td></td>
<td>take advantage of.</td>
</tr>
</tbody>
</table>

**LOW INVESTMENT: FILE SHARING**

Minimally, ALHFAM could choose to start using one of many low-cost document sharing sites. These sites allow users to easily post content and offer a few (limited) options for organization and search functionality. While these systems are a small financial investment, easy to use, and hosted in the cloud, they fail to offer the more complex needs such as commenting features, advanced search options (or the ability to easily update the code to include advanced search options), or tagging systems, features we think are integral to a successful solution. These systems may work on the short term, but they would ultimately fall short of adequately serving the association’s long-term objectives.

**HIGH INVESTMENT: KNOWLEDGE MANAGEMENT SOFTWARE**

ALHFAM could adopt a Knowledge Management software system which encompasses all areas of knowledge management and offers sophisticated collaborative features. These systems are often referred to as Knowledge Management Software and are geared toward working groups who want to not only store assets, but to develop them as well. While these types of software solutions are comprehensive, they tend to come with a higher cost investment, contracts, and offer options and
CREATING THE ALHFAM KNOWLEDGE BASE

services which are likely to be of minor value to ALHFAM’s specified needs or redundant to other efforts. For example, ALHFAM has already begun to consider the different methods for organizing/editing content and develop ideas about what that process should look like to best meet the association’s specific needs. A prescribed process could overly complicate the system, create redundancies with actions (such as editing) completed before the document enters the system, or simply impose a process which is not necessary for ALHFAM’s needs. Overall, Knowledge Management software systems are likely to be more complex and costly than required.

THE RIGHT INVESTMENT: DIGITAL ASSET MANAGEMENT SOFTWARE

To best meet ALHFAM’s needs, we recommend using sophisticated, cloud-based, digital asset management software to fill the asset repository need.

While there are many software options that tout content and data management, these are often either smaller features of a larger (and often more costly) platform. The result is that the content management, specifically independent assets such as Word documents, PDFs, PowerPoint presentations, or images may be less robust than necessary for ALHFAM’s needs. Digital Asset Management software is focused on housing and organizing assets, providing superior performance in this area. As such, these systems are ideally suited to provide access to various file types, employing advanced search, tagging and organization options. As such, we recommend using a content management system whose primary focus is providing controlled access to content.

Our recommendation of using a hosted/cloud-based solution eliminates the need for ALHFAM to worry about servers, server space and/or upgrades.

The best software solution will also be able to link to assets which ALHFAM may not own or have permission to archive but are viewed as valuable enough to be part of the knowledge base. In this situation, the software allows for the creation of metadata and cataloging via link even if it doesn’t also house the object itself.

Whatever software is selected, we suggest selecting a plan that offers reliable support to help with setup and initial deployment (at least) as well as its own Knowledge Base of resources to help administrators and users learn how to use the system effectively. Lacking this technical help may contribute to an unnecessarily difficult setup and integration, consuming excessive hours from whomever at ALHFAM is selected to own this part of the project.
Federated Search Implementation

ALHFAM has a web presence, active on both its dedicated website as well as on social media platforms such as Twitter, LinkedIn, Facebook, Wordpress, and various discussion groups. While some members voiced a desire to have one site to serve all of association’s online needs, each platform has different purposes and is likely to appeal to different audience needs. Constraining the web presence can limit how many people are exposed to ALHFAM and undermine the association’s strategic goals.

We recommend that the ALHFAM continue to have a varied web presence. However, we also recognize the critical importance that the information housed on each platform be accessible to members without having to search several locations by hand to find it. To accomplish this, the Knowledge Management System solution would require a federated search feature which allows multiple (pre-defined) pages/sites to be included in any search. This ensures that no matter which ALFHAM page the desired content resides on, it can be found through one search. Table 4 lists software characteristics which should be taken into consideration when selecting a solution. The recommended characteristics are in bold.

Table 4. Federated Search Considerations

<table>
<thead>
<tr>
<th>FEDERATED SEARCH FUNCTIONALITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ability to search multiple, pre-defined pages/sites</td>
<td>The search should scan every/any location on which ALHAM has relevant files</td>
</tr>
<tr>
<td>Advanced search options</td>
<td>Users should be able to customize the search to include such perimeters as title, author, creation date, medium, etc.</td>
</tr>
<tr>
<td>Detailed search results</td>
<td>Search results should offer more information than the title and link so as to help users determine which results are relevant and not without having to open each link</td>
</tr>
<tr>
<td>Sorting</td>
<td>Ability to sort results by various data elements, such as author, title, date, etc.</td>
</tr>
<tr>
<td>Ad or brand-free versions</td>
<td>Option to remove any branding by the company who created the software</td>
</tr>
<tr>
<td>Open Source Software</td>
<td>Software is open source (free and able to be enhanced by the public, including the development of apps which work with the software) instead of proprietary</td>
</tr>
<tr>
<td>Customized layout</td>
<td>Ability to configure what information and in what order/format appears in each search result</td>
</tr>
</tbody>
</table>
LOW INVESTMENT: BASIC CUSTOMIZED SEARCH

At a minimum, ALHFAM needs a tool which will search the pages and sites associated with the Knowledge Base, enabling.searchers to find all materials to which they have access with one search. This can be done through some simple HTML code which can then be applied to the desired location(s).

Figure 8 shows a simple custom search in action. In addition to the dedicated ALHFAM site and the Midwest Open Air Museums Coordinating Council (MOMCC), ALFHAM’s pages on the following social networking platforms were searched:

- Facebook
- LinkedIn
- Twitter
- Wordpress
- YouTube

The benefit of this search is that it is both limited to ALHFAM-related pages/sites while reaching beyond the dedicated website (which would exclude relevant content housed elsewhere). While this solution is an easy step up from the current search functionality on the dedicated site, the number of results can be overwhelming and not specific enough to meet the searcher’s needs. To generate more refined results, advanced search options are necessary.
Figure 8. Basic Federated Search Example

Conference
Association for Living History, Farm and Agricultural Museums Annual Meeting and Conference, June 6-8, 2009. Hosted by Old Salem Museums & Gardens...
www.alfhafm.org

Sugar, Spice, Isinglass & Cakes, Great & Small - Workshop
Other Conferences, Seminars and Symposiums Related to Living History ..., Bridging Ages Conference in Las Cruces, New Mexico, USA, April 15-18, 2013 ...
www.alfhafm.org

ALHFAM - Annual Meetings and Conferences
The annual conference is the largest single gathering of the ALHFAMily, ... considered by many to be one of the most useful museum conferences available.
www.alfhafm.org

ALHFAM - Conferences
The ALHFAM website carries a variety of information on conferences, workshops, seminars, etc. that may provide useful information to our members (and ...)
www.alfhafm.org

Spring 2012 Conference
Don't forget to register for the Spring Conference in Madison, Indiana, March 8-10! While you're at it, make your hotel reservations and don't forget to mention ...
momcc.org

Fall Conference 2012 Call for Papers!
Common Places, Common Ground. Interpreting Midwest Life and Culture Hosted by Uhlers Ferry Historic Village, Cedar Rapids, IA November 13, 2012 ...
momcc.org

ALHFAM - 2010 Conference Galleries
Follow the conference with photos! Through the week we will posting photos of conference workshops, sessions, tours and other events on the Galleries page ...
www.alfhafm.org

Keynote speaker for 2012 conference announced! | ALHFAM
Nov 29, 2011 ... And while we’re talking about the conference, only a month to go to get those panel/session proposals in!!! Go here to get more information ...
alhfam.wordpress.com

Dinner venue for 2012 Conference | ALHFAM
Oct 19, 2011 ... Hi there folks, thought that id give you a little taste of one of our dinner venues for next year's annual conference. I'm excited to inform you that ...
alhfam.wordpress.com
HIGH INVESTMENT: COMPREHENSIVE, CUSTOMIZED SEARCH

The best solution combines relevant advanced search options with results which are well organized and provide enough information in the preview to help searchers quickly inform their decision about relevance. Figure 9 shows such a solution which not only provides several options to refine a search, but also bibliographic information, and image and content previews in the results. This particular search engine also offers the option to refine and organize the results to better meet the searcher’s needs. As ALHFAM’s digital assets grow, the more search options that can be offered to researchers, the better chance that the results meet their needs without requiring hours of weeding through non-relevant finds.

Figure 9. Comprehensive Federated Search Example
THE RIGHT INVESTMENT: ADVANCED SEARCH OPTIONS

Advanced Searches offer users more options to help refine a search and hopefully generate a more targeted list of results. These searches can include settings for such options as file type, category, location, author, creation date in addition to the keywords. Figure 10 shows an example of a more complex custom search engine for the Morgan Library and Museum and Figure 11 shows the search results.

**Figure 10.** Advanced Options Federated Search Example: Query

![Advanced Options Federated Search Example: Query](image)

**Figure 11.** Advanced Options Federated Search Example: Search Results

![Advanced Options Federated Search Example: Search Results](image)
Digital Asset Management (Policies and Oversight)

As has been discussed, a Knowledge Management System involves more than gathering content. It ensures that there are adequate processes and policies in place to stimulate the submission of new content in a variety of formats, determining which existing content should be digitized and included as well as how that content is evaluated, organized, published, and shared. Each of these steps need processes created to ensure that things move smoothly but that the content that is published is of acceptable quality. This is the only way that the Knowledge Base will be a respected, reliable resource.

A well thought-out and comprehensive set of policies is the first step to ensuring the content in the Knowledge Base is reliable and properly reflects the association. However, the policies and procedures also need to be efficient and easy to follow in order to engage users and content creators, consistently followed, and continually examined to ensure they still meet the association’s needs and are contributing to a first-rate, growing Knowledge Base.

LOW INVESTMENT: POLICIES

The most basic means to handle digital asset management is to create a set of guidelines to manage the process. These can be adopted from existing materials found as the result of research or developed from the ground up by ALHFAM. These processes and guidelines would be published and used by members to self-regulate what should and should not be posted and enable a large amount of people to post materials. This is an inexpensive means to an end, with minimal time and cost investments.

This solution might yield some undesirable results. Without one person actively championing the program, it is possible that it could derail into chaos or inertia, both equally unproductive. Additionally, this option would embrace a large amount of open publishing, which risks content being published in the Knowledge Base that does not demonstrate the quality with which ALHFAM wants to be associated.

MEDIUM INVESTMENT: POLICIES + BOARD MEMBER AS MANAGER

To mitigate some of the issues presented by the above option, the association could assign the management of the Knowledge Base to a board member. The advantage here is having an individual to champion the program, ensuring that goals and objectives are met. Additionally, all of the current board members have significant expertise in ALHFAM-related subject matter which is a definite asset in understanding and evaluating the content as well as knowing what sorts of content should be developed for the association. This solution represents minimal cost investments but increases the time investment by a volunteer.

Given the consistent feedback that board members have limited time to offer, time which is quickly filled up by their existing responsibilities on the board, this solution is better than nothing but may not allow for the amount of time needed to successfully manage the program, especially in the beginning when the time investment needed to successfully launch the program will be significant.
THE RIGHT INVESTMENT: POLICIES + KNOWLEDGE MANAGEMENT EXPERT AS MANAGER

The best way to achieve success is to hire a Digital Asset Manager with knowledge management experience. This person would take responsibility for ensuring that content flows through the process properly and in a timely manner, evaluating the process over time to determine if it needs to be refined to better meet member and association needs, as well as serving as a champion for the Knowledge Base and its continued development and overall success. The benefits of this solution include the expertise not presently demonstrated by any current members as well as the time allowance an employee or contractor is able to make that volunteers may not be able to. This should result in a consistent, dedicated, and skilled effort which is likely to yield the best results.

The Digital Asset Manager would work closely with the ALHFAM Board of Directors to ensure strategic goals are being met and contribute to brainstorming ways the Knowledge Base could enhance other activities (e.g., providing pre-work for a workshop to orient participants). This option should help ensure that the initial development and deployment are given the proper attention and thus lay solid groundwork for continued growth and development, leading to the goal of becoming a respected resource for the ALHFAM community. Done properly, this Knowledge Base should prove valuable enough to generate increased membership.
Website Refactor

Although peripheral to the initial project request, several board members commented on the current website’s growing inability to meet their needs due primarily to the inefficiency in updating the site as well as the complexity of the site’s programming. As the association moves to create a document repository, we think that a website refactor should also be considered, especially in light of the fact that some of the document repository software solutions can be expanded to include website development. Not only would such a solution mean learning only one type of software and working with one company, it will likely facilitate the integration of the dedicated ALHFAM website with its document repository.

We recommend that ALHFAM consider an overhaul on the site, moving away from a custom programmed solution to software that is designed for non-programmers. This eliminates the need for a web designer or developer to be on available for updates and changes. We also recommend a cloud-based hosting option rather than self-hosting which removes the burden of maintaining servers from ALHFAM.

Additionally, ALHFAM should continue to embrace the idea of a web presence and not expect that the dedicated website needs to host all of the member activity ALHFAM wishes to foster online. The association should continue to develop its social media presence, remaining active on the different platforms. This includes continuing to post blogs on Wordpress, videos on YouTube, images and updates on Facebook, etc. The website should make it easy for visitors to find these related pages and activity though RSS feeds and links.

ADMINISTRATIVE SERVICES INTEGRATION

The website refactor would benefit from integrating ALHFAM-related administrative services, including membership management (joining, renewals), purchasing options, conference registration, and a searchable member database which includes information on each member’s areas of expertise – another ALFHAM strategic objective.

As was recommended with the digital repository, the ideal website solution would involve quality tech support. While there will be time needed for the ALHFAM web administrator and others to learn a new piece of software, the availability of tech support should ensure that there is never an issue with not being able to change something due to the fact that the programmer can’t be contacted any longer or that there are no answers to one’s question on discussion boards.
Content Delivery Recommendations

MEDIA DIVERSIFICATION

As noted above, the bulk of gathered assets are text-based. However, many of the areas of interest for ALHFAM focus on processes, both human and mechanical, which benefit tremendously from visual aids, if not video documentation and it is highly recommended that video documentation be used heavily moving forward. Ten years ago, video documentation required expensive cameras, post production, and getting digital versions online was difficult. Most of the obstacles to posting videos online have been removed, and it is now feasible for members to document both events being attended (such as a conference, lecture, or demonstration) as well as members’ areas of expertise (e.g., an experienced historic cheese maker filming her process).

While a professionally produced and edited video may be the best solution for certain situations, sometimes a point-and-shoot method represents the best balance between cost and benefit. Empowering (and encouraging) ALHFAM members to do this themselves, either through deliberate planning or spontaneous engagement will help to build a strong video and photo library into the Knowledge Base.

It is recommended that valuable member videos should be sought out and, with the member’s permission, copied over to the ALHFAM YouTube channel with the metadata loaded into the Knowledge Base so as to ensure its continued availability as well as ease of access.

Diagrams, illustrations, and animations of certain artifacts and processes are valuable tools for preserving information, often better able to communicate than text alone. As such, multimedia formats (e.g., text and graphics, illustrations and video, audio and animations, etc.) are often a better means to transfer information than single media presentations.

By including a variety of media, members may be able to select the best medium for their particular learning style as well as increasing the chances that the most appropriate media is used to best communicate the subject matter and activity, not just that which is easiest to create/host.

METHOD DIVERSIFICATION

In addition to documenting activities and communicating basic information (e.g., policies, procedures, contact information, etc.) through a variety of media types, a successful Knowledge Base will house assets that use a variety of methods to transfer information and knowledge. “...the way information is presented has a significant impact on how it is interpreted” (Davidson & Voss, 2006, p. 57). That means that not only should a variety of media be used, but a variety of design approaches and methods, such as those discussed in the Information Interaction Design section, should be used for maximum effectiveness.

One method that seems well-suited to ALHFAM’s needs is the digital narrative (including personal oral histories).

One theme that emerged was the desire to capture what’s “in the heads” of some older members. Barriers to this are often that they aren’t interested in writing articles about what they know and/or are less technically savvy and therefore disinterested in engaging in the creation of digital assets. In some cases, ALHFAM might want to consider creating digital narratives with these folks. Another member can serve as the interviewer as well as running the recording equipment which can be video
or simply an audio recording. The opportunity audio/video presents is that the “teller” need only speak, thus eliminating any barriers that having to write, shoot, illustrate, etc. might present. These narratives can be first person stories shared by members to help preserve not only skills and knowledge but (and more likely) also personal perspectives, experiences, and ideas ALHFAMers would benefit from having access to. “…stories have an inherent capability to capture rich tacit knowledge” (Connell, Klein, & Meyer, 2004, p. 187). This same technique may also be of interest to the many ALHFAM interpreters who are ideally suited to use this medium to tell their character’s or historical figure’s stories. For examples of digital narratives, visit Story Corps. It should also be noted that the Farmers Branch location has already started recording oral histories of relevance to their site.

Finally, ALHFAM should make a conscious effort to consistently document their own activities, thus building a legacy of the association’s culture, values, and collective endeavors and experiences which will be available to future members.

TECHNOLOGY EDUCATION/ASSISTANCE

The researcher encountered many members who were concerned about older members’ technological savvy. There was a feeling, often communicated, that only younger members would embrace and contribute to an online presence and the consequences of that would be that the experience and expertise of older members who aren’t interested in embracing technology would not be well represented and/or their reluctance would deter widespread adoption of the Knowledge Base.

This is significant to the development of the Knowledge Management System in that it should be easy for both experienced and novice members to use as well as housing relevant documentation on how to use the system. Guides on how to generate digital assets would also be beneficial, including not only step-by-step instructions for generation (e.g., How to create a PDF) but also guidelines for what makes an effective assets (e.g., hints to taking a great photo or video).

This type of assistance may result in increased quality and quantity of assets.
Investment Options

For each of the three investment levels below, we have provided recommendations for the best way to allocate the budget to each of the three elements ALHFAM needs to develop a Knowledge Base. These are designed to give a general idea of what the solution could look like for each option. Individual vendors who respond to the RFPs may return costs that are higher or lower depending on their solutions and fee structures.

$5,000 Option

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Digital Asset Repository</td>
<td>• Low Investment: File sharing</td>
</tr>
<tr>
<td>Federated Search</td>
<td>• Low Investment: Basic Federated Search</td>
</tr>
<tr>
<td>Knowledge Base Management</td>
<td>• Low Investment: Policies Only</td>
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$15,000 Option

<table>
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<tr>
<th>ELEMENT</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>Digital Asset Repository</td>
<td>• The Right Investment: Digital Asset Management Software</td>
</tr>
<tr>
<td>Federated Search</td>
<td>• The Right Investment: Advanced Search Options</td>
</tr>
<tr>
<td>Knowledge Base Management</td>
<td>• The Right Investment: Policies + Knowledge management expert as Manager (six-month contract)</td>
</tr>
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</table>

$25,000 Option

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>DESCRIPTION</th>
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<tbody>
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<td>Digital Asset Repository</td>
<td>• The Right Investment: Digital Asset Management Software</td>
</tr>
<tr>
<td>Federated Search</td>
<td>• The Right Investment: Advanced Search Options</td>
</tr>
<tr>
<td>Knowledge Base Management</td>
<td>• High Investment: Policies + Knowledge management expert as Manager (one-year contract)</td>
</tr>
</tbody>
</table>
References


### Strategic Plan

**Objective 1:** Provide highly-valued skill training to a growing membership using a range of methods.

**Mission:** "..." where members are trained with skills... advancements, research, and dissemination..." makes history.

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<table>
<thead>
<tr>
<th>ALHAFM</th>
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<tbody>
<tr>
<td><strong>Crafts</strong></td>
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<td><strong>Coaching</strong></td>
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<td><strong>Training</strong></td>
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<td><strong>Research</strong></td>
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<td><strong>Publishing</strong></td>
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<td><strong>Consulting</strong></td>
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<tr>
<td><strong>Networking</strong></td>
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<tr>
<td><strong>Strategic Plan</strong></td>
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**Objective 2:** Increase the visibility of ALHAFM to the public and the media.

**Plan:** By 2014 - 2015

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**Appendix A: ALHAFM Strategic Plan, 2011 - 2013**

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Creating the ALHAFM Knowledge Base

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**Note:**

- In 2012, ALHAFM conducted a survey to understand the needs of its members.
- The organization plans to implement a new membership management system by the end of 2013.
- ALHAFM hosts a series of webinars on various research topics every month.

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Appendix B: Member Input

The following pages summarize the feedback provided regarding ALHFAM’s web presence and ideas about the Knowledge Base.

Overall Themes

- The need for any online presence to be fun, easy, and engaging so that we can easily transfer individual knowledge capital into organizational capital and make it easy for members to access
- The perceived technical divide between Gen X/Gen Y and the older generations. Over and over again, members commented that the older folks weren’t interested/ready
- The need to capture the vast amounts of undocumented knowledge in the oldest members heads
- Readiness to engage with a solution
- The need to capture the diversity of ALHFAM’s membership base and their associated interests (interpreters, farmers, curators, historians, etc.) “We aren’t all farmers”
- Members have limited time to engage in documentation; many view themselves as “doers” vs. “documenters/writers”
- Too many logins – need to streamline
- Want one-stop shopping (this does not mean one location houses everything but that one location should be able to link to ALHFAM presences in other areas, including its social media outlets as well as the regional sites)
- Need to be able to easily find out who knows what so you can get to the right person to answer questions/provide expertise.

Regarding the Website

- There is a core group that uses the site regularly
- The programmer is no longer available, making updates difficult
- Blake Hayes is the owner, but not a programmer, so he’s spending a great deal of time with the site; this is viewed as inefficient and not an ideal use of his time
- It’s become outdated – it was great when they launched it several years ago but has not been able to keep up with the improving technologies that make current sites more engaging and user-friendly
- It fails to integrate ALHFAM’s other online presences
- A YouTube channel has not yet launched but is planned
- The eNewsletter is a push vehicle for the website
Regarding Content

- There is a strong need to capture the expertise of older members before they are no longer with the association. There is a high risk of losing that knowledge forever if something is not done, a loss which compromises the mission of the organization.
- Many of the things that the organization does, and wants to be a source of expertise about, are difficult to adequately describe with text. Photos and videos often do a far better job of helping people to fully understand techniques and how different tools/artifacts operate.
- People need to know what it looks like and how it works
- Additionally, there are members heavily involved in reenactments which, again, would benefit from live action documentation.
- There seems lack of depth to the site offerings
- There is a great deal of paper content which should be scanned into searchable PDFs so that this content can be more useful to the members

Regarding Gathering Content

- The main means of user-submitted content is via The Bulletin. Note that this has recently changed and all timely content, such meeting dates, events, etc. are now published separately in the eNewsletter, ALHFAM Update. This is intended eliminate the problem of outdated information in The Bulletin.
- The publications committee agrees that there are issues with both quality and quantity of content for The Bulletin.
- There seems consensus that contributions to The Bulletin, ALHFAM’s version of a journal, are slow to come due to intimidation. Standards are (and should be) high, which leads many “doers” to resist documenting their ideas/areas of expertise due to discomfort with writing and/or taking the time to properly prepare an article which would meet the necessary standards.
- Additionally, the publications committee agrees that deadlines and sometimes slow/late submission rates end up compromising the quality of an article that may really need another edit or two in order to be as good as it can be.
Appendix C: 2012 ALHFAM Skills Survey

2012 ALHFAM Skills Survey

This survey collected information on skills training that ALHFAM members would like to see offered as well as what skills that ALHFAM members are willing to teach. There were also questions on emergency preparedness as well as disaster plans. The survey was taken by 192 members, completed totally by 135. The skills were divided into 10 categories: Administrative/Organizational, Management, Historic Trades, Agriculture, Domestic Skills, Research, Collections Management/Restoration, Education/Interpretation, Publications and Exhibits.

Goals

The survey had main goals:

1. To discern what training needs that individuals and institutions anticipate needing in the near future.
2. To compile information that will allow the development of a data base that can be accessed by ALHFAM members who are seeking consultants/instructors for staff training.
3. To identify areas that there is anticipated needs but limited expertise currently available through ALHFAM members.

Skills Training Needs

1. Historic Trades training category garnered the highest level of interest with 71.8% of respondents followed by Education/Interpretation with 66% and Domestic Skills with 62.8%. Publications (21.3%), Administrative/Organizational (25%) and Management had the least interest.
2. Administrative/Organizational category:
   Training Sought: Effective Use of Social Media (50.3%) followed by Grant Writing (49%) and Master Planning (36.3%). Strong interest in Exhibit Design, Marketing/Public Relations and Fundraising Event Planning as well.
3. Management Skills:
   Training Sought: Volunteer Management (56.8%) followed by Public Program Event Planning(48.2%) and Non-profit Operation (45.3%).
4. Historic Trades:
   Training Sought: Tailoring (40.4%) followed by Woodworking(39%), Millinery(38.3%), Basketmaking (36.9%) and Leatherworking(37.6%). Strong interest in Shoemaking, Tinsmithing, Blacksmithing, Coopering and Timber framing as well.
5. Agriculture Skills:
   Training Sought: Cidermaking (50.4%) followed by Sustainable Agriculture (40.3%) and Crop Processing (40.3%). Strong interest in Pruning, Sheep Shearing and Plowing as well.
6. Domestic Skills:
   Training Sought: Preserving (57.5%) followed by Kitchen Gardens (52.3%) and Herbal Uses (49.0%). Strong interest in Mending Techniques, Hearth Cooking and Garment Construction.
7. **Research Skills:**
   - **Training Sought:** Using Archives Effectively (55.8%) followed by Identifying Sources (53.2%) and Cataloging and organizing research findings (51.3%). There was also strong interest in Oral Histories.

8. **Collections Management/Conservation Skills:**
   - **Training Sought:** Historic structure care (60.8%) followed by Historic Housekeeping (56.1%) and Collections Care and Management (38.5%). Strong interest in Collections storage and writing furnishing plans as well.

9. **Education/Interpretation Skills:**
   - **Training Sought:** Interpretive Planning (50.3%) followed by Program Development (49.0%) and School Programs (46.4%). Strong interest in developing workshops, outreach programs and first person interpretation as well.

10. **Publications:**
    - **Training Sought:** Electronic Media (74.8%) followed by Graphic Design (42.9%) and Writing (31.9%).

11. **Exhibit Skills:**
    - **Training Sought:** Interactive exhibits (58.6%) followed by Online Exhibits (47.4%) and Visitor Evaluations (47.4%). Strong interest in Exhibit Design as well.

**Skills Instruction Offered:**

There were very few categories that had no instruction being offered. The majority of instructors were willing to offer onsite group workshops with either a negotiable fee or reimbursement of costs.

**Disaster Preparedness/Emergency Response**

- **Museums that have created procedures/plans:** (113 answered question) 47.8% have plans/procedures in place with 32.7% having no plan. 20.4% have plans in process.

- **Museums that have required use of such plans:** (108 answered question) 67.6% have not required use of such plans. 32.4 have experienced emergencies that require use of such a plan.

- **How museums would rate their expertise in disaster management:** 49% see themselves as novice, 26% as Intermediate (prepared but not tested), 20.8% as Advanced (Somewhat experienced) and 4.2% as experts.
Appendix D: Requests for Proposals
ALHFAM Digital Repository and Federated Search RFP

OVERVIEW

The Association of Living History, Farm and Agricultural Museums (ALHFAM) is seeking to gather, capture, and organize its digital resources and create an online Knowledge Base to serve current and prospective members, as well as external constituencies. The Knowledge Base will be managed by a Knowledge Management System which will support the organization’s mission “to share practical knowledge and skills among those who make history relevant to others.” This project is undertaken with the objective of meeting the organization’s strategic objectives to “Provide highly valued skill training to a growing membership using a range of existing and new delivery methods” and “Provide quality content that addresses member preferences in a professional format that demonstrates our unique identity, using a range of media.”

The Knowledge Management System will need to effectively engage both younger, more tech savvy members of the organization as well as serve those who may not be as computer literate. It will possess the following characteristics:

1. Access to materials in various locations, including the dedicated website, social media sites (e.g., Twitter, LinkedIn, Facebook, Wordpress), the discussion forum/listserv, and possibly the sites of certain individual or organizational members

2. A digital repository to house assets of all types, including:
   - Animations
   - Audio
   - Cybertext
   - Illustration
   - Photo
   - Text
   - Video

3. Easy-to-use federated search functionality that presents clusters of information based on criteria such as subject matter, data type, and date

4. Easy methods for administrators to update and upload new assets

5. Member-only areas which include:
   - Full access to the organizations resources
   - Ability to easily contribute to and interact with the Knowledge Base (comments, documents, metadata, multimedia, etc.)

This RFP focuses on the development of a digital repository to house assets and the federated search functionality which will allow members to easily find materials housed on a variety of specified web pages/sites.
REQUIREMENTS

Bidders should present ALHFAM with a digital repository and custom search solution that meets the above-stated needs. The table below outlines the association’s list of desired options. Items in bold are required options. Other items should be considered in the proposed solution.

<table>
<thead>
<tr>
<th>ASSET REPOSITORY FUNCTIONALITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESTING THE SOFTWARE</td>
<td></td>
</tr>
<tr>
<td>• Free Trial</td>
<td>The software can be tested out to determine if it meets the association’s needs before any money is committed.</td>
</tr>
<tr>
<td>• Money-Back Period / no contract</td>
<td>If, after development, the software is determined to not meet the association’s needs, ALHFAM can discontinue use and get money back.</td>
</tr>
</tbody>
</table>

HOSTING OPTIONS

<table>
<thead>
<tr>
<th>ASSET ORGANIZATION</th>
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<tbody>
<tr>
<td>• Intuitive structure</td>
</tr>
<tr>
<td>• Tagging</td>
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<tr>
<td>• Member-Only Access</td>
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</table>

LAYOUT/APPEARANCE OPTIONS

<table>
<thead>
<tr>
<th>TECH SUPPORT AND EASE OF USE</th>
</tr>
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<tbody>
<tr>
<td>• Custom Development</td>
</tr>
<tr>
<td>• Standard Layout</td>
</tr>
<tr>
<td>• Templates</td>
</tr>
<tr>
<td>• Ad-free (non-branded) option</td>
</tr>
<tr>
<td>• User-to-user support</td>
</tr>
<tr>
<td>• Official documentation/ Knowledge Base</td>
</tr>
<tr>
<td>• Live support and/or support tickets</td>
</tr>
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## Asset Repository Functionality

<table>
<thead>
<tr>
<th>ASSET REPOSITORY FUNCTIONALITY</th>
<th>NOTES</th>
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</thead>
<tbody>
<tr>
<td>• Members/Users</td>
<td>Software is intuitive to use and help is easy to find.</td>
</tr>
<tr>
<td>• Administrators</td>
<td>Administrators can easily learn how to perform necessary activities.</td>
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</table>

## Expansion Options

<table>
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<tr>
<th>EXPANSION OPTIONS</th>
<th></th>
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<tbody>
<tr>
<td>• Extra Storage</td>
<td>If more space is needed as assets are developed, the repository be expanded to house them.</td>
</tr>
<tr>
<td>• Multiple products/services</td>
<td>The software maker offers other products which might benefit ALFHAM such as website development and hosting.</td>
</tr>
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</table>

## Supported Formats

<table>
<thead>
<tr>
<th>SUPPORTED FORMATS</th>
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</thead>
<tbody>
<tr>
<td>• Hosts most common MIME types</td>
<td>The repository can host any type of asset (e.g., doc, jpg, wma, html).</td>
</tr>
<tr>
<td>• Ability to view assets without downloading</td>
<td>Assets can be viewed in the browser window in addition to downloading.</td>
</tr>
</tbody>
</table>

## Accessibility

<table>
<thead>
<tr>
<th>ACCESSIBILITY</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Multi-platform</td>
<td>The software should run on as many devices as possible to meet ALFHAM’s technically diverse user base.</td>
</tr>
<tr>
<td>• Mobile-Friendly Versions</td>
<td>Software that has versions specifically formatted for smaller screens on mobile devices such as smart phones and tablets.</td>
</tr>
</tbody>
</table>

## Asset Creation and User Collaboration

<table>
<thead>
<tr>
<th>ASSET CREATION AND USER COLLABORATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Creation</td>
<td>Documents can be created and updated within the software. Software offers “WYSIWYG” (What You See Is What You Get) to make it clear how the end product will look.</td>
</tr>
<tr>
<td>• Collaboration</td>
<td>Software allows people to work together to develop an asset.</td>
</tr>
<tr>
<td>• Versioning</td>
<td>Software tracks file updates vs. simple overwriting.</td>
</tr>
<tr>
<td>• Discussion groups/Forums</td>
<td>Site hosts forums for discussion (would replace the email list; if not present on the repository, it should be integrated into the ALFHAM website to have a logical, central location for discussions).</td>
</tr>
<tr>
<td>• Commenting Features</td>
<td><strong>Users can comments on articles/posts.</strong></td>
</tr>
</tbody>
</table>

## Custom/Advanced Search Functionality

(see also Federated Search requirements; if the digital repository software has adequate search functionality to meet those needs, a separate solution need not be developed and implemented)

<table>
<thead>
<tr>
<th>CUSTOM/ADVANCED SEARCH FUNCTIONALITY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Advanced search options</td>
<td>Built-in search functionality offers advanced search options (or the ability to modify code to insert alternate search options).</td>
</tr>
<tr>
<td>• Search customization</td>
<td>Search functionality can be expanded to include other ALFHAM-related sites.</td>
</tr>
<tr>
<td>ASSET REPOSITORY FUNCTIONALITY</td>
<td>NOTES</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>• Full-text and document meta data search</td>
<td>Search looks at full document text, title, author and tags as well as automated metadata (such as posting date, time, platform, etc.)</td>
</tr>
<tr>
<td>• Scans multiple media types</td>
<td>Search scans multiple file types, such as doc, pdf, xls, ppt, etc.</td>
</tr>
</tbody>
</table>

OTHER

| Open Source Software | Software is open source (free and able to be enhanced by the public, including the development of apps which work with the software) instead of proprietary. |
| Custom Domain Name | The address of the repository can be ALHFAM specific (e.g. alhfam.org vs alhfam.wordpress.org). |
| Non-profit discounts | Software company offers discounts for non-profits that ALHFAM could take advantage of. |

TIMING

[Anticipated project start date and desired completion dates.]

SELECTION CRITERIA

The project will be awarded based on the sole discretion of the ALHFAM Board of Directors.

Selection will be made on or before [Date]. Bidders will be notified by [insert communication option].
ALHFAM Digital Asset Manager Job Description

Position Title: Digital Asset Manager
Supervisor’s Title: ALHFAM President

OVERVIEW

The Association of Living History, Farm and Agricultural Museums (ALHFAM) is seeking to gather, capture, and organize its digital resources and create an online Knowledge Base to serve current and prospective members, as well as external constituencies. The Knowledge Base will be managed by a Knowledge Management System which will support the organization’s mission “to share practical knowledge and skills among those who make history relevant to others.” This project is undertaken with the objective of meeting the organization’s strategic objectives to “Provide highly valued skill training to a growing membership using a range of existing and new delivery methods” and “Provide quality content that addresses member preferences in a professional format that demonstrates our unique identity, using a range of media.”

The Knowledge Management System will need to effectively engage both younger, more tech savvy members of the organization as well as serve those who may not be as computer literate. It will possess the following characteristics:

1. Access to materials in various locations, including the dedicated website, social media sites (e.g., Twitter, LinkedIn, Facebook, Wordpress), the discussion forum/listserv, and possibly the sites of certain individual or organizational members
2. A digital repository to house assets of all types, including:
   - Animations
   - Audio
   - Cybertext
   - Illustration
   - Photo
   - Text
   - Video
3. Easy-to-use federated search functionality that presents clusters of information based on criteria such as subject matter, data type, and date
4. Easy methods for administrators to update and upload new assets
5. Member-only areas which include:
   - Full access to the organizations resources
   - Ability to easily contribute to and interact with the Knowledge Base (comments, documents, metadata, multimedia, etc.)
PRIMARY PURPOSE AND FUNCTION

ALHFAM seeks an individual to oversee its Knowledge Management System, the processes by which the Knowledge Base is developed and maintained. This person would serve as a champion for the Knowledge Base, its continued development, and overall success in realizing ALHFAM’s strategic objective to provide quality content that addresses member preferences in a professional format that demonstrates their unique identity, using a range of media. The ideal candidate will have experience with knowledge management systems and be able to lead the organization through the process of developing and implementing ALHFAM’s system.

The Digital Asset Manager duties would be divided into two phases: start-up (which includes the development and implementation of the Knowledge Management System) and maintenance (the ongoing support for the system). The start-up phase will involve the biggest time commitment.

START-UP PHASE PRIMARY RESPONSIBILITIES

- Working closely with the Board of Directors to develop appropriate processes and procedures to guide the system and ensure content reflects ALHFAM’s mission
- Developing a process to determine which hard-copy materials should be digitized as well as an efficient means to do so which places as little burden as possible on ALHFAM volunteers
- Developing clear documentation of those processes and ensuring they are communicated out to the ALHFAM community

MAINTENANCE PHASE PRIMARY RESPONSIBILITIES

- Ensuring that content flows through the process properly and in a timely manner
- Evaluating the process over time to determine if it needs to be refined to better meet member and association needs

TIMING

[Anticipated start date and term of contract.]

SELECTION CRITERIA

The position will be awarded based on the sole discretion of the ALHFAM Board of Directors.

Selection will be made on or before [Date].
IV. Final Report PRESENTATION

CREATING THE ALHFAM KNOWLEDGE BASE

Prepared for: ALHFAM

Prepared by: Gretchen L Kriesen, | SUNYIT

July 24, 2012
The ALHFAM Knowledge Base

GRETHELN KRIESEN
SUNYIT

Recommendations
The ALHFAM Knowledge Base

- Integrate a variety of media types
- Be easy to populate, update, and organize/categorize
- Allow for more than one administrator

These are characteristics that should describe the Knowledge Base as a whole and may not be reflected on every ALHFAM site or social media pages.

- Offer a reliable system for technical help
- Be flexible and scalable

Recommendations: Overview

- Primary Recommendations
  - Document repository
  - Federated Search
  - Digital Media Management

- Secondary Recommendations
  - Website refactor including streamlined administrative functionality

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Asset Repository: Desired Characteristics

- Cloud-based hosting
- Logical organization (folders, tagging, etc.)
- Tech support offered
- Easy to learn/use
- Expansion options
- Multi-Platform
- Custom/Advanced search functionality
- Supports multiple media types
- Searches content of assets

Federated Search: Desired Characteristics

- The ability to search multiple, pre-defined pages/sites
- Advanced search options
- Detailed search results
Digital Asset Management

- Policy and Procedures
  - Development
  - Implementation
  - Monitoring
- Asset Gathering (Initial build of repository)
  - Migrating existing materials to the Asset Repository
  - Developing plan to digitize relevant print materials
- Asset Management
  - Ongoing oversight

Website Refactor

- Cloud-based
- Templated (vs. custom programming)
- Administrative activity integrated
The Right Investment

Human Capital Investment

Features/Functionality

Financial Investment

Demonstration
V. Appendix A:
ALHFAM’s President’s Message, Fall 2013
President’s Message

Although I’d seen and become uncomfortably used to scenes of uprooted trees, crushed cars and houses, and streets choked with wires and debris, the memory of Hurricane Sandy for me will always be the ride to Newark Airport for my flight to the fall Board meeting. As a native of New Jersey and one who, from the time I was a kid, loved the pulse of traffic and industry along the Arthur Kill, Newark Bay and the arteries leading to New York City, I was astonished by what I didn’t see. Not a wisp of smoke came from the refineries that line the New Jersey Turnpike or the chimney of the nearby Budweiser plant. The gantries of one of the busiest container ports in the world were motionless and empty slips where supertankers normally dock provided rare views of the channel and bridges beyond.

With barely a car on the road, the trip from home to the airport took 14 minutes; something hard to do at three in the morning, never done in rush hour. It made me recall a science fiction story I’d read, about the morning after the world ended…where alarm clocks rang in empty bedrooms and stoplights signaled traffic that wasn’t there.

A few hours later in Cedar Rapids, Iowa, I was glad to report to fellow Board members that my family and friends were safe, that my house had survived the storm with minimal damage, and that the losses at my historic site could have been far worse than the $60,000 sustained. It seemed ironic that we were meeting just a few miles downstream of where the worst flood in the city’s history happened four years earlier…devastating homes, property and lives, and all but wiping Ushers Ferry Historic Village off the map.

Ed Schultz summed it up recently in an email he sent to members of the Farm Professional Interest Group:

There is a trend in living history (and I can certainly say this for historic agriculture) to learn nothing from the past experience of others. As an example: think of how many sessions, articles, and on-line discussions there have been about hog butchering. It is an interesting and controversial subject, but we repeat unendingly the same things that ALHFAMers have discussed for 42 years. The preservation of skills and knowledge is a critical part of the new Strategic Plan. The frustrating thing for me (and I’m sure others) is that I have no easy way to get to this information. What if there was a way to access
creating the alhfam knowledge base

ALHFAM Bulletin

all of the information that [we’ve] produced? You type in a keyword and 42 years’ worth of information comes up.

The technology to do that was demonstrated during the fall Board meeting when Gretchen Kreisen, a graduate student at the State University of New York Institute of Technology at Utica/Rome (SUNYIT), presented a system that she developed for ALHFAM as her master's thesis. In an exercise to test one of the capabilities of the ‘knowledge base’ she designed, we used it to search keywords from our recent skills survey: open hearth cooking, collections care, plowing.

The results were stunning. Drawing only from our website and social media – just a few of the sources available – the search yielded 30, 52 and 63 listings, respectively. Later, on my own, I searched emergency preparedness and found links to the information I should have been reading as Sandy was forming off the coast of West Africa...but that was nowhere on my radar screen.

Knowledge management systems are not new. Using one to consolidate and deliver the experience, skills and knowledge that ALHFAM holds would be, and it is an option the Board has been considering as a tool for implementing our strategic plan. Based upon objectives identified in the plan, the system designed at SUNYIT outlines methods for organizing ALHFAM’s publications, archives, web presence and social media through the use of a managed digital information system underpinned with set policies and procedures. Used to efficiently unify and share the most extensive collection of living history resources anywhere, the system adds an unparalleled benefit to being a member of ALHFAM – or becoming one.

The project began when SUNYIT professor, Steven Schneider, responded to an inquiry I made about creating an ALHFAM wiki by suggesting that we explore its potential through his department’s graduate program. The idea led to the formulation of a thesis project designed to assess our resources and, within the context of the strategic plan, develop recommendations for managing them. To ground the project in our mission and membership, the graduate candidate (Gretchen Kreisen) attended the 2012 Annual Conference, held discussions with committee and PIG chairs, and hosted a blog inviting member discussion and input.

Among the key features that the SUNYIT team recommends is a repository for the collection, cataloguing, storage, and care of the Proceedings, Bulletin articles, regional newsletters, “L” archives, PIG workshop materials, “farm school” content, Replica Resource List, skills database, website, blog and social media. A customized search engine allows members to access all of these resources – as well as any being shared through agreements with other organizations, to find information quickly and easily.

Other features allow for the collection of information in specific areas of interest or expertise in chosen formats, such as folders, wiki’s, or as one member suggested, extension leaflets. Online courses, meetings, presentations and other web-based communications can be hosted on multiple platforms from anywhere, anytime.

Development costs for a system with these capabilities can range from $5,000 – $25,000, depending on the level of performance sought. Respective operating and maintenance costs range from $3,000 - $12,000, annually. SUNYIT recommends a mid-range system whose annual operating cost would decrease as we develop internal resources for its management.

Investments like these are understandably intimidating for an organization that runs primarily on volunteer power, and whose boards, committees, member institutions and individual members historically, and heroically, donate hundreds of thousands of dollars of “in-kind” services each year. As membership in ALHFAM continues to decline and there are fewer hands to do the work required, Board members are acutely aware of, immensely appreciative of, and truly concerned about the extraordinary contributions on
which we depend. While dedicated people continue to make such contributions, time is at a premium for us all. Tools that can help us do the job are essential.

With these realities in mind, the Board included funds in the 2013 budget that will enable the development of an ALHFAM knowledge base. Use of these funds is contingent on the review of additional specifications and recommendations from SUNYIT and from the skills training, membership and communications planks of the Strategic Plan Committee. Work can begin as early as this winter, starting with the execution of an RFP that seeks proposals from qualified sources.

As your Board, we believe that this initiative will support ALHFAM’s mission by giving members access to the unparalleled collection of living history skills, knowledge and experience that they’ve helped create, care for and conserve. In providing funding for it and for the related work of the strategic plan, we remain committed to the careful and transparent use of resources for essential operations and services, and for investments that we believe will strengthen ALHFAM’s present and future.

Pete Watson,
ALHFAM President

ALHFAM Membership

ALHFAM membership entitles you to four issues of the ALHFAM Bulletin, reduced registration fees for ALHFAM conferences, reduced cost for the Conference Proceedings and other publications. Members will be included in regional mailing lists and can access member-only content, including the Membership Directory, on the ALHFAM website. Supporting and Institutional members receive the Conference Proceedings as a benefit of membership. Institutional members may send staff (paid or unpaid) to the annual conference at the reduced registration fee available to members. Joint membership is for two voting members who share a mailing address and are interested in only one set of mailings, including the Conference Proceedings.

Membership is for one year from date of receipt of dues.

Membership Levels:
Basic $30
Supporting $50
Joint $55
Student or Retired $25
Business Associate $50
Institutional (Small or Library) $60
Institutional (Large) $120
Patron $100

To join ALHFAM, please complete this form and send it with dues to:

Judith Sheridan
ALHFAM Secretary-Treasurer
Brownwood Farm
8774 Route 45 NW
North Bloomfield, OH 44450-9701

Phone/fax: 440-685-4410
E-mail: Sheridan@orwell.net

Make checks, in U.S. funds, payable to ALHFAM.

-------- Complete the following (please type or print clearly) --------

Name: ________________________________
Address: ________________________________

Phone: ____________ Fax: ____________
E-mail: ________________________________
Institution: ________________________________

Yes ______ No: Add my e-mail address to the ALHFAM members’ electronic discussion list.