

Digital Library Federation

DLF Website Proposal

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1. Introduction

eCoreXperience is pleased to present this proposal as a response to the website needs of the Digital Library Foundation (DLF) for the http://diglib.org website. We'd be pleased to speak with you further about this project and possible solutions. We are a User Experience and Interaction Design firm with a strong focus on creating solutions that meet our clients' business and technical goals.

1.1. Executive Overview

eCoreXperience has a wide range of experience in all of the desired areas of interest to DLF. We specialize in reaching target audiences through thorough analysis of an organization's needs and purpose for the website as well as a thorough understanding of site users (who they are, what are their needs/motivations, etc.). Tying those needs together with a proven, iterative process that hones the information architecture of a site to render the navigation as useful as possible for the end user is one of our hallmarks. Finally, we are conversant with many industry tools that allow for the creation of dynamic, easy-to-maintain sites.

1.2. Solution Overview

Based upon the requirements stated in the RFP we have crafted a solution that addresses the needs identified. These include the following:

- DLF seeks to re-organize the site to make it highly intuitive to navigate, easy-to-use so that members can find the information that they're looking for quickly and make relevant connections to other items of interest;
- DLF would also like to foster a sense of community between members, enabling them to come together to create, share and modify information;
- Web 2.0 networking and community-building are important facets of the DLF desired outcome;
- With a strong commitment to OpenSource solutions to support its constituency, DLF requires that the proposed solution be rolled out primarily on OpenSource software; and
- Finally, while the site does not require a rework of its look and feel, any new overall design will need to integrate with the existing visual design.

In addition, DLF would like eCoreXperience to provide technical specifications for hardware and software requirements, possible hosting solutions and set expectations for on-going maintenance costs.

To accomplish these goals for DLF, the eCoreXperience team will apply its extensive expertise in website design with a user-centric methodology. Our project approach will be outlined in greater detail throughout this proposal, but generally, the work falls into the following phases:

- Initiation This phase will involve all of the project startup elements including kickoff meeting, collection of
 any relevant branding/marketing materials and or guidelines, system documentation or other existing
 documentation from DLF relevant to this project, and client 'homework' to begin the process of documenting
 existing and future content. This phase will set a baseline of expectations between eCoreXperience and
 DLF as regards meetings, project plans and processes going forward.
- Solution Architecture Building on information gathered in the Initiation phase any assumptions from the RFP, gaining an understanding of the organization's technical environment and how the desired site will integrate with that environment. This process allows eCoreXperience to garner the necessary understanding of, and buy-in from DLF to ensure that our solution will meet the organization's needs.



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- Structure & Design For DLF, this phase will focus strongly on an analysis of the content and functionality
 that DLF wishes to provide for its members and constituents. This analysis will be conducted through the
 Information Architecture stage of this phase and will involve the creation of new navigational schemes and
 an intuitive user interface that will make finding information on the DLF site easy. Visual Design is also a
 stage in this phase and will largely entail integrating the proposed information structure with DLF's current
 look and feel.
- Implementation Building on the previous phases, implementation will involve the set up of a hosting
 environment as selected by DLF, installation and configuration of the Drupal Content Management
 Framework and the creation of all custom templates and code required to fully configure Drupal to meet the
 requirements determined in the Solution Architecture phase while realizing the Information Architecture and
 Visual Design decisions of the Structure & Design phase. Extensive testing to ensure the highest standards
 of quality and compliance will be conducted as part of this phase along with training for DLF staff.
- Deployment Finally, once all testing is complete, including Section 508 and WCAG compliance testing, and sign-off to launch has been obtained, eCoreXperience will deploy the completed site to production and ensure stability of the new site prior to final sign-off. Our solution includes a proposed maintenance fee schedule for DLF to consider after deployment. eCoreXperience is fully committed to every client and ensuring that satisfaction is guaranteed at project inception, throughout the project lifecycle and beyond project closure.



1.3. Why Choose eCoreXperience, Inc.?

eCoreXperience brings a set of five key differentiators to the table:

- User-Centric Approach—Our proven, user-centric methodology puts the users, the people who use the
 technology, front and center. It's how people use any one piece of technology that makes the difference
 between a successful product and an unsuccessful one. By keeping in touch with users' needs from the
 outset, we can ensure a high degree of user adoption before a single line of code is ever written.
- 508/W3C Accessibility Standards—We adhere to high standards of compliance both according to Section 508 guidelines and W3C recommended standards to ensure a high level of accessibility on all projects.
- Technology-Agnostic—Rather than committing to any one technology, any one platform we employ a technology-agnostic approach that focuses on delivering what the client needs, whether that's the latest from the bleeding edge or tried and true techniques.
- Iterative Process—Scalable to multiple solutions, small or large, our iterative approach is formulated along PMI project management standards and is designed to ensure a quality finished product that meets requirements, on time and on budget.
- Our People—Your People—Our team members each average over 10 years working in technology, and
 across industries including education, associations and other non-profits, healthcare and Fortune 500. Our
 ability to work closely with client teams to determine the right solution to meet client needs is a key
 differentiator.

1.4. Value

eCoreXperience, after reviewing the RFP and the enclosed requirements, has determined that we can offer the following value for our proposed solution:

Price: \$43,715

Timeframe: August 1, 2008 through October 31, 2008

Further detail on pricing and the cost of the proposed solution can be found in Section 6.



2. eCoreXperience Qualifications

Founded in 2001 and located in New York, eCoreXperience is a User Experience and Interaction Design firm with an established history of delivering high-quality, intuitive websites, applications and systems, with a client-base that spans the corporate, education and not-for-profit worlds. Our client-base spans the mid-Atlantic region and beyond, and includes a strong presence in major U.S. cities such as New York and Washington. From intranet and internet applications to presence solutions, our goal is to bridge the gap between technology and the people who use it. Our focus as a company is to provide our clients with top-of-the-line application and website solutions that maximize user experience—an approach that puts the user, rather than the technology, at the forefront.

We practice a goal-oriented approach to all our projects—beginning with a thorough understanding of business, user and technical needs and then carrying that understanding through the entire project life cycle.

- What are the business drivers the website or application must address?
- Who is the audience and what are their needs and motivations?
- How can technology be implemented to maximize effectiveness and minimize complexity from both a business and user standpoint?

By following this approach, we consistently deliver intuitive internet and intranet solutions that are visually engaging, promote brand awareness, provide clean navigation, and are deployed using a technical solution targeted for unique client needs.

Our clients include companies from both the private and public sector. A sample client listing follows:



2.1. Sample Client List















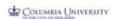
























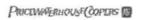




















2.2. Member-Based Organization Insights

The eCoreXperience client-base includes universities, associations, non-profit organizations and Fortune 500 clients. In the member-based organization marketplace, our team looks to accomplish a number of key goals for our clients including:

- Driving and retaining memberships;
- Providing better service and support for member-based organizations;
- Targeting content to member, non-member and partner needs;
- Enhancing site functionality (e.g., ecommerce, SEO, search, community, content maintenance);
- Leveraging existing platforms to support organizational goals (e.g., Content Management Systems, Learning Management Systems, etc.)

Our depth of experience in working with small and large associations, universities and not-for-profit organizations has provided us with an understanding of the unique needs of such organizations:

- Serving as a central point of information for a community of interest
- Providing quick and timely access to quality content
- Building a strong community of interest among members
- Focusing on growth and retention of membership base

Key to meeting these needs is an easily navigable site providing easy access to content. The site must also be visually appealing and convey the brand of the organization's culture via look and feel as well as consistency of visual cues. Although we have provided these services to variety of organizations, many of the projects involved private intranets and are therefore not available for public viewing. The following, however, are some samples that are available to the public:

- Associated General Contractors of America http://www.agc.org
- American Insurance Association http:// www.aiadc.org
- American Trucking Association HighwayWatch http://www.highwaywatch.com
- Center for Children & Technology http://www2.edc.org/CCT
- Columbia University, Teachers College, Center for Educational Outreach & Innovation http://continuingeducation.tc.columbia.edu
- Columbia University, Teachers College, Hechinger Institute on Education and the Media http://hechinger.tc.columbia.edu
- Columbia University, Teachers College, The Reading & Writing Project http://rwproject.tc.columbia.edu/
- ConsensusDOCS http://www.consensusdocs.org
- Healthcare Financial Management Association (HFMA) Hudson Valley Chapter http://www.hfmahudsonvalleyny.org
- Mortgage Bankers Association—Fraud Site http://www.mortgagebankers.org/MBAFightsFraud
- Mortgage Bankers Association—Main Site—Requirements and Information Architecture http://www.mortgagebankers.org
- Our Lady of Lourdes Catholic High School www.ollchs.org
- U.S. Department of State—Youth Site www.future.state.gov



2.3. Sample Projects

Following are brief summaries for a selection of completed projects.

2.3.1. Associated General Contractors of America

Associated General Contractors of America (AGC) is the leading national construction trade association. In response to feedback from its membership base, AGC determined that their current website needed to be redesigned from both a visual and structural perspective. From a visual standpoint, the site needed a fresh look that more effectively reflected the work and interests of its members. Structurally, the navigation needed to be totally re-invented to streamline access to content and remove buried links; bubble-up key news and topics; and provide a clear content hierarchy based on how users would access content as opposed to the existing organization-based structure.

Beginning with thorough requirements gathering and content analysis, eCoreXperience identified the key areas that needed to be addressed to move the website forward to a more user-focused orientation. A site deconstruction map was developed that graphically represented how complex the site had grown due to organic content growth. With this foundation in place, a series of iterative sessions were held with key content owners and a new, user-focused navigation and content construct was developed. Concurrently, sessions were held to identify how to enhance the palette and better use imagery to engage the user base. The end result is a visually engaging site that allows users to quickly navigate to desired content while allowing AGC to highlight the most important and timely information.

- Analyzed existing content and content structures
- · Identified usability issues relating to multiple add-on content services and provided recommendations
- · Streamlined information architecture to move from an organizational-based to a user-focused structure
- Created an engaging visual design that more effectively represented AGC's business goals and audience interest
- Developed HTML code and wireframe "roadmap" to facilitate Content Management System implementation

URL: http://www.agc.org/

2.3.2. Mortgage Bankers Association

The Mortgage Bankers Association (MBA), the preeminent association representing the real estate finance industry, needed to re-examine how it was handling its content-rich Web sites. With over 40 distinct web properties, the content was beginning to overwhelm existing information and technical systems. As a result, MBA needed to identify a means by which to streamline its information architecture to more effectively deliver content to its constituency as well as determine whether or not an Enterprise Content Management System (ECMS) could be implemented to improve the organization's ability to manage their multiple outputs of content starting with their flagship website—for now and into the future.

Beginning with detailed requirements gathering sessions, eCoreXperience managed a Product Selection process to assist MBA in identifying the most effective ECMS for their needs and budget. Upon ECMS purchase, Rhythmyx, a new site architecture and taxonomy was developed with the distinct constituencies in mind and their unique needs. Building upon existing user studies, it was determined that although content was comprehensive, it was not easily accessible and the membership was complaining. Starting with the flagship MBA main site, our Information Architect performed an in-depth analysis of the existing site structure and focused on totally recategorizing the content to streamline the navigation and target it to specific audiences. eCoreXperience also



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worked with MBA to customize the Rhythmyx product to enhance out-of-the-box functionality and provided management and guidance for content migration, and the corresponding integration with iMIS for content personalization based on membership level and status.

- Conducted detailed requirements gathering to determine functionality and system support needs for a new Enterprise CMS
- Managed Product Selection process and developed product recommendations
- Customized Rhythmyx templates
- Managed migration and implementation in .NET environment

URL: http://www.mortgagebankers.org

2.3.3. Columbia University, Teachers College, The Reading & Writing Project

The Reading and Writing Project, associated with Columbia University Teachers College, is a research and staff development organization dedicated to supporting expert literacy instruction.

eCoreXperience developed a custom Registration Management tool to store online registration and enable administrators to make registration decisions regarding enrollees (Accept/Reject). In conjunction with this development, a redesign of their existing website took place to simplify navigation, provide a fresh visual design and integrate with the Registration Management tool. Finally a Content Management System solution was put in place.

- Performed detailed technical and business requirements gathering for both website and Registration Management tool
- Managed system integration points with existing Columbia Learning Management and Accounting Systems
- Designed a clean and easy to use navigation and integrated with a visual design reflective of the Project's mission with a focus on children and the joy of learning
- Implemented ProfitSuite Content Management System

URL: http://rwproject.tc.columbia.edu/



2.4. Reference Contact Information

Following are four references representative of our previous work with associations and an educational institution.

Project Contact: Jhannet Marantonio, Former Director of Web Services

American Trucking Associations' Highway Watch® Program <u>imaranto@mervisdiamond.com</u> (preferred method of contact)

Project Contact: Brandie Fennell, Vice President & CIO

Mortgage Bankers Association

bfennell@mortgagebankers.org (preferred method of contact)

Project Contact: Katrina Schymik, Former Vice President, Membership & Business Development

American Insurance Association

kschymik@hagner.com (preferred method of contact)

Project Contact: Ann Armstrong, Executive Director

Columbia University Teachers College

aarmstrong@exchange.tc.columbia.edu (preferred method of contact)

2.5. Online Portfolio

eCoreXperience has the privilege of working with a diverse group of clients – from non-profits to public sector to Fortune 500. Samples of our work can be viewed at our online portfolio (note that User ID and Password are case sensitive):

http://portfolio.ecorexperience.com

User ID: Guest08

Password: accessibility



3. Project Logistics

In this section the logistics of the project, from staffing and roles to timelines and schedules and our Project Management philosophy are covered.

3.1. Project Roles

The following roles are anticipated for this engagement; team members may shift based on availability at time of engagement and the project's needs.

Solution Architect

The Solution Architect is a business consultant with extensive professional experience responsible for assisting clients in developing strategic technical initiatives across various departments and divisions, identifying solutions for business challenges and working with the delivery teams to ensure that the solutions being implemented meet the business and strategic requirements. The Solution Architect works with the client to identify and stage initiatives and develop plans to achieve identified strategic goals.

Engagement Manager

The Engagement Manager is responsible for project oversight and for ensuring the project is proceeding on time and on budget.

Project Manager

The Project Manager acts as a single point-of-contact for the project and provides day-to-day management of a project. This includes establishing the scope, estimating the effort, developing the schedule, managing the work products and team resources, ensuring communication and tracking progress.

Information Architect

The Information Architect (IA) determines the structure and user experience of a project by translating client business rules and objectives into functional requirements. The IA will be responsible for developing the navigational rules, as well as the organization and hierarchy of information. Key responsibilities include the creation of conceptual blueprint documentation and site flows detailing navigation, interaction, architecture planning, data flow, development of wireframes, and managing the integration of the architecture and UI (User Interface) design with the visual concept contributed by designers.

Visual Designer

The Visual Designer works to translate verbal ideas into visual designs. The designer's responsibility is to extend approved designs and conceptualize unique User Interface Once the design is complete, the designer is responsible for creating all the visual elements necessary for handoff to the development team for HTML coding and integration.

Technical Architect

The technical architect is responsible for evaluating the current system architecture of the client and analyzing system needs in order to execute the proposed technical solution. Additionally the technical architect maps out integration points and highlights any areas of special note where there is a gap to be bridged between the present



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systems setup and the client's desired end state.

Accessibility Engineer

The Accessibility Engineer is also responsible for ensuring that the code develops adheres to Section 508 of the Federal Government Americans with Disabilities Act (ADA) pertaining to website accessibility. In addition, eCoreXperience includes as a standard operating procedure code that is AA level of the W3C accessibility standards. These standards are above and beyond the requirements of Section 508.

Content Analyst

The Content Specialist is responsible for working with the client to assist in developing strategies for Search Engine Optimization (SEO) such as developing appropriate meta-tagging as well as methods the client might use for increasing meta-tag value through page content (e.g., incorporating page meta-tags appropriately into page content).

Web Engineer

The Web Engineer is a development design specialist responsible for the integration of design elements into front-end code (HTML, DHTML, JavaScript, Flash, etc.). The Web Engineer packages the font-end code to allow seamless integration with back-end applications.

Drupal Developer

The Drupal Developer is an expert in the development of Drupal themes, configuring the CMS and providing any customizations or additional module configuration required to meet the client's needs.



3.2. Estimated Schedule

Following are the estimated timeframe and project management approach that will be utilized throughout the project.

3.2.1. Estimated Timeline

At project onset, a detailed project plan will be created including tasks, review cycles, milestones, timelines and assigned resources. A high level timeline for this project is noted below but is subject to change based on DLF staff availability for proposed meetings and reviews as well as holidays. Note that some tasks may occur concurrently. During project plan development, timeframes may be adjusted based upon input from DLF, documented results of Requirements Gathering and further project discovery. Note that items indicated with an asterisk (*) denote project deliverables as opposed to project work products and/or tasks.

Anticipated Project Start: 8/1/2008

Estimated Project Completion: 10/31/2008

	Aug 2008	Sep 2008	Oct 2008
Initiation			
Project Kickoff			
Solution Architecture			
Document Known Requirements			
Requirements Gathering			
Site Deconstruction Map *			
Technical Inventory			
SEO Recommendations			
Functionality Inventory			
Solution Definition Document *			
Structure & Design			
Category Grouping Map			
Navigation Map *			
Homepage Wireframe *			
Secondary Page Wireframes *			
Visual Design Meeting			
Visual Design Concepts *			



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	Aug 2008	Sep 2008	Oct 2008
Expansion Design			
Implementation			
Web Engineering			
CMS Installation			
CMS Template Development			
Back-end System Integration			
Quality Assurance and Testing			
508/WCAG Testing			
Deployment			
Launch			

3.2.2. Project Management

It is important to note that project management plays a key role in this solution. Our Project Management approach spans our core project methodology and is based upon establishing clear lines of communication with both internal and client teams. Our management process is derived from industry-standard, Project Management Institute (PMI) project management best practices but also incorporates our specific expertise in user experience and interaction design at every stage of the process. eCoreXperience uses a proven, integrated project management approach to ensure the timely, successful completion of all projects.

Our Project Management approach includes the following:

- Development and management of a project plan to include resource, meeting scheduling, timeline, milestone/deliverable and client satisfaction management
- Project Manager to serve a single point of contact for all client interactions
- Development and management of a private project site for your initiative and provide access to identified stakeholders so that the latest Project Plans, Contact Information Sheets, Status Reports, work products, deliverables and other essential documents are always readily available for download and distribution.



4. Technical Recommendations

We are presenting the following proposed technical recommendations to address specific requirements as outlined in the DLF RFP.

These recommendations are based solely on the RFP and conference call of 6/30/2008 and could shift as we expand our knowledge of DLF's systems during the Solution Architecture phase of the project.

Based on the goals expressed in Section 3 eCoreXperience recommends the following two-pronged technical solution to respond to DLF's particular requirements:

- A robust, extensible, OpenSource Content Management Framework to house the disparate types of
 content the organization wishes to present to its users and permit easy management of that content by
 DLF staff, while also permitting registered members of the website and in some cases members of the
 public to contribute to the website;
- A reputable, well-known industry leader in web hosting to provide the technical environment to support the Content Management Framework.

4.1. Content Management Framework—Drupal 6.0

Based on the technical requirements and specific functional requirements outlined in the RFP, eCoreXperience has determined that the Drupal 6.0 Content Management Framework meets 99% of the desired functions out-of-the-box or through configuration steps built into the administrative interface. This means that the bulk of the work required will be in the development of theme templates to apply a consistent look and feel throughout the site as well as the new, streamlined, intuitive navigational structure that eCoreXperience will design hand-in-hand with DLF. Where Drupal does not meet a requirement with a Core Module, custom development outside the scope of this project will allow DLF to scale for future needs through module development or acquisition beyond the initial deployment.

4.1.1. Drupal Assumptions

- Drupal meets 99% of the requirements stated in the RFP 'out-of-the-box' as such it is assumed that eCoreXperience will deliver an 'out-of-the-box' solution that is limited to configuration of core modules and customization of 'look and feel' templates only. In order to keep the project costs within DLF's desired parameters, custom coding and extensive module customization are out of scope for this engagement.
- Drupal provides a robust Taxonomy Module that allows the development of tagging vocabularies for the
 insertion of meta-data and to use as 'tags' to categorize content throughout the site. While eCoreXperience
 will configure this core module, the responsibility for developing the vocabularies will lie with DLF. Training
 on the administrative interface and the core modules will be conducted that will allow DLF staff to manage
 the taxonomy and any tagging vocabularies.



4.2. Web Hosting—Dreamhost

Dreamhost, one of the nation's leading hosting providers which also boasts the quality of being green as well as a full supporter of OpenSource platforms, is our recommended hosting solution should DLF seek to pursue outside hostin. eCoreXperience not only recommends Dreamhost, but uses the service and we have nothing but positive things to say about this company as a hosting provider. Additionally, Dreamhost is a Drupal hosting provider and provides strong information about setting up the Content Management Framework on their servers. (See: http://wiki.dreamhost.com/index.php/Drupal for more information.)

Shared Hosting Option

Dreamhost's shared hosting options are a very affordable and robust solution for any OpenSource software implementation. Shared hosting accounts include 500 GB of storage space that increases weekly by 2GB and throughput of 5.0 TeraBytes that increases weekly at a rate of 40GB. These specifications more than meet the needs outlined in the RFP for 2GB of storage with an expected growth-rate of 1GB per year over the next 5 years. Pricing for Dreamhost's shared hosting ranges from \$5.95 to \$10.95/month based on number of years pre-paid. (See: http://dreamhost.com/hosting.html for more information.)



Addressing DLF Goals

Noted below are the strategies that eCoreXperience anticipates using to address specific non-functional and functional goals and requirements as stated by DLF in the RFP, outlining our targeted strategies for making each goal a reality at the conclusion of the project. For organizational goals, please see section 5.2.1 and for detailed technical/functional requirement specifics, see section 5,2.2.

4.3. Project Insights

In order to determine how best to address DLF's specified needs, the current website was evaluated at a high level by a team of User Experience experts. Following are some initial thoughts on how some elements of the project might be addressed. Note that through our process (see section 6.1 on Methodolgy), we will work iteratively with the DLF team to determine the final project direction. The purpose of these "insights" is to provide DLF with a feeling of how our team approaches a project and how we bring to our clients a perspective that is focused on methods to enhance and promote their products and services.

- Navigation—Visually speaking navigation at a high-level is supported well on the DLF site, the five main tabs, "Collect", "Produce", "Preserve", "Use" and "Build" are simple and effective words that relate to the functions of the organization and tie back to the sector and constituency that the site serves. Where the site breaks down is at the next level, once a user has clicked on one of the tabs. The left-hand sidebar is used to display links to member constituencies rather than "drilling" down to guide the user further into the content for that section. All functions and content are accessed in a very "hypertextual" manner, with links presented inline in the text. While this methodology is recommended when down beyond the third tier of navigation, it is not recommended at a secondary level to the extent that is presented on the DLF site. Users probably become rapidly lost, digging through text to find links to go deeper and may get frustrated unless they already have a very good knowledge of the DLF site. Reclaiming the left-hand sidebar for a drill-down menu is indicated as a desired factor in the RFP and is definitely recommended to increase the navigability of the DLF website. Finally there are places in the site where navigation is entirely lost and no link is provided to return 'home' or to the section one just left. This strands the user, forcing use of the back button to get back to a main navigational area. Extending navigation through all levels of the website can improve the user's browsing experience significantly. The use of site "breacdrumbs" should also be considered to aid in overall navigation usability.
- Content—While the DLF RFP refers to thousands of pages of content and downloadable documents, the sense a user gets when opening the site is that there is actually very little content to be found. This ties back to the issues with navigation highlighted in the previous bullet point. The presentation of DLF's content, which is actually quite rich, is not well-served by the method of presentation. Better use of 'highlight' sections that show new items added, or related information are possible ways to indicate freshness of content and guide users towards what may be of interest to them. The tone of most of the content on the site is within the parameters of that expected for a site of this nature, though every page is a little on the heavy side. Breaking content down into smaller chunks is recommended for web readerships since users tend to 'glance' at pages and skim for items that leap out rather than reading an entire page in-depth.
- **Usability**—While the overall presentation of the DLF website allows for a reasonable degree of usability, the issues with navigation make it difficult for user to easily locate information, which can lead to a frustrating user experience. Additionally, while most of the site is very legible, there are areas where improvement in visual design for usability would greatly benefit the site. For example, on the very first page the links into highlighted content areas are not underlined or otherwise well highlighted as items to be clicked on. This is a simple issue to correct with the proper application of standards-compliant style-sheets. Additionally the beige drop-downs that appear when one clicks on one of the five main tabs are a little muddy and lack contrast, potentially causing problems for persons with visual impairments. A higher contrast presentation of this area would greatly enhance the ability of users to browse through these selections.



4.4. Specific Strategies

Following are two tables representing how eCoreXperience anticipates addressing the organizational goals and technical requirements identified in the DLF RFP.

4.4.1. Organizational Goals

Goal	RFP Page or Reference #	Strategy
Website is First Point of Contact With World About DLF	Page 1, first paragraph	A restructuring and finessing of the presentation of the homepage is the first line of approach to making a good 'first impression'. eCoreXperience, through the Requirements Gathering process and Structure & Design phases of the project will ascertain what the foremost audience targets are and what information is most likely to create that great first impression and highlight it in an engaging manner designed to retain visitors to the site.



Goal	RFP Page or Reference #	Strategy
Communication Tool for DLF Membership & Working Group Participants	Page 1, first paragraph	 Through extensive analysis and communication with DLF, eCoreXperience will derive an understanding of the Membership's needs and, working in tandem with DLF will ensure that the appropriate communication mechanisms are built into the new site to foster communication between DLF and their Members as well as Member-to-Member communication and Working Group participant collaboration Based on the RFP, some of the desired functions to help support this goal include the ability for different users and groups to collaborate on the authoring of informational pages, the ability for users to comment on content, the ability to fill out a form and have it route to the appropriate staff-person at DLF, the ability for users to self-register and provide profile information that is then available throughout the site. Our proposed technical solution, Drupal, provides these functions natively and can be extended beyond the 'out-of-the-box' capabilities to scale with the organization as additional needs become apparent. In addition to the named features, threaded forum functionality is included in Drupal and can be leveraged to support topical conversations in support of subjects of interest to DLF Membership.



Goal	RFP Page or Reference #	Strategy
Archive and Record of DLF Accomplishments	Page 1, first paragraph	Archiving older content so that it is easy to locate is a frequent concern for our clients. eCoreXperience during the Structure & Design phase will use the understanding garnered during the Solution Architecture phase to work Archives into the navigational scheme of the site in a logical and consistent manner as well as providing insight and guidance to DLF on governance for Archive procedures.
		Additionally, Drupal, our recommended technical solution allows for 'auto-expiration' of content from display pages, a function that can be utilized to minimize overhead for DLF staff and automatically populate Archive pages.
Simple, Dynamic Structure	Page 1, third paragraph	Based on a preliminary analysis of the website, eCoreXperience feels that DLF has an interesting and simple paradigm on the existing homepage that can be used as a base to accomplish the dynamic goals the organization has in mind. It's a matter of taking that base and extending it further, pushing out the categorization of content and identifying content types so that secondary and tertiary levels of navigation can be devised that are easy to use for the anticipated user base.
		As mentioned in the very first point in this table, demonstrating content 'freshness' is a very simple and straightforward way to indicate dynamism without investing in a lot of flash without substance. The simple fact of highlighting in tasteful manner that an area of the site has been updated recently lends a feeling of things in motion while also indicating that the caretakers of the site are actually 'minding the store' which goes a long way towards fostering trust of the site with users.



Goal	RFP Page or Reference #	Strategy
Organize and Categorize Users to Allow Topical Collaboration and Access to Specialized Materials	Page 1, third paragraph	 Through Requirements Gathering and interviews with DLF staff, an understanding of current groups as well as anticipated groups will be arrived at so that eCoreXperience can set up a model to set up new groups and serve the needs of that group. The Drupal Content Management Framework provides the ability to create individual user profiles and to assign those users to multiple groups and security levels which can be organized for access to specific content and content types. eCoreXperience will leverage the knowledge gained in Requirements Gathering to set up an initial set of groups in the Framework and train DLF staff on the creation of new groups and maintenance of existing groups
Fast, Simple Management Interface That Allows 'Real Time' Updating of Site by DLF Staff	Page 1, third paragraph	 The recommended technical solution, Drupal, provides a management interface that is largely 'point and click' based with some additional automation features available through the programming of cron jobs on a Linux/Unix type server. Administration of the system both for adding and updating content and administering users is very straightforward. Security levels in Drupal can be configured in such a way that authors have the ability to submit but not publish, for instance, so certain forms of updates can be moderated by DLF staff.



Goal	RFP Page or Reference #	Strategy
Aggregate Information From Disparate Sources Across DLF Site and Sector Sites for Easy 'One Stop' Access	Page 1, third paragraph	 Drupal's Aggregator feature allows RSS feeds from around the web to be collected and categorized in a topically meaningful way. Any site that presents an RSS/RDF feed can be captured to present a 'one stop shop' experience based around categories of DLF's choosing. eCoreXperience will work closely with DLF to identify possible categories for aggregation and assist with setting up these categories during Implementation. Subsequently, DLF staff will be trained to add additional categories and leverage the organization of aggregated feeds further to serve the user base.
Robust Hosting Solution Capable of Handling Amount of Data and Throughput	Page 1, fourth paragraph	 Based on the RFP, there are very specific requirements for the amount of data that a hosting solution needs to be able to handle as well as throughput and total load on servers. Given the data presented, eCoreXperience is able to recommend several reputable and low-cost hosts that support OpenSource systems and Drupal, specifically. Beyond the RFP, eCoreXperience would like to conduct a further exploration of DLF's current environment and to discuss the organization's hosting needs in further detail in order to be able to present more than one feasible option for DLF to pursue.



4.4.2. Functional Requirements

Requirement	RFP Reference #	Part of Proposed Solution?
 The site shall be developed using OpenSource technology. Any work done must be made available under a standard OpenSource license. 	0.1	Yes - The source code of Drupal is freely available under the terms of the GNU General Public License 2 (GPL). Unlike proprietary blogging or content management systems, Drupal's feature set is fully available to extend or customize as needed.
Hosting Offer The respondent may offer web hosting services, if available, but DLF shall be free to ask them to develop the site only and use alternative web hosting.	0.3	No – eCoreXperience does not offer hosting services. However, we will provide a hosting service provider recommendation and information about our maintenance services and agreements.
Hosting Solution The respondent shall describe the hosting solution that will accommodate a load greater than that of the current site. • The website shall have room for at least 30,000 files weighing in at 2GB, but estimated to grow at a rate of roughly 1GB (15,000 files) per year for the next five years. • The website shall handle at least 75,000 sessions generating about 300,000 page views per month. • The website shall be able to transfer at least 25GB per month.	0.4 0.4.1 0.4.2 0.4.3	Yes - Dreamhost's shared hosting accounts include 500 GB of storage space that increases weekly by 2GB and throughput of 5.0 TeraBytes that increases weekly at a rate of 40GB. These specifications more than meet the needs outlined in points 0.4 through 0.4.3
Technical Support The respondent shall offer ongoing technical support to DLF, although DLF is free to obtain these services from any other provider.	0.5	Yes – eCoreXperience will provide technical support beyond deployment according to a signed maintenance agreement. Please see section 7 for further details about our ongoing maintenance support options.



Requirement	RFP Reference #	Part of Proposed Solution?
Co-Exist with Existing Site The new site shall be able to co-exist with a frozen version of the existing site to facilitate the resolution of existing references. [desirable]	0.6 (desirable)	Yes – Drupal would be installed either in a different hosting environment or different file structure from the existing site enabling the gradual migration of content from the existing site to the new site. Additionally, content on the old site can be linked to clearly as an 'archive' version. This will involve management of the URL at which the two sites are located with one being the 'main' site at http://diglib.org and another perhaps named logically: http://archive.diglib.org or another name that makes sense to DLF and the member base. Based upon the results of the Solution Architecture phase, any additional costs that might relate to the implementation of this desirable feature will be provided to DLF.
Backups The site shall be backed up at least daily and files from backups shall be available to DLF staff as needed.	0.7	Yes – Dreamhost provides backup services and the ability to download backup files. If frequency of Dreamhost is not sufficient, an automated script will be setup to create downloadable backups.
Security The site shall be designed to resist attacks on the server, such as cross site scripting, SQL injection, and URL poisoning.	0.8	Yes – Dreamhost has security configuration options that can be turned on to prevent many of these issues and those that are not available 'out-of-the-box' can be arranged with the server administrator. Drupal also has built-in security features that address SQL hacking and where 'out-of-the-box' is not available, modules can be downloaded or developed to increase the security of the site.
Separate Content from Design	1.1	Yes - Drupal uses a Theme-based structure
Content of the site shall be well separated from design to facilitate editing of the content without concern for the design.		



Requirement	RFP Reference #	Part of Proposed Solution?
Industry Standards/Accessibility The site shall make use of industry standards such as CSS and shall be viewable with full features on all modern browsers including Firefox 2, Safari 3, and IE7.	1.1.1	Yes – CSS will be incorporated into the front-end code package. In addition, Drupal is compatible with the following browsers: Internet Explorer 6.x or later Firefox 2.x or later Opera 7 or later Safari 1.x or later Camino 1.x or later
Editable Templates DLF staff shall have access to the "skin" of the site and authority to edit that skin as needed.	1.1.2	Yes – eCoreXperience will work with DLF to identify which staff-members should have Administrator access to the Drupal Admin interface and to the server by FTP or shell to modify templates. We recommend staff with a technical competence in Linux, Apache, XHTML, CSS and PHP for this level of access.
Persistent URLs Content on the site shall have URLs that are persistent enough for embedding into other settings like del.icio.us, digg, and user blogs.	1.2	Yes – URL Aliasing (Path Module) The path module allows you to specify aliases for Drupal URLs. Such aliases improve readability of URLs for your users and may help internet search engines to index your content more effectively. More than one alias may be created for a given page.
Search Engine Optimization (SEO) Content shall be open to web spiders such as Google. The site shall be able to generate site maps, page metadata, and other search engine optimizations automatically. [desirable]	1.3 1.3.1 (desirable)	Yes – Site map is available and Drupal includes Taxonomy that can be leveraged to provide SEO. Page metadata – Can be generated automatically through adding additional modules (MetaTags and MetaTags byPath) Drupal also includes its own internal Search.



Requirement	RFP Reference #	Part of Proposed Solution?
 CMS Editing Interface Content of the site shall be editable from any web browser (Firefox 2, Safari 3, and IE7) When editing, the site shall display date, time and user who last edited each page.[desirable] The site will respond gracefully to multiple, simultaneous attempts to edit one item. (Does not have to auto-resolve, notification is enough.) [desirable] 	1.4 1.4.1 (desirable) 1.4.2 (desirable)	 Yes – Drupal supports the listed browser types. Yes – Drupal supports Wiki-style revision system that allows editors to roll-back their work and leave editorial log messages. Configurable depending on requirements. Out-of-the-box: Displays following message: "This content has been modified by another user, changes cannot be saved."
Upload Files The site shall accept file uploads.	1.5	Yes - Users with the upload files permission can upload attachments. Users can choose which post types can take attachments on the content types settings page. Each user role can be configured for the file size of uploads, and the dimension of image files.
RSS Aggregation The site shall be able to aggregate content made available via RSS.	1.6	Yes – Feed Aggregator allows feeds any site that allows feed gathering to be created. The aggregator is a powerful on-site syndicator and news reader that gathers fresh content from RSS-, RDF-, and Atom-based feeds made available across the web. Feeds may be grouped in categories, generally by topic. Users view feed items in the main aggregator display or by their source. Administrators can add, edit and delete feeds and choose how often to check each feed for newly updated items. A correctly configured cron maintenance task is required to update feeds automatically.



Requirement	RFP Reference #	Part of Proposed Solution?
Comments The site shall be able to accept comments on selected pages and documents. • It shall be possible to attach comments at the paragraph level to designated pages of the site. [desirable]	1.7 1.7.1 (desirable)	 Yes – Drupal provides the ability to comment on pages and posts Ability to comment at the paragraph level may be possible with custom development. Default comment settings: Disabled Read only Read/Write If comments are disabled, no comments will be visible. Set to Read only effectively locks a given thread. Read/Write allows comments to continue by users with appropriate rights. Anonymous commenting options: Anonymous posters may not enter their contact information Anonymous posters may leave their contact information Anonymous posters must leave their contact
Tagging Users shall be able to tag each page of the site with multiple terms. • There shall be at least two classes of tags: [desirable] • There shall be tags that can be entered by any user; • There shall be tags that can only be entered by DLF staff. • DLF staff shall be able to remove any tag.	1.9 4.5 through 4.5.3 (desirable)	information Yes – The taxonomy module allows categorization of content using both tags and administrator defined terms. It is a flexible tool for classifying content with many advanced features. Can create one free-tagging vocabulary for everything, or separate controlled vocabularies to define the various properties of the content. Yes – Security/User levels can be set within the tagging features to limit who can add tags, depending on content type.



Requirement	RFP Reference #	Part of Proposed Solution?
The site shall have a clearly designated area for DLF Forum information.	2.1 through 2.8	Yes - Drupal natively supports a tiered navigation system, with main menu and at least two levels of sub-navigation.
 The site shall allow for the creation of designated group areas. 		Additional levels of navigation and the look and feel can be customized through the theme and/or module configuration.
 The site shall include a contacts area with information about DLF. 		
 Each group area shall include a contacts page with information about members of that group. [desirable] 		
 The site shall include a public relations area with general information about the organization. 		
 The site shall include an opinions area to aggregate blog content from around DLF. [desirable] 		
 Aggregated blog entries shall include links back to native platforms. 		
 The site shall present a sidebar for navigation. [desirable] 		
The site shall clearly designate archival or non-active content.		



Requirement	RFP Reference #	Part of Proposed Solution?
 The site shall provide a workflow for managing DLF Forum information. [desirable] Data gathered as users propose sessions shall be maintained and enhanced as sessions are accepted and presented. (User proposes a session, session is accepted or rejected, session is added as a presentation.) Data gathered to describe forum shall be used to enhance information about individual and institutional interests. 	2.9 2.9.1 2.9.2	Yes – Drupal supports basic workflow out of the box. Additional workflow can be added custom using modules or by configuring Actions and Triggers within the administrative interface. Some of the workflow 'state' options from Drupal that can be used to achieve this requirement: Published - When content is submitted, it will be publically accessible. Promoted to front page - Promoted to the default Drupal front page (set to /node) Sticky at top of lists - Post will remain at the top of a given list. This applies to forums, the front page, a given taxonomy list.





Requirement	RFP Reference #	Part of Proposed Solution?
Content Types Cont'd Aggregated Feeds The site shall include an opinions area to aggregate blog content from around DLF. [desirable] (2.6) Aggregated blog entries shall include links back to native platforms. (2.6.1) Newsreaders shall be able to subscribe to updates of changes to the content within designated areas of the site. (1.11) The site shall be able to "freeze" certain content into an archival form that no longer accepts comments or editorial changes. [desirable] (2.4) The site shall clearly designate archival or non-active content. (2.8)	2.5 2.6 2.6.1 2.8	Yes - Feed aggregator – allows creation of grouped feeds by category – managed through admin interface. (2.6, 2.6.1) Yes - RSS publishing – Allows 'pushing' out of feeds from Drupal site. (2.6.1, 1.11) Yes - Certain content types can be set to "Read Only" mode. (2.4, 2.8)



Requirement	RFP Reference #	Part of Proposed Solution?
 It shall be possible to register users of the DLF site. (A,B,E,I) It shall be possible for users to register themselves on the DLF site. It shall be possible for users to to register for the DLF site with an OpenID. [desirable] Each user shall have a profile on the site to be referenced from various contacts pages. [desirable] 	3.1 3.1.1 3.1.2 3.6	Yes – this is configurable in the Drupal Admin interface. Options include: • Public registrations: • Only site administrators can create new user accounts. • Visitors can create accounts and no administrator approval is required. • Visitors can create accounts but administrator approval is required. • Drupal can also be configured to send automatic welcome and update messages to the user. Some options: • Welcome, new user created by administrator • Welcome, no approval required • Welcome, awaiting administrator approval • Password recovery email • Account activation email • Account blocked email • Account deleted email • Yes – OpenID Integration is available. • Yes – Every user has a profile and profile display can be customized through



Requirement	RFP Reference #	Part of Proposed Solution?
Staff Non-Staff Member Non-Member Group Administrator w/ ability to assign users as members of their group Super User with access to all site areas.	3.2 through 3.6	Ves - Drupal has a very flexible set of user level/group security features that can be configured to provide the desired user levels. A host rule is effective for every page view, not just registrations. Can choose between an access/deny rule and apply it to username, e-mail or host mask and use wildcards. Permissions allow control over what users can do on the site. Each user role (defined on the user roles page) has its own set of permissions. Permissions can be used to reveal new features to privileged users (those with subscriptions, for example). Permissions also allow trusted users to share the administrative burden of running a busy site. Roles allow fine tuning of the security and administration of Drupal. A role defines a group of users that have certain privileges as defined in user permissions. Examples of roles include: anonymous user, authenticated user, moderator, administrator and so on. By default, Drupal comes with two user roles: Anonymous user: this role is used for users that don't have a user account or that are not authenticated. Authenticated user: this role is automatically granted to all logged in users. The user module supports user roles which establish fine grained permissions allowing each role to do only what the administrator wants them to. Each user is assigned to one or more roles. Content created by users is associated with the creators' user account also associating permissions from the account.



Requirement	RFP Reference #	Part of Proposed Solution?
It shall be possible to assign each user to any number of groups on the site. Designated administrators of group areas shall have the authority to assign users to their own groups. [desirable] Content Security Levels User registration required Public Members-only (only members or users registered under that group can see) Group-private (only users registered under that group can see)	3.4 3.5 4.1 4.2 through 4.2.3	Yes – Drupal has a very flexible set of user level/group security features See above under "User Levels" for more detail. Yes - See above under "User Levels" for more detail.
Public (anyone may edit wiki page) Members-only (only members or users registered under that group may edit) Group-Private (only users registered under that group may edit)	4.3 through 4.3.3	Yes – Wiki-like editing is available and the same types of security described under "User Levels" is available. •
Comment Security LevelsPublicMembers-onlyGroup-Private	4.4 through 4.4.3	Yes – These security levels for comments can be configured.



Digital Library Federation – DLF Website

Requirement	RFP Reference #	Part of Proposed Solution?
 Tag Security Levels Public (anyone may add/edit tag) Staff-only (only DLF may add/edit tag) DLF staff should be able to remove any tag 	4.5 through 4.5.3	Yes – "folk taxonomy" is supported Yes – Admin-only tagging available. Yes – Admins can manage all taxonomies.
Forms Forms that send email to appropriate groups of DLF staff	5.1	Yes – Contact Info form can be configured with multiple categories that allow sending email to different groups.
 Detect orphan pages [desirable] Detect stale links [desirable] 	5.2 5.3	 Yes Some Tracking provided natively by dblog module which generates a log of the following: Recent log entries Top 'access denied' errors Top 'page not found' errors Available updates Status Report Customization or additional module required to make 'pretty' reports.



Requirement	RFP Reference #	Part of Proposed Solution?
 The site shall be responsive, most pages should load in less than two seconds and no page should require more than four seconds to load under reasonable network conditions.[desirable] The site shall adhere to the web accessibility guidelines of W3.org. [desirable] The site shall provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language. The site shall make it easy for users to see content, including separating foreground from background. The site shall make all functionality available from a keyboard. [desirable] The site shall maximize compatibility with current and future user agents, including assistive technologies. The site shall make pages appear and operate in predictable ways. 	5.5 5.5.1, 5.5.3 through 5.5.8	Yes - eCoreXperience adheres to high standards of 508 and WCAG compliance employing the skills of one of our 508/WCAG Engineering experts. These high standards will be applied during the development of custom Drupal themes and the configuration of the CMS to ensure that DLF's requirements for a highly accessible site are achieved.
Presentation Content shall be presentable in different ways (for example, with a simpler skin) without losing information or structure.	5.5.2	Yes – The ability to provide more than one skin is native Drupal functionality. Configuration options are available.



4.5. Hardware and Software Requirements

Server

Server running Apache 1.3 or Apache 2.x hosted on Unix/Linux or Windows, with Apache 'mod_rewrite' extension to allow for clean urls.

OR Microsoft IIS5 or IIS6 if PHP is configured

Recommended: PHP 5.2 or higher

Required: PHP version 4.3

PHP memory of 16MB or higher for a default Drupal 6 installation.

The PHP extension for connecting to your chosen database needs to be installed and enabled. Drupal's currently supported database connectors are: mysql (the original MySQL extension), mysql (an improved connector for newer MySQL installations), and pgsql (for PostgreSQL). Drupal 6.x does not provide the option to select the mysql connector if mysqli is enabled in your PHP configuration.

PHP <u>XML extension</u> (for blogapi, drupal, and ping modules). This extension is <u>enabled by default</u> in a standard PHP installation; the Windows version of PHP has built-in support for this extension.

An image library for PHP such as the <u>GD library</u> is needed for image manipulation (resizing user pictures, image and imagecache modules). GD is included with PHP 4.3 and higher and enabled by default. <u>ImageMagick</u> is also supported for basic manipulations in Drupal core but support in the contributed modules repository is much less developed.

Additional details of PHP requirements can be found on Drupal's website: http://drupal.org/node/61509

Database Server

Recommended: MySQL 4.1 or MySQL 5.0

Drupal 6 supports MySQL 4.1 or higher.

PostgreSQL 7.4 or higher

Supported Browsers

- Internet Explorer 6.x or later
- Firefox 2.x or later
- Opera 7 or later
- Safari 1.x or later
- Camino 1.x or later



5. Proposed Approach

The following section outlines our strategy and approach for all phases of DLF engagement.

5.1. Methodology

eCoreXperience utilizes a standard, time-tested and scalable methodology to address each client's unique needs. While elements and phases might or might not apply to a specific engagement, it is important to understand that a consistent approach is utilized for every engagement, regardless of project scope.

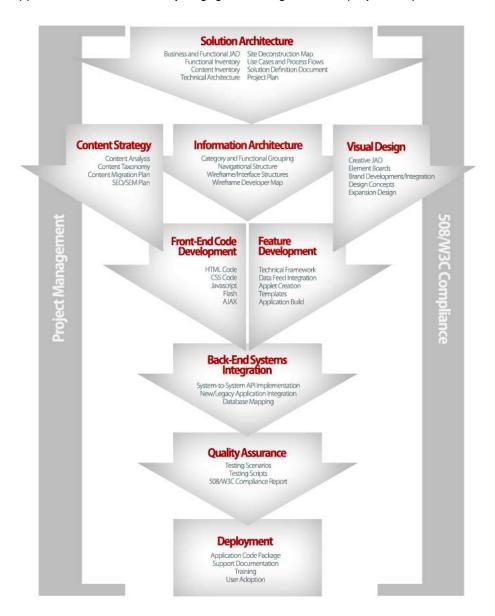


Figure 1:eCoreXperience Process



5.2. Solution Architecture

This phase focuses on clarifying organizational goals and needs, all stated business and technical requirements, and validation of the proposed solution based on full requirements and development of a Solution Definition Document (SDD) which summarizes all the requirements gathered as well as any recommendations.

5.2.1. Requirements Gathering

During Requirements Gathering, all DLF needs are determined through the use of a facilitated session focused on business and functional requirements as well as acquisition, prior to the session, of any existing, relevant documentation. This session will involve the review of the organization's goals for the project, specific functionality that is desired, process flows, functional requirements and any other information that is necessary to understanding the goals of the project. A core part of the eCoreXperience process is the use of the Joint Application Design Session (JAD). A Joint Application Design session is a results-oriented approach to collecting high quality information and developing project deliverables in a compressed timeframe using facilitated workshops. This workshop(s) uses a facilitator to guide participants through a structured process. The process is designed to produce one or more project deliverables interactively with the workshop participants. The goals of JAD are to:

- Improve the communication between business users and a project team;
- Speed up the development process by performing several tasks in a single workshop that otherwise may take several weeks or months to complete using more traditional information gathering and decision making approaches;
- Improve the quality of deliverables by promoting involvement from all parties interested in the deliverable;
- Increase creativity by involving all key stakeholders in design activities;
- Remove project teams from the function of intermediary in the negotiation and resolution of conflicts by directly involving all interest groups;
- Define project scope and bring stakeholders to consensus;

Upon completion of the JAD session, the results are documented for incorporation into the SDD, that serves as the foundation for the rest of the Solution Architecture phase. Once completed to the appropriate level of detail, the next stage of the process will begin.

The tasks associated with this stage are as follows:

- Review existing, relevant documentation
- Develop initial process maps of "as is" site to form the foundation of discussion
- Conduct facilitated session(s) with key DLF stakeholders

Deliverable: Results of this session will be incorporated into the Solution Definition Document



5.2.2. Site Deconstruction Map

Many organizations currently have web sites and applications that do not entirely or effectively serve the purpose for which they were built. An analysis and assessment of the existing web site is the first key step to understanding what is in place, the purpose it serves and the success with which it accomplishes that goal.

A key tool for analyzing the existing site structure is a Site Deconstruction Map. This map will visually present the existing site from a structural perspective and provide a graphical representation of all of the components that make up the current site—the connections from main navigation to secondary, tertiary and beyond if applicable.

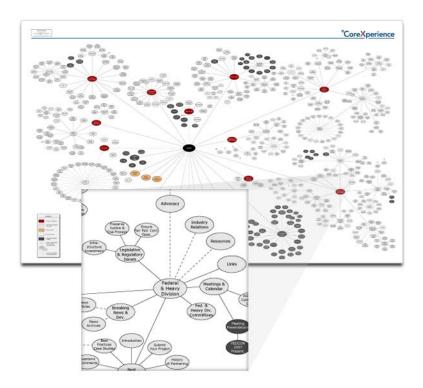


Figure 2: Site Deconstruction Map Sample

The tasks associated with this stage are as follows:

Analyze the existing site structure and document in map format

Deliverable: Site Deconstruction Map



5.2.3. Content Inventory

For this stage, eCoreXperience will provide DLF with a Content Matrix template. DLF will be responsible for using that template to provide a complete inventory of content to be included—either content to be migrated over or new content not existing on the current DLF site.

The tasks associated with this stage are as follows:

- Develop a Content Matrix Template
- DLF to complete Content Matrix using provided Template
- Document results and provide recommendations in the SDD

Deliverable: None. Content Matrix and resulting recommendations will be incorporated into SDD.

5.2.4. Search Engine Optimization (SEO) Recommendations

eCoreXperience will work with DLF to identify significant keywords to be incorporated later in the development cycle into page-level meta-tags to improve Search Engine Optimization.

The tasks associated with this stage are as follows:

- Discuss with DLF potential keywords to promote SEO
- Document and rank results and then provide recommendations in the Solution Definition Document

Deliverable: None. SEO Recommendations will be incorporated into SDD.



5.2.5. Functionality Inventory

The Functionality Inventory is a compilation of all desired functionality for the identified website, presented in table format alongside expected results that will occur as an outcome of project execution. The goal of the Functionality Inventory is to provide both the development team and the DLF team with a clear roadmap of the site or application's desired end state. This deliverable will also help to inform other parts of the process including functional groupings and technical requirements.

The tasks associated with this stage are as follows:

- Identify site functionality needs
- Document results and provide recommendations in the SDD

Deliverable: None. Functionality Inventory and resulting recommendations will be incorporated into SDD.

5.2.6. Solution Definition Document

The findings from the Solution Architecture portion of this engagement will be compiled in a single document, the Solution Definition Document (SDD). This report will serve as a functional specification as well as a foundation for development, it will include the following:

- Refinement of the existing DLF strategy based upon evaluation and results of facilitated session with DLF team:
- Functionality Inventory documenting desired site functionality as well as recommendations for incorporation
 of additional tools to meet identified goals;
- Content Inventory documenting desired site content (DLF to complete inventory using provided Content Matrix template);
- SEO Recommendations; and
- Technical Inventory that documents the current technical infrastructure as well as any recommendations for enhancement to meet website implementation needs;

The SDD will be presented for review and revision before final sign-off.



5.3. Structure & Design

Building upon the information gathered in the Solution Architecture portion of the engagement, the Structure and Design portion of the project will focus on how best to structure the site or application and how to provide a visually engaging presence for DLF that aligns with established style parameters. Using our proven, iterative process that will involve the DLF team at each key development milestone, eCoreXperience will work to create a web presence for DLF that, incorporates the business goals of the organization and provides users with an experience that encourages them to explore the organization's offerings and draws repeat visits. This will be a core phase for the DLF project, focusing on the diversity of content types that the organization handles as well as how to best organize the content for ease of access.

5.3.1. Information Architecture Development

Information Architecture addresses how content and functionality is structured for a website or application—beginning with a holistic view of current and pending content as well as functionality and then refining those elements to develop a user-focused navigation and page level interface designs. Specific tasks and activities must be completed in order to create an Information Architecture that will provide a strong foundation to meet the goals of the project. Elements included in this phase are:

Category Grouping

Grouping the high-level categories of a website or application's main components of content and functionality into logical sub-groups allows for proper placement of application functions and information repositories. This high-level categorization would also apply as the precursor to a structured taxonomy of either informational or functional aspects. Areas of the application can also be identified more readily for phased approaches to development.

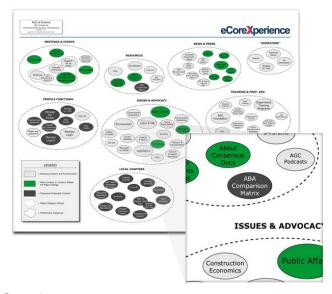


Figure 3: Category Grouping



The tasks associated with this stage are as follows:

- Review Functionality and Content Inventories
- Create Category Grouping Map
- Review Category Grouping Map with DLF team

Deliverable: None. This is a project work product that will be used as the basis for the development of the Navigation Map.

Navigation Map

The Navigation Map provides a clear inventory of page types in the context of their navigational arrangement. They are grouped into the various functional or logical sections on the site. Pages are placed with respect to their navigational flow.

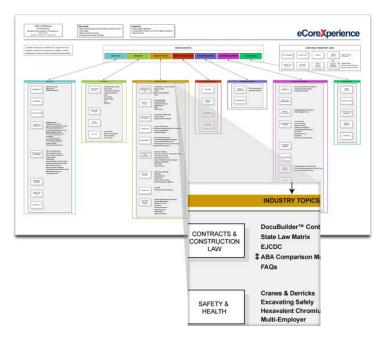


Figure 4: Navigation Map

The tasks associated with this stage are as follows:

- Analyze results of Category Grouping Map meeting
- Create Navigation Map
- Review Navigation Map with DLF team
- Incorporate changes based upon DLF team input
- Develop final Navigation Map

Deliverable: Final Navigation Map



Wireframes

Wireframes provide details of the user interface at the page level. This includes a schematic view that recapitulates the user flow at a high level. This is used to validate a final interface design before production begins. Individual pages can be printed out as a paper-based prototype for user testing or evaluation.

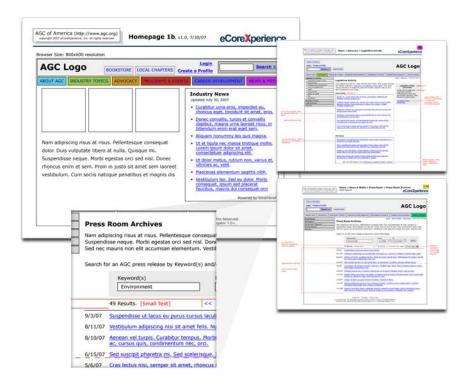


Figure 5: Wireframes

Wireframe Map

In order to provide guidance to both the front-end and back-end development teams, eCoreXperience will develop a map of how individual wireframes interact with each other with a specific focus on areas where a step-by-step process is required. In addition, supporting documentation will be developed to augment the Wireframe Map.

The tasks associated with this stage are as follows:

- Develop Wireframe Map
- Develop associated documentation

Deliverables: Wireframe Map and documentation.

5.3.2. Visual Design

Although DLF has indicated that a visual redesign is not a high priority of this project, eCoreXperience deems necessary, a certain level of attention to the design of secondary pages and integration with the existing homepage design of the site.

The goal of this process is to provide a consistent and practical approach to developing the visual aspects of the project. The elements in this stage include the following:

Visual Design Meeting

This interactive workshop is broken down into a series of exercises aimed at further defining the audience mindset, as well as the organization's attitude and positioning goals. It is an opportunity to help the client become fully involved in defining the visual personality. The goal of the workshop is to capture keywords and phrases that identify the target audience(s), organizational culture, and positioning goals that are based on visual identifiers to help further understand both the verbal and visual descriptors in relationship to one another. This provides a solid foundation to assist with supporting the new information architecture, refining the existing website's design, and extending it out through the different levels of the website.



Design Concept Development

Based upon the Visual Design Meeting, the existing DLF website as well as the homepage and secondary page wireframes defined in the Information Architecture stage, Design Concepts will be developed highlighting possible refinements for the homepage itself as well as Secondary Page Design Concepts. The Design Concepts are visual representations of the organization's attitude and culture, organization's position, and overall branding goals as well as the homepage elements defined during Information Architecture development. DLF will be presented with 2 variations of the Homepage and Secondary Page Design Concepts incorporating all input/feedback.



Figure 6:Homepage Design Concepts



Figure 7: Secondary Page Design Concepts

The tasks associated with this stage are as follows:

- Create 2 Homepage and Secondary Page Design Concepts
- Review Design Concepts with DLF team
- Develop a final Design Concept based on DLF feedback

Deliverable: Final Homepage and Secondary Page Design Concepts



Digital Library Federation - DLF Website

Expansion Design

Expansion Design is the extension of the base Secondary Page Design Concept into every unique page as represented in the Wireframes. This part of the process process ensures that there is a relevant design for each expected page type in the site. During Expansion Design, the graphical elements for each unique page will be developed, including graphical headings, images and other visual assets.

The tasks associated with this stage are as follows:

 Develop unique secondary page design graphical assets based upon approved unique secondary page wireframes

Deliverable: None. The assets developed in this portion of the engagement will be used during Web Engineering.



5.4. Implementation

5.4.1. Web Engineering

Upon completion of the Visual Design and the Information Architecture, all of the individual elements of the design are crafted for front-end coding. This includes HTML/XHTML/CSS/Javascript/Flash/AJAX as needed to support the design and information architecture. The HTML/XHTML code can be used as a step towards early validation.

As per eCoreXperience standards, the front-end code package will be developed to meet Section 508 and W3C AA compliance standards.

The tasks associated with this stage are as follows:

Develop front-end code

Deliverable: Front-end Code Package

5.4.2. Drupal Content Management Framework Implementation

This phase includes installation of the Drupal Content Management Framework in the host environment, the development of templates, and training on the use of the Drupal configured system. DLF will be responsible for migrating content to the new Content Management Framework. The training may be held on-site or virtually and will include a Quick Reference Guide that will serve post-training support.

The tasks associated with this stage are as follows:

- Install and configure Drupal on host server
- Create templates to support defined Visual Design and Information Architecture
- Develop a Quick Reference Guide on how to use the CMS
- DLF to migrate content to Drupal

Deliverable: Quick Reference Guide



5.4.3. Quality Assurance (QA) and Testing

Full testing to validate all work, assure compliance with federal standards and industry best practices, and a high standard of usability based on feedback from end users will be carried out in this stage. Testing stages include Unit (individual user or developer testing), System (testing of the product or service within the system environment), Use Cases (scripted testing by a test group based on developed cases), User Acceptance (end user testing of the product or service within the system environment).

The tasks associated with this stage are as follows:

Develop and execute test plans

Deliverables: Test Plan with associated Use Cases and Test Scripts

5.4.4. 508/WCAG Audit and Validation

A full series of Section 508 and WCAG compliance tests will be performed to assure compliance with the stated accessibility and usability requirements from the DLF RFP. Coding to the guidelines and standards will take place throughout the Implementation phase and this stage is intended to validate that work before the final release to production.

The tasks associated with this stage are as follows:

Develop and execute test plans

Deliverables: Accessibility Test Plan



5.5. Deployment

Upon approval of the testing results, eCoreXperience will push the product or service to Staging or Production.

The tasks associated with this stage are as follows:

• Deploy site to live production environment

Deliverable: Operational Production

5.6. On-going Maintenance

eCoreXperience believes strongly in supporting its clients after launch. Our team is able to provide a range of maintenance services subject to agreement with DLF. Two options are provided below for your consideration:

Option	Pricing
Option 1: Maintenance On Demand This option provides clients with the ability to obtain technical support on an as needed basis, with no minimum commitment of support time.	Remote support is provided in hourly increments at the rate of \$120/hour.
Option 2: Maintenance Subscription This option provides clients with a subscription level of maintenance which affords a lower hourly rate, as well as smaller service increments	The base subscription is a prepaid block of 10 hours at the hourly rate of \$105. Support is provided in 15 minute increments after the first hour.



6. Investment

Following is a breakdown of the phases and estimated time frames for DLF's website initiative as outlined previously in this document. Note that the stages may occur concurrently. The timeframes noted are for elapsed time and take into consideration coordination of scheduled calls.

6.1. Development Costs

The development costs, inclusive of all phases noted previously in the proposal, are as follows:

Price: \$ \$43,715

6.2. Content Management Framework Costs—Drupal

As this is an OpenSource product, there are no costs associated with software or licensing purchase.

6.3. Hosting Costs

Based upon the requirements noted and a planned Drupal implementation, the estimated hosting costs for Dreamhost are as follows:

Option	Pricing
Shared Hosting:	Setup fee: \$49.95
Includes 5GB of storage, 5TB of throughput and full platform support for the installation of Drupal on Debian Linux. Also included are site statistics and security tools to make the site secure against the types of attacks described in the DLF RFP.	One Month pre-paid: \$60.90, price per month thereafter \$10.95 One year pre-paid: \$119.40, price per month: \$9.95
See http://dreamhost.com/hosting.html for full details of Shared Hosting features.	Two years pre-paid: \$214.80, price per month \$8.95
	Every additional year pre-paid results in an additional dollar-per-month discount.



Option	Pricing
Dedicated Hosting:	No set-up fee
Includes same features as Shared Hosting PLUS:	\$395 per month paid monthly
24/7 monitoring of server by Dreamhost including email and mysql	
Software and security management provided by Dreamhost	
 All hardware replacement, even upgrades to latest servers in the event of a failure, at no additional charge. 	
 All files are kept on a redundant network attached storage, with hourly versioned backups. 	
Web panel access for administrators still included.	
Naming for the actual machine (this is the server name, not the URL of the website)	
Does not include root access to the server	
Email and databases are still hosted in shared environment	

Note that eCoreXperience will work with DLF to identify alternative host providers if DLF feels that Dreamhost will not meet stated needs.

6.4. Technical Support

Based upon the requirements noted, the estimated costs for monthly technical support are as follows:

Option	Pricing
Option 1: Technical Support On Demand	Remote support is provided in hourly increments at the rate of \$125/hour.
This option provides clients with the ability to obtain	
technical support on an as needed basis, with no	
minimum commitment of support time.	
Option 2: Technical Support Subscription	The base subscription is a prepaid block of 10 hours at the hourly rate of \$115. Support is
This option provides clients with a subscription level of	provided in 15 minute increments after the first
maintenance which affords a lower hourly rate, as well	hour.
as smaller service increments	



6.5. Expenses

The development cost noted above is exclusive of out-of-pocket expense which will be invoiced separately. Expenses for this project will not exceed 10% of overall project costs and relate to travel to meetings as well as any conference call/WebEx usage. eCoreXperience will utilize all means possible to limit expense expenditures to DLF.

6.6. Assumptions

The following assumptions have been applied in this proposed solution:

- If, during the course of Requirements Gathering, significant changes arise that impact the timeframes and cost noted within this proposal, eCoreXperience will document the project impact and notify DLF of any associated time/cost changes and wait for approval to move forward.
- DLF will provide a Project Manager to serve as a single point of contact to work directly with the
 eCoreXperience Project Manager. Responsibilities for DLF Project Manager may include: coordinating
 meetings, coordinating approval process and acting as central communications point for DLF. The
 eCoreXperience Project Manager will be responsible for creating and managing the Project Plan and
 serving as the single point of contact for DLF.
- A Project Plan will be provided to DLF with scheduled meeting dates. Upon approval of the Project Plan, any changes in meeting dates or approval turnaround time may impact the proposed project end date
- eCoreXperience will provide DLF with a Content Matrix template. DLF will be responsible for using this template to document all existing site(s) content. This completed matrix will then be used to inform the Information Architecture process and serve as a tool for monitoring content migration process
- A hosting option will be selected by DLF that is able to support the requirements of the recommended technical solution, Drupal. If the selected hosting option does not support this technical solution, additional time will be required to make a new Content Management System recommendation.
- Administrative functions will be the responsibility of DLF after training.
- Drupal meets 99% of the requirements stated in the RFP 'out-of-the-box' as such it is assumed that
 eCoreXperience will deliver an 'out-of-the-box' solution that is limited to configuration of core modules and
 customization of 'look and feel' templates only. In order to keep the project costs within DLF's desired
 parameters, custom coding and extensive module customization are out of scope for this engagement.
- Drupal provides a robust Taxonomy Module that allows the development of tagging vocabularies for the
 insertion of meta-data and to use as 'tags' to categorize content throughout the site. While eCoreXperience
 will configure this core module, the responsibility for developing the vocabularies will lie with DLF. Training
 on the administrative interface and the core modules will be conducted that will allow DLF staff to manage
 the taxonomy and any tagging vocabularies.



7. Next Steps

Should the DLF require further information about our proposed approach or solution, we will schedule time to confer with you either via conference call or an in-person meeting.

7.1. Follow-Up Presentation

It would be a pleasure to schedule a follow-up presentation to more fully explain our proposed solution and answer any questions that DLF may have.

7.2. Post-Selection

If our proposal meets with your approval, a Master Services Agreement and Statement of Work will be provided to DLF for approval and signoff prior to the onset of the project.



8. Appendix A—Sample Bios

Following is a selection of eCoreXperience staff bios.



Paula Majerowicz

President, Solutions Architect

Summary

Founder and President of eCoreXperience, Ms. Majerowicz's consulting and management experience concentrates in collaborative computing and the delivery of business value as enabled by distributed application platforms. Her expertise is integrating user experience solutions with technology frameworks.

- · Business strategy and planning
- Life-cycle solution methodologies
- Joint application and rapid application development
- Object-oriented design and development
- Information delivery and technology training

Education

Master of Science, Loyola College

Bachelor of Arts, Loyola College

Technical Skills

- ACT!
- Adobe Acrobat
- Adobe Illustrator
- Adobe InDesign
- Adobe PageMaker
- Adobe Photoshop
- Autodesk Actrix
- FileMaker Pro
- Goldmine
- Lotus Notes
- Lotus LearningSpace
- Macromedia Dreamweaver
- Macromedia Fireworks
- Microsoft Excel
- Microsoft Frontpage
- Microsoft PowerPoint
- Microsoft Project
- Microsoft Visio
- Microsoft Word
- Operating Systems: PC DoS & MS DoS, Windows 3.1, Windows for Workgroups, all versions Windows 95-XP; Macintosh System 5.0-OS X

Specific Experience

eCoreXperience, Inc.

2001 - Present

President, Solutions Architect

In addition to her role as President of eCoreXperience, Paula also serves as a working project team member providing strategy and solution insights. Utilizing business analysis experience, expertise and experience in



integrating front-end and back-end systems to maximize technical frameworks and in-depth understanding of User Experience/Interaction Design, Paula crafts high-level solutions that are then implemented by the eCoreXperience team. Sample project highlights follow.

- American Insurance Association—Solutions Architect
 For this website redesign and Enterprise Content Management System (CMS) deployment, developed a phased approach to provide in-depth analysis of existing site and infrastructure, recommend CMS package selection and redesign direction, assemble an implementation team comprised of eCoreXperience, business partner and AIA Subject Matter Experts (SMEs) and oversee successful project completion. The solution addressed resource, member needs, timeline and budget requirements.
- Mortgage Bankers Association—Solutions Architect
 The Mortgage Bankers Association (MBA) needed a solution that, over time, could address information architecture and content needs for both their main site and subsidiary sites—one that would best utilize in-house expertise/skills, build new in-house CMS resources and allow for a manageable implementation of site redesign and Enterprise CMS deployment. A solution was crafted to apply a phased approach, focusing first on the main MBA site and incorporating a gradual rollout to subsidiary sites.
- US Department of State—Solutions Architect
 Crafted comprehensive solution to redesign, consolidate and manage two disparate Department of State
 websites targeted at a youth audience. Solution included structured focus groups, complete visual and
 information architecture redesign, development to ensure 508 accessibility compliance and developing a
 structure by which content could be updated and maintained internally via FileNet Content Management
 System.

Xpedior, Inc. 1999 – 2001

Vice President of Consulting Services

As Vice President of Consulting Services, responsible for all delivery services, including strategy offerings, application development and overall client satisfaction. Sample engagements include the following:

- Avon—Business Analyst and Solutions Architect
 Developed and facilitated JAD sessions for 7 international teams. Analyzed and documented business processes by geography, application functional requirements, product development priorities and legacy system integration. Performed process reengineering to establish single solution including new application and multiple legacy systems across multiple geographies.
- American Management Association (AMA)—Business Analyst and Solutions Architect
 AMA required the development of an online repository to encourage customers to purchase the learning opportunities available. Conducted formal requirements gathering including facilitation of JAD sessions.
 Analyzed and documented business processes. Benchmarked all business goals and application specifications. Created Solutions Definition documentation

IBM Global Services 1996 – 1999 Principal—eBusiness Services

Managed the lifecycle of service offerings in the New York Metropolitan area for e-business services, including Messaging, workflow applications, Intranet/Extranet applications, infrastructure design and deployment, distributed learning solutions and electronic commerce. Responsible for the sales, marketing and delivery of e-business services. Managed consultants and architects working on related engagements. Overall engagement manager for all e-business engagements in the NY SMB marketplace. Developed and managed distributed learning course applications for worldwide deployment to practitioners.



Advanced Voice Technologies Director of Customer Service—AT&T Rollout

1994 - 1996

 Managed the design, development and implementation of AT&T's national voice messaging offering for schools K-12. Served as technical liasion to the product development team for feature/function quality assurance. Development national deployment plan, including product marketing and training materials.

Vanstar Corporation National Training Manager

1987 - 1994

Managed the national 800 number center for corporate and consumer technology training nationwide.
Network included 93 classrooms in 35 locations. Responsible for all MIS functions for headquarters, as
well as infrastructure for remote sites. Managed 40 direct reports and 6 subcontracted services
companies, including trainers, telemarketers, project managers and registrars. Responsible for custom
solution design and implementation.



Barbara A. O'Connell

Engagement Manager

Summary

Barbara has over 17 years of professional experience in the technology industry. Her skills are derived from a variety of disciplines including project management, business analysis, marketing, content strategy, content development, content management, training, and technical documentation.

- Content strategy
- Technical documentation
- Taxonomy development
- Content creation and re-purposing
- Design, develop and deliver training solutions

Education

Bachelor of Arts, Manhattanville College

Technical Skills

- Adobe Acrobat
- Adobe Illustrator
- Adobe InDesign
- Adobe PageMaker
- FileMaker Pro
- Lotus: Notes
- Lotus LearningSpace
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Project
- Microsoft Visio
- Microsoft Word
- QuarkXpress

Specific Experience

eCoreXperience, Inc. Director

2001 - Present

Barbara utilizes a broad range of skill sets ranging from content strategy to project management. Her primary focus area, however, has been on content: taxonomic structure development, content strategy development, content creation, technical documentation, and user adoption. Key elements of user adoption include campaign development, instructional design and training material development (both traditional classroom and eLearning) as well as all supportive collaterals such as Quick Reference Guides—all with a total focus on user experience. Sample project highlights follow.

Associated General Contractors of America—Content Strategy Development
Worked to develop a comprehensive content strategy starting from analysis of existing site content to
content migration planning. Templates were developed to serve as content work products for the client
and strategies were created to optimize technology for both content management and migration. In
addition, a Solution Definition Document (functional specification) was created to document all project
requirements and proposed solutions.



- American Insurance Association (AIA)—Website Evaluation Documentation
 Managed the development of a comprehensive website evaluation document for the existing AIA site.

 Analyzed site structure and content. Gathered input from evaluation team and compiled into a cohesive document with a consistent style and tone.
- American Insurance Association—Taxonomy Development
 Created a controlled vocabulary (thesaurus) used to facilitate migration of legacy data, structure future input and enhance search functionality. Compiled terms and designated relationships derived from variety of departments. Thesaurus included over 3,000 terms.
- Columbia University Teachers College—Curriculum Development
 Worked with Coaching Professor at Columbia to develop a prototype course module for a new course offering. Developed templates for both student guide and instructor presentation material. Created course content and presentation materials.
- National Education Association Member Benefits (NEAMB)—Website Evaluation Documentation
 Managed the development of a comprehensive website evaluation document for the existing NEAMB site.
 Analyzed site structure and content. Gathered input from evaluation team and compiled into a cohesive
 document with a consistent style and tone.
- Church on the Hill—Content Development and Promotion
 Created all content for a not-for-profit organization's new website. Content was created to not only drive
 users to the site but also to encourage donations and participation in future events. As an ancillary
 service, worked to promote the site via links to other associated sites to drive search engine results
 optimization and site promotion.
- Columbia University Teachers College—Project Management
 Managed Information Architecture, Visual Design and Web Engineering delivery teams; coordinated requirements sessions with Learning Management System (LMS) and Content Management System (CMS) vendors; managed integration of front-end code with LMS and CMS systems.
- Mortgage Bankers Association—Product Evaluation Coordination
 Managed CMS product selection process including requirements gathering, business analysis, vendor identification, RFI development and distribution, response evaluation, vendor presentations and final recommendations documentation
- Symphony Health Systems—Business Analysis and Documentation
 Participated in requirements gathering sessions; created use cases; created Business Requirements and Technical Specifications documentation; conducted interviews and created content collection documentation and processes.
- Teeman, Perly & Gilmartin—Business Analysis and Training Support
 Identified and documented all business processes related to tasks to be performed both digitally and manually; developed business cases and detailed process flow charts and developed system documentation and training materials including step-by-step training guides and Quick Reference Cards.

Xpedior, Inc. 1998 – 2001 Director, Content Development

- As Director-Content Development, utilized marketing, content development, content management, training and documentation experience to build a practice focusing on content for Xpedior's clients.
- Prior to that, served as Director-Sales Tools & Training responsible for providing the national Xpedior sales force with the tools to help them succeed in their sales endeavors and share best practices across



regional boundaries.

IBM 1997 – 1998

IT Project Manager

At IBM, managed the intellectual capital and the marketing and training thereof for key eBusiness
services offerings focused in Intranet and Extranet delivery to IBM customers. In this capacity,
participated in the redesign of IBM's eBusiness intranet site, designed an intranet structure to support
end-to-end intellectual capital for specific eBusiness services focusing on both delivery and sales,
developed and implemented a strategy to educate both the sales and engagement communities on
eBusiness services offerings, and created web-based training in both Lotus LearningSpace and html
delivery formats.

Freelance Consultant 1996 – 1997

 As a freelance consultant, worked as a technical writer and training expert, developing curriculum and user guides for proprietary software packages. In addition, coordinated a computer-based training program for a Fortune 500 customer for Sylvan Learning Systems.

Vanstar Corporation Senior Project Manager

1991 – 1996

 At Vanstar, primary areas of focus were curriculum development, partner programs and marketing of Vanstar's computer training services. This included technical writing, creation and implementation of marketing campaigns, management of partnership program, vendor negotiation and management and design and publication of classroom schedule for 45 nationwide classrooms.

NYNEX (now Verizon) Manager, Graphic Design

1988 - 1991

 For NYNEX, coordinated design and production of software and hardware documentation projects, managed production of student manuals—interacting with outside vendors and distributing curriculum for both in-house and external use, and designed and facilitated the production of newsletters for both internal and customer use.



Beth Kelleher

Project Manager

Summary

Beth has over 10 years in the technology industry with a focus on content management and the development life-cycle for database-driven web applications. Her skills span both the technical and business realms with a foundation in web design and development as well as technical writing, project management, quality assurance and training.

- Project Management
- Web Design, Development and Production
- Content Management System Configuration
- Technical Writing
- Quality Assurance and Training

Education

B.A. French Language and Literature, Smith College, 1996

Technical Skills

- HyperText Markup Language (HTML) and Extensible HyperText Markup Language (XHTML): 12 years experience
- Cascading Style Sheets (CSS): 4 years experience
- Javascript: 2 years experience
- PHP: 6 years experience
- Perl: 2 years experience
- Lotus Notes/Domino Development: 5 years experience
- ColdFusion Development: 8 years experience
- Movable Type: 2 years experience
- WordPress: 2 years experience
- Day Communiqué: 3 years experience
- Adobe Photoshop: 8 years experience
- Adobe Illustrator: 1 year experience
- JASC Paint Shop Pro: 11 years experience
- Macromedia Homesite: 10 years experience
- Macromedia Dreamweaver: 4 years experience
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Project
- Microsoft Visio
- Microsoft Word
- Technical Writing: 6 years of experience
- Quality Assurance: 2 years of experience



Specific Experience

eCorexperience, Inc.

6/2007 - Present

Project Manager

- Responsible for the management and successful execution of eCorexperience client projects from inception to deployment with a focus on user experience.
- Columbia University: Hechinger Technical Writing
 Evaluated areas of Hechinger's Profit Suite Content Management System and templates and wrote an updated user guide.
- Columbia University: Reading & Writing Quality Assurance Testing
 Provided Quality Assurance testing for the Reading and Writing web site. Performed functional testing, documented and escalated issues. Evaluated site content for consistency and accuracy.
- Associated General Contractors of America Project Manager
 Evaluated current site function and assisted with requirements gathering and documentation through the JAD process.

Brown & Toland 4/2001-6/2007 Web QA Release Manager, Project Lead, Web Developer

• As a QA Release manager, developed QA standards for the release of all Brown & Toland web-based projects. Coordinated releases with development teams, user groups and Change Control. As a Project Lead, managed the total life-cycle of web development projects from inception to deployment, including scheduling and leading meetings, creating and maintaining project plans and managing teams of up to 10 people to the plan. As a Web Developer, re-designed and developed a new corporate web site, developed new web applications to support business functions, maintained existing web sites and applications and provided technical documentation and training on all projects.

• BTCARE – Project Lead

BTCARE (Brown & Toland Claims, Authorizations, Referrals and Eligibility) is a secured application built in HealthCareObjects and DBMS on the IDX Webframework and VMS backend to enable employees and contracted provider offices to view claims, submit, edit and review Authorizations and Referrals and request patient eligibility status.

- Managed the BTCARE project from inception through deployment. Coordinated meetings with business owners. Obtained and documented business requirements. Created development team structure and secured resources from functional managers.
- Managed development team through the application development cycle. Managed all testing and quality assurance activities.
- o Provided on-site training to enhance user adoption in physician offices.
- *iCacti Implementation Team Lead*Implemented iCacti (iDirectory and iProfile), the web front end for the CACTUS credentialing system, including internal and external views of the online physician directory and profile-review site.
 - Collected business requirements, developed requirements matrices, coordinated internal and vendor resources and ensured timely completion of deliverables for a successful go-live.
 - o Installed and configured the iCacti products on the web servers and customized all applications to



Brown & Toland specifications with Brown & Toland branding.

- Brownandtoland.com Designer & Developer
 Evaluated existing web site, re-designed and re-developed the site from the ground up in a new content management system (Day Communiqué)
 - Reviewed site structure and content with business owners. Built wireframes, mockups and site layout options as images and HTML pages for site design decisions.
 - Developed content atoms in Day Communiqué, built JSP-driven form pages using the content management framework.
 - o Implemented new site design and content in the content management system.
 - Created training manual and conducted user training sessions for launch as well as on-going monthly sessions to bring new employees up on the content management system.

SuSE Inc. 4/2000-2/2001 Web Master

• Developed and implemented new web pages for the web site using NPS content management system and Javascript

Designers & Planners 10/1999-3/2000
Web Developer

 Initiated a plan to migrate the web group into the IT division from the Environmental division. Designed and developed web sites for the N45 branch of the Navy and other Naval clients in Cold Fusion and Notes Domino 4.6 and R5.

George Washington University Medical Center Web Developer

2/1999-9/1999

 Collected requirements from physician project owners, designed and developed alpha and beta prototypes of the Clinical Data Repository (CDR) user interface in ColdFusion, SQL Javascript and HTML.

The Chronicle of Higher Education Production Associate

6/1996-2/1999

- Analyzed conversion procedures and identified areas in which improvements could be made. Outlined improvement plan and implemented scripts with a net result of a 2-4 hour reduction in processing time. Created documentation and training materials for the conversion process.
- Converted the newspaper from typeset format into clean, cross-browser compatible HTML. Performed
 updates to the web site, answered help desk e-mails about web site use.



Eileene Coscolluela

Web Engineer & 508 Compliance Specialist

Summary

Eileene has over 10 years of professional experience in web design and development. She has extensive experience developing ecommerce, educational, transactional, and informational websites. She also has experience in requirements gathering, information architecture, project management, technical writing, and quality assurance. Eileene's focus involves user agent/browser-based technologies such as XHTML, Cascading Style Sheets, JavaScript, Dynamic HTML, and Web Accessibility/Web Standards Compliance issues.

- Information Architecture
- Direct and develop proof-of-concept modules and click-thru prototypes for back-end integration
- Create valid and compliant code for XHTML and CSS documents
- Provide Section 508 and Web Content Accessibility development direction and testing

Education

Bachelors of Science, University of Illinois at Urbana-Champaign

Technical Skills

- HyperText Markup Language (HTML) and Extensible HyperText Markup Language (XHTML) development: 14+ years experience
- Cascading Style Sheets (CSS): 10+ years experience
- JavaScript: 12+ years experience
- Dynamic HTML: 10+ years experience
- eXtensible Markup Language (XML/XSL/XSLT): 3 years experience
- Web Accessibility/508 Compliance issues: 10+ years experience
- Adobe Photoshop: 14+ years experience
- Adobe Illustrator: 10+ years experience
- Adobe InDesign: 2 years experience
- Macromedia Homesite: 5 years experience
- Macromedia Dreamweaver: 7+ years experience
- Macromedia Flash: 1+ years experience
- Macromedia Freehand: < 1 year experience
- Microsoft Frontpage: < 1 year experience
- Lotus Notes/Domino/LotusScript development: 2 years experience
- Interwoven TeamSite: 2 years experience
- Unified Modelling Language (UML): < 1 year experience
- Technical Writing: 5+ years experience
- Financial Domain: 3 years experience
- Educational Domain: 3 years experience
- Government and Not-for-profit Domain: 7+ years experience
- Quality Assurance: 10+ years experience



Specific Experience

eCoreXperience, Inc.

3/2001 - Present

Senior Web Engineer and Information Architect

As a Senior Web Engineer and Information Architect for eCoreXperience, Eileene is responsible for gathering requirements and developing the informational organization for websites, with a focus on the functional requirements. Eileene works with the business analysts, technical architects, and creative leads to craft solutions. In addition, she is responsible for the integration of the design into the technical solution by managing the creative technical team. Following is a listing of project highlights.

- Our Lady of Lourdes Catholic High School Lead Information Architect and Lead Web Engineer
 Architected information solution to fit client's requirements for directed content into two websites: one
 focusing on the students and the other for a wider audience. Set up hosting environment. Installed and
 configured CMS into hosting environment. Customized CMS based on client requirements for a two-site,
 one CMS solution. Managed crafting of web engineering materials and integration into the CMS by the
 web engineering team.
- American Trucking Association: Highway Watch Lead Web Engineer, CMS Template Integration, and Information Architect
 Developed content matrix and provided recommendations to the information architecture team.
 Created HTML components compatible with NetForum framework to deliver the architected design solution. Integrated HTML components into the NetForum framework. Worked with development team to integrate dynamic content and design requirements. Assisted in developing standards for content migration.
- Columbia University: Reading & Writing Lead Web Engineer, CMS Template Integration, and Information Architect
 Developed content matrix and provided recommendations to increase accessibility. Managed web engineering development team. Integrated web engineering deliverables into the ProfitSuite CMS.
- Columbia University: Hechinger Institute Education Blog Lead Information Architect, Lead Web Engineer, CMS Template Integration, and Ongoing Technical Support
 Developed a phased project approach to allow the client to begin creating and publishing content on the web immediately. Set up hosting environment. Installed and configured CMS into hosting environment. Customized CMS based on client requirements in an integrated, phased approach. Created HTML components compatible with Movable Type framework to deliver the architected design solution. Integrated HTML components into Movable Type framework. Crafted a solution for delivery of push-content to clients' readers. Provide continuing maintenance and support.
- Columbia University: Hechinger Institute Lead Web Engineer and Lead Information Architect
 Developed information architecture solution: content categorization, navigation, wireframes.
 Managed development by the web engineering team, of a click-thru prototype of the website.
 Currently providing maintenance and CMS development.
- Columbia University: The Center for Educational Outreach and Innovation Lead Web Engineer and
 Information Architect
 Designed functional wireframes and assisted with functionality workflow development for the three related
 websites comprising this project. Created a standards compliant front-end code package and worked
 closely with back-end development team to enforce standards through integration, with an emphasis on
 utilizing style sheets for layout to ensure deep backwards compatibility and printability.
- Delta Government Services Group: OA Billing –Lead Web Engineer, Web Accessibility and Standards Consultant
 - o Led a web engineering team to develop valid and compliant code following architected design



- solution. Provided technical design advice and direction for application to comply with government accessibility requirements.
- Trained technical and analytical teams on Web Accessibility and Standards, with an emphasis on Section 508 compliance and Web Accessibility Content Guidelines 1.0. Produced a line-by-line audit of a pre-existing administration website for Section 508 compliance/WCAG 1.0 conformity, including recommendations for adjusting the current application and guidelines for future development. Created all-day training sessions for systems analysts and technical architects and conducted training in Section 508 and WCAG 1.0. Provides continuing technical design advice to keep applications compliant.
- Assured Guaranty –Information Architect and Web Engineer
 Worked with the client to develop a scalable intranet portal solution, through a strongly staged approach to the project. Defined navigation and layout in wireframes and created an accompanying front-end code package.
- March of Dimes Information Architect and Web Engineer
 This intranet portal project required taking an existing intranet website and reorganizing it to better serve
 a new portlet infrastructure. Through personalization and directed, context-specific sections, each
 member of the organization would be able to find focused information tailored to their specific needs.
 Defined a new navigation and layout in wireframes. Produced a technical document for utilization by
 developers to create generic portlets that would be customized depending on the intranet section's
 needs. Created the final front-end code package and worked closely with technical team to ensure
 integration.
- Diane vonFurstenberg—Technical Lead
 Assisted with the Information Architecture and served as technical lead, working with back-end
 developers and the client's infrastructure vendor to optimize the environment and minimize downtime.
- NASD—Information Architect
 Through iterative brainstorming discussions with the client, developed an overall navigational structure for a financial portlet and identified the portlet functionality. All aspects of the portal layout were defined in wireframes. Developed an executive portal proof-of-concept.
- NCO Financial Group Information Architect and Web Engineer
 For this online consumer debt collection application, a new application needed to be created with reference back to an existing structure. The original application was analyzed and new functionality was then incorporated. Created a new Information Architecture including navigational structures and wireframes to address poor user experience with the existing application. Engineered a proof-of-concept prototype and created the final front-end code package for hand-off for integration
- US Department of State
 The US Department needed to redesign their "Kids" site to improve the user experience and more specifically target the youth audience. Managed template development and optimization; developed interface interactivity while upholding accessibility requirements; and provided Section 508 compliance design and technical adjustments and testing.

The New York Mercantile Exchange Interface Developer

6/2001 - 1/2004

 As an interface developer, managed the front-end technical team for eNYMEX.com; created XML/XSL/XSLT objects for specific engagements; developed and maintained the NYMEX project intranet website; created Interwoven templates for the public website and provided public website maintenance for NYMEX.COM.



Xpedior, Inc. 3/1998 – 3/2001

Senior Design Consultant

 Managed and mentored the creative technical team, assigning project workloads and developing standards and processes; provided development strategies for atypical engagements and collaborated with other teams to meet deliverables; developed proof-of-concept modules and prototypes for presentations and future back-end integration.

The National Center Supercomputing Applications Web Developer

6/1997 - 3/1998

 Redesigned the interface and website architecture for the National Science Foundation/NCA World Wide Web Federal Consortium, Alliance Intranet, and National EOT Intranet. Provided internal HTML and web tutoring.

University of Illinois at Urbana-Champaign Web Developer

1/1996 - 3/1998

- Served as the webmaster for the International Society for Environmental Botanists (ISEB), Plant Biology 372, Plant Biology 345, and Plant Biology 102 websites. Created lecture presentations, administered an asynchronous learning environment, and taught "Introduction to WWW/HTML" to academic personnel.
- Created interface templates and websites for University of Illinois at Chicago College of Nursing and University of Illinois at Chicago College of Pharmacy. I was also a web consultant for the College of Nursing, assisting in tailoring educational material for online delivery.



Ella Coscolluela

Visual Designer

Summary

Ella's background in graphic design focuses on company image development and corporate branding, and is complemented by her extensive hands-on experience as a Web Engineer. Her primary focus areas are the following: collaborating with the client to help realize a vision that will best convey the client's needs, utilizing client feedback to create an intuitive, visually appealing Web interface, and interfacing with the development team to consider technical feasibility and execution in the design process. Internally, she is also in charge of managing the eCoreXperience brand, its consistency and application, and its recent evolution through the re-branding process.

- Collaborate with the client to help realize a vision that will best convey the client's needs
- Utilize client feedback to create an intuitive, visually appealing Web interface
- Provide technical support by considering feasibility and execution in the design process
- Manage the eCoreXperience brand, its consistency and application, and oversee its evolution through the rebranding process

Education

The International Center of Photography (New York, NY), Digital Photography

Parson's School of Design (New York, NY), Technology & Design

Bachelor of Arts, Wellesley College, Studio Art (concentration in Documentary Photography)

Technical Skills

- Adobe Photoshop
- Adobe Illustrator
- Adobe Premiere
- Adobe InDesign
- Adobe PageMaker
- Arachnophilia (open-source HTML hand-coder)
- Bridge
- Macromedia Dreamweaver
- Microsoft Suite (comprehensive)
- Moveable Type
- Quark Xpress
- HTML, XHTML, CSS, JavaScript
- Comprehensive branding development
- Design document writing
- Domain administration



Specific Experience

eCoreXperience, Inc.
Creative Lead & Visual Designer

2003 - Present

As the Art Director for eCoreXperience, Ella is responsible for gathering creative, visual and brand requirements and developing the visual elements to deliver a successful user experience which reflects both business goals and unique identity. Brand and identity also include logo design for both digital and print-based marketing vehicles. Following is a listing of project highlights.

- The Board of Pensions of the Presbyterian Church (USA)—Art Director
 Interfaced with the client to develop a unique look and feel which spoke to the larger parent brand of the
 Presbyterian Church, as well as the Board's own newly adopted messages of commitment and consistency.
 Researched and provided photographic options to client broken down by varying classifications of price,
 vendor, photographic style, and content.
- CCity.com (Phase 1): Circuit City—Lead Designer
 Adapted the Circuit City brand to a kiosk look and feel, for use on a portal site utilizing several layers of functionality, linked to a Domino/Notes database. Collaborated with client through several iterations of design, which included development of a specialized icon set, elaboration of the Circuit City palette, and exploration of various banner styles.
- O.A. Billing Application: U.S. General Services Administration—Art Director
 Developed a unique visual identity for an internal portal application though an iterative process that explored palette, imagery, typography and logo development. Created a customized icon set that mapped out various levels of functionality and navigation. Provided follow-up support in site expansion and development by creating customized buttons, labels, and icons for the client.
- Reading and Writing Project: Columbia University—Art Director
 Collaborated with the client to update the website's look and feel to be more cohesive with the visual style of
 their most recent print publications. Provided guidance in the imagery process by culling through examples of
 internally available photographs and providing the most suitable options, as well as samples of various
 applications of said photographs. Worked together with the Information Architect to devise creative solutions
 for various functionality challenges linked to different form types.
- EarlyStories (in conjunction with Hechinger Institute: Columbia University)—Art Director
 Developed a sub-brand that fit within the larger parent brand created for the Hechinger Institute. Collaborated with the client to create a site that incorporated the visual language and classic layout of most blogs, that could be easily executed within a highly dynamic CMS solution. Designed branded HTML templates for a periodic email blast sent to the sites user list.
- Hechinger Institute on Education and the Media: Columbia University—Art Director
 Utilized existing logo as a springboard to develop a comprehensive visual identity, including an elaborated
 color palette and typographic options. Collaborated with the client to streamline their existing logo for
 adaptation on the web. Developed a dynamic and flexible web design, capable of adapting to ebb and flows
 of time-sensitive content within a CMS solution.
- Center for Educational Outreach and Innovation: Columbia University—Art Director
 Developed in parallel, a triad of related visual identities that fell within the parameters of both Teachers
 College and Columbia University's branding guidelines. Through the application of different palettes and
 imagery, a single design concept was then able to be expanded into three separate "mini-sites", each of
 which visually addressed a separate user audience. Collaborated with the Center's design team to create a
 new logo that would work in both digital and print formats.



Digital Library Federation - DLF Website

March of Dimes—Art Director

Developed a unique and original visual identity for the *dimensions* portal which still successfully embraced the fundamental style rules and philosophies of the larger parent brand. Through a series of feedback-driven meetings with the business owners and subsequent meetings with the development team, developed a design tailored to fit both visual and technical needs. Upon completion of the portal, created a comprehensive guide to the portal's visual identity that covered topics including photography selection and color correcting, mood palettes, and web page layout.

Ontra—Art Director

Interfaced with both the business owner and the Flash developer to create a highly detailed storyboard for a multi-media marketing piece. Image acquisition and the development of custom animation required several meetings between both parties.

Highway Watch ®—Art Director

Developed a comprehensive company brand, inspired by the logo of one of the client's parent companies – the American Trucking Association. The project's unique requirements entailed the development of two offshoot brands in conjunction with one another. Communicated and collaborated extensively with users from each target audience to create three harmonious yet individual brands through multiple iterations while developing palettes, logos, and finally site designs.

• General Electric—Lead Designer

Collaborated with the development team to develop a visual intranet portal solution that not only adhered to the restrictions of the client's platform but also tailored the parent company brand to address the site's target audience.

Pfizer—Lead Designer

Worked with the client's technical team to create a look and feel for the portal site that was feasible within the development tool's visual limitations and accommodated several layers of functionality. This required an iterative design process involving several stages of review that ran parallel to and frequently integrated with the Information Architecture process.

NASD—Lead Designer

Elaborated on the company's parent brand in order to create an individual look at feel for a dynamic intranet portal. Interacted extensively with the development team to understand and visualize the limitations of interface customization.

NCO Financial Group—Art Director

Guided the client through the visual design process through a series of comprehensive, on-site meetings. Gathered feedback through visual example and exercise to develop a site-specific style guide, utilizing the larger parent brand as a foundation. Used this style guide to inform site designs, while simultaneously working with the development team to insure proper execution in keeping with the technology's limitations.

• AE Feldman—Art Director

Architected and implemented a comprehensive company re-brand for the web site and extended re-branding into client's print material. By working extensively with the client in meetings and an iterative design process, was able to Constructed a style guide through extensive client meetings and an iterative design process, that not only met the client's needs, but was flexible enough to work within the restrictions of dynamic CMS solutions.

Mortgage Bankers Association/Fraud Site—Art Director

Collaborated with the client to develop a site branding strategy that provided an individual visual identity for Fraud, while still retaining certain features from the MBA brand such as logo and basic site navigational structure. Implemented an iterative design process was that required extensive financial industry and association research as well as several rounds of composition and revision.



Digital Library Federation – DLF Website

