Creating Your Corporate eLibrary

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Introduction

The role of the corporate librarian is changing. With the dependence that organizations have built on information, there is also a paradoxical shift in how employees find information. The role of the corporate librarian has moved from one of knowledge expert, to one of controlling budgets and negotiating the purchase and management of various information sources.

At the same time, organizations are becoming more and more global, employees are working remotely, and resources are moving toward electronic formats. The clear path for the corporate library is to become an online resource that smartly leverages the corporate information budget to provide the most credible information to the largest base of users. With this shift, a librarian must be more technology savvy and must simultaneously wear many hats, including those of: information provider, technology consultant, project manager, and evangelist.

Making the jump to an online corporate library for your organization can seem like a daunting task. However, with the proper planning and the right resources, you can make it a smooth transition for everyone in your organization. The key to a successful eLibrary project lies in the planning. By breaking down your project into smaller steps, with a milestone for each, you can make your project more accessible for everyone and keep it on track and on budget.

This paper walks you through the process for creating your corporate eLibrary, while discussing the definition and merits and providing an overview of the key elements to consider while creating your plan. It provides users with a framework for determining needs, choosing the right technology, and finally using this information to formulate a recommendation and turn it into a compelling business case.

What is a Corporate eLibrary?

A digital or electronic library, also called an **eLibrary**, refers to a portal, intranet, extranet or Internet site that replicates the resources of a physical library in an electronic format, while improving access and search capabilities. When we add the word "corporate" to this definition, we are then referring to an organizational or institutional electronic library.

Even though the definition of a corporate eLibrary is relatively fixed, it can differ greatly in terms of form and function.

Some examples of corporate eLibraries include:

- A customer or partner resource center for your products and/or services
- A company-wide resource library (internal)
- A department specific library (i.e. sales and marketing resources)
- A collection of industry or topic-specific reference materials

 A collection of digital assets that are leveraged throughout your organization (images, text, stock photos, logos, etc.)

An eLibrary essentially involves putting search functionality on top of a volume of content, and combining it with a smart user interface to deliver results.

The content of an eLibrary can contain:

- electronically acquired documents such as journals, magazines and eBooks
- digitized content (originally in print format, but has been converted to digital format)
- digital content that's available on the web
- links to free and open content that exists in web page format
- electronically published original works

Why Create a Corporate eLibrary?

Organizations are moving more and more toward electronic libraries for a variety of different reasons. For some organizations, the choice to go digital is motivated by the need to support employee research across multiple locations with a single collection of documents. Other corporations are becoming increasingly global, with satellite offices across the globe. This factor, combined with the increase in home workers or telecommuters, means that employees are no longer working in a central location. For these organizations, the choice comes down to either duplicating resources and hosting on-site libraries in each of the regional offices, or in looking at a solution that can serve all of the offices from one central location.

In addition to the challenges of the global organization, the recent increase in fuel costs have led many organizations to limit employee travel and to look for new ways to reduce courier and shipping fees. These two reductions are also triggering organizations to investigate new methods for sharing documents and content electronically.

Beyond physical access, the increased perceived value of information is also prompting organizations to make better use of shared knowledge and resources. The shift in management style in many organizations has created flatter chains of command, giving more employees the power and the responsibility for making decisions. A digital library allows an organization to index content so that all employees have searchable access to both internal and licensed content under a single search function. This improves knowledge of what resources an organization has access to, and maximizes the use of content that an organization has acquired.

An eLibrary offers users self-service access to credible, often hand-selected, reference materials from any location, at any time. Just like a physical library, the librarian can control who has access to materials and what they can do with them (access, read, copy, save, email).

What type of eLibrary should you create?

Once the decision is made that an eLibrary is a good choice for your organization, then comes the question of "which type of library is best for me?". There are a number of different options in terms of eLibraries, as they can take on many forms, from a Wiki to a complex web portal, to anything in between.

The type of eLibrary you need is really determined by a few factors. Is your eLibrary meant to be a collaborative environment where any user can add or comment on content? If so, then perhaps a Wiki format would be a good fit. With a Wiki, every user has the ability to contribute content and edit postings using a markup language. This can be an appropriate approach when the library is more of a collaborative resource or a community website. For a traditional corporate library, Wiki's are generally not the best fit as the collection being presented is typically chosen by an information specialist or librarian who manages all elements of content, from selection to licensing.

A web portal is similar to a Wiki, but with an added technical layer. With a Wiki, adding content is relatively easy. Once a user learns a few simple mark-ups, a basic post can be completed in a matter of minutes. With a web portal, the postings are generally made via a web form or are posted directly in an HTML format. With a web portal, it is also necessary to have access to the web server to post content. While the portal can integrate nicely with existing tools and processes, it is not inherently designed to display content, so it relies on the native application of the content (i.e. Word, Excel, PDF) to display it.

Another choice for an eLibrary is to implement a content management system (CMS). This is an application that is used to create, edit, manage, and publish content in a consistently organized fashion. The challenge in using a CMS for an eLibrary type project is that it limits the eLibrary's content to just what the organization has produced. It does not allow for third-party content, which is generally makes up the bulk of materials in a corporate library, to be integrated and indexed.

The final, and most popular option, is a commercial eLibrary application. This is a solution that is designed to integrate multiple types of content under a single interface that provides search functions, results viewing and, in most cases, direct display of the documents on-screen.

Assessing Your Needs

Before you start looking at solutions and technologies, it is a good idea to thoroughly assess your needs. You will want to start by getting a global picture of the landscape for your eLibrary by looking at every angle, from the content you will include, to the resources at your disposal.

A good starting point is to ask questions, starting with six basic ones below:

- 1) Who is your eLibrary for? Which audience you are designing for? What type of users are they?
- 2) What will they use it for? Is the library mainly for primary research? Or is it more for keeping up-to-date on key industry trends, researching clients or customers, or preparing reports?

- 3) Where will they use it from? Will your users access the library from a workstation? Or a laptop? From within the organization? From home? Across a VPN or network?
- 4) Why will they use it? Why will your users turn to the eLibrary? Is it replacing a tool/ process that they've always used? Are users being forced to switch processes? Is it more accessible or more convenient?
- 5) When will they use it? Will it primarily be used during business hours when users can ask for help? Or will it be used during off hours? Will there be peaks of use that must be accounted for?
- 6) How will they use it? How, really applies to two element. First, it applies to how users will find the information they are seeking. Second, it covers how they will interact with the information once they have found it.

By starting with these basic questions, you can sketch out a user profile for your eLibrary (who's using it), as well as a usage profile (how they're using it). These two fundamental components will help you make many decisions as you build your eLibrary plan.

In addition to the basics, it is also important to do a deeper dive into your needs in a few specific areas.

User Needs

The audience for your library determines many of your needs. In order to really determine your user needs, it is important to ask who you are designing this library for, and more precisely, what profiles of users you will be targeting. To build a user profile, you will want to outline the key attributes of your major user groups and explain their primary function in relation to the eLibrary. These user profiles, or "personas", are tangible models which illustrate the different groups and outline their motivations, capabilities, and attitudes.

Once you've determined the user profiles, it's a good idea to find an individual from each key group that you can consult with about eLibrary decisions. This can be done through informal chatting/testing or through a more formal channel like a focus group.

Let's look at an example of how to define user profiles. For this example, we'll pretend that we are building an eLibrary for a manufacturing company that builds and sells machine parts. For this type of application, you may be tempted to combine all employees into one category and create a single persona. But if you think through the use cases of the eLibrary, you will see that there are a number of different sub-groups under the employee category, such as:

- 1) **Production Staff** This group of users likely does not have ready access to a dedicated PC, so their eLibrary needs may be different than other users. They may need to print materials from a central computer to use on the production floor. They may also have a need to access different file types (i.e. Autocad, production plans).
- 2) **Production Managers** This group's needs may be similar to the first group, but they may also have access to more privileged content about production numbers, forecasts, etc. They may also have a need to access and edit content that will be shared with their team.
- 3) Company Executives This group will have full access to all documents and full privileges to save, print and email content to other users.
- 4) Administrative Staff This group is likely to be the one responsible for adding all of the

- content used and shared by the executive team. This audience is quite computer savvy and is accustomed to working online.
- 5) Sales and Marketing Team This group tends to need quick access to information. They may also have a frequent need to share information with external parties.

In this example, each of the different groups will be interacting with the eLibrary in a different way and will have different content and access needs.

For each of the personas, you will want to also look at the following user factors:

- Age Are your users young, old, in between or all of the above? This factor may influence
 elements such as text size, information density on screen and even colors of your interface.
- **Technical competency** How skilled are your users? This may impact your choices of buttons and links, enabling keyboard commands, and more.
- **Familiarity with the subject matter** If users are not familiar with the materials, it may be necessary to add further explanations or provide context on certain terms or materials.
- **Involvement with the organization** Is your audience limited to employees, partners or members? If so they may be more inclined to invest in learning how to use the eLibrary, then users that are not engaged or involved.
- **Special needs** Do you need to support technology such as screen readers or Braille devices?

Content Needs

The next step in assessing your needs involves looking at your content, starting with what you have today. Make a list of the types of resources that you have, including the format that they currently exist in. For example, you may have a combination of physical books and eBooks, subscriptions to various print and eJournals, print magazines and digital magazines, self-produced documents in PDF files, and more. By making this list, you can see how many different formats or file types you may need to support. It is also important to consider non-print resources, such as audio books, eLearning materials, webinar content, and podcasts if these are part of your current collection.

According to the Corporate Library Benchmarks Study, 2007 Edition, for a company with more than \$5 billion in annual sales, online and other electronic information can account for more than 65% of the materials budget, and more than 80% of the Library's content expenditures.¹

If your list contains many resources that are currently in print format, you may need to contact the publisher to see if you can either obtain permission to digitize the assets for inclusion in an eLibrary, or if you need to re-purchase the materials in a digital format. In either case, it is important to ensure that you have the resources and/or the budget to manage the conversion or repurchase of existing print materials.

If your print collection is huge, don't let this conversion put your entire project on-hold. It may be possible to convert your print materials in batches and add them to your eLibrary. In the meantime, a hybrid solution may be available to include abstracts of the print documents in your search results and a reference to their physical locations. Be sure to consult your eLibrary team or vendor to discuss this possibility.

Once you've established the list of content, you will want to look at the way your content is organized and indexed. With many eLibrary technologies, it is possible to index content in a few different ways, including full-text indexing and keyword search, as well as standard or custom categorization. You will want to decide which model works best for your organization, traditional systems or custom categorization. In deciding, you must also consider what indexing data you have access to from the documents. Are the documents already tagged with metadata, or do you need to account for adding in the right information to support your chosen indexing model.

The next step in analyzing your content needs involves looking at your long-term content strategy. If your library is a living collection, it will have new additions on a regular basis. How will you ensure that any new items to your collection are added and indexed within your eLibrary? Who will be responsible for this task? What tools, knowledge and/or technology will he or she require to keep the collection up-to-date?

It is also important at this stage to look at what other sorts of content may be added in the future. If you believe that you may need to add-in multimedia content (audio, video, eLearning, etc...) to your eLibrary in the future, you will want to be sure that this is on your list of future content requirements. This may play into your choice of solution when you start weighing out technology options.

IT Needs

The third element that you will want to assess is your information technology (IT) needs. This refers to the level of support and interaction you will have with your IT team. In some organizations, the IT team is readily available to participate in projects; whereas in others, it is more difficult to secure these resources for a project, either due to other priorities or just the sheer volume of work.

It is important to break out your technology needs in advance to determine how much reliance you will have on your IT team and what decisions you need to take in reference to this. For example, if you are looking to deploy an internal eLibrary that is only available within your organization to users with a valid network login, then even if you work with an external vendor, it will still be necessary to involve your IT team to establish the connection between your network and the eLibrary.

In order to assess your technology needs, it is important to look at a few issues related to access, including:

- Location of access (home, work, or from multiple locations)?
- Type of device used (PC/Mac, laptop, or mobile device)?
- Type of connection (network, Internet, intranet, no connection, DSL, or dial-up)?
- Login criteria, including what credentials the user requires (password, card, or biometrics)?

Depending on the choices you make above, the level of interaction with IT will change.

It is also important to consider the big question of build vs. buy when determining your IT needs. Whether you opt for an eLibrary that is based on open source technology or one that is built and managed in-house, you will need to seriously consider the technology resources you have access to, as these choices may be cheaper to implement, but could take much longer if in-house resources are fully booked.

The decision must look beyond the initial launch and must also consider the time required for ongoing maintenance and updates, as well as troubleshooting whenever an incident is detected.

In some cases, if you determine that access to an in-house technical resource will be a challenge, then choosing a technology partner that offers a hosted platform with an annual service and maintenance package may be the best option for you.

Evaluating Potential Solutions

After you have fully analyzed your user, content and IT needs, it is now time to look at the various potential solutions on the market and further refine your shopping list of must-have features.

In looking at potential solutions, you will want to consider a number of factors, including:

The User Experience

Depending on the type of technology you choose, the user experience for an eLibrary solution will vary greatly. You will want to look for a solution that delivers the best mix of performance and interactivity for your users. Some of the solutions that leverage rich Internet application (RIA) technology may be the best choice as they are quick and responsive and provide richer graphics and guiding tools to help users find information faster. The other common technology used for eLibrary solutions is HTML. This technology can be faster to deploy and cheaper to develop, however, it is also more difficult for users to navigate and use.

For an example of an RIA-base eLibrary application, please visit http://reach.inm.com/eLibrary/.

Fit with Other Technologies

Another factor to consider in evaluating potential solutions is their ability to interact with other technologies you use within your organization. Depending on how it's set-up, an eLibrary may need to accept content that is generated in-house via a content management system (CMS), pull user credentials from a customer relationship management (CRM) solution, or even feed data back to an enterprise resource management (ERP) platform. Look for an eLibrary technology that uses standard protocols to interact with other systems to provide the most flexibility for your workflow in the future.

Price

As with user experience, the price of eLibrary solutions can vary greatly. Solutions range from free to several hundred thousand dollars, depending on the complexity, the features, and the infrastructure needed. The key in evaluating price is to ensure you are comparing apples to apples when you look at the various options. Start with an approximate budget (what you feel the organization can afford or what your ROI calculations show is a sweet spot) and look at solutions in that range to see how they compare.

Maintenance and Support

The level and type of maintenance and support offered with an eLibrary platform will vary greatly. It is important to map this requirement tightly to your needs and resources. Some solutions are completely hands-off, where you will be responsible for managing anything that goes wrong and for

supporting users. Others offer maintenance and support packages that account for system monitoring and updating as well as basic user support. If you are not heavily supported by an IT team, make sure that you choose a technology that offers a full-service type approach.

Metrics and Reporting

A key element in your decision should also depend on the data that the application collects and shares. Years ago, the burden for creating reports and showing the success of an application fell to the IT team. The project manager would provide a list of stats and information that he or she wanted and IT would find a way to extract the data. Today, most credible applications are designed with some form of dashboard or reporting tool that allows the project manager to view key performance indicators and pull statistics about use on-demand. Make sure the technology you are evaluating has strong reporting capabilities as justification of your project and potential expansion will be easier to show if you have ready access to key data.

Choosing Technology

When it comes down to choosing the exact technology, there are several decisions to make. At this point, it is a good idea to involve two other resources within the organization to gather their feedback and comments. Beyond your focus group that we mentioned earlier, you will also want to consult two internal teams at this point, marketing and IT. The marketing team will help you make decisions on how the application looks and the fit of the potential solutions to your organization's brand. This may seem like a trivial element, but it can be a make or break point for your project. By involving marketing now, you can uncover any potential issues about how the platform is customized and what image the solution portrays to the user audience. This is particularly true when the eLibrary extends to an external audience, as it becomes a true vehicle for communication. The marketing team can comment on logo integration, customization of graphics, color palates, and more.

The second audience that must be consulted is IT. Working with IT is critical at this point to ensure that the solutions you are evaluating fit with the philosophy of the organization in terms of adoption. Some organizations have policies internally governing the use of open source software or the adoption of certain technologies. Knowing these in advance can help you make a recommendation that is in line with your organization's beliefs.

The first decision to make is choosing between an open source technology and a proprietary solution. The concept of open source sounds appealing to many organizations as it is often free or very low cost. It also offers endless possibilities for customization. However, it does come with a few caveats. Open source technology requires access to skilled, technical resources and can take a lot of time. Since the documentation and support often comes from the user community, it is easy to run into an issue that can take time to solve.

With proprietary solutions, the challenges are different. With most proprietary solutions, the vendor is the one tasked with making any customizations (or a certified reseller in some cases). This can mean fees for each customization and a reliance on the vendor's calendar and resources for scheduling your project. It may also mean that there is a monthly or yearly fee for maintenance and support. Be sure to do your homework and to ask about all fees and timelines.

For any technology you evaluate, it is best to consider solutions that closely follow industry standards and that rely on loosely coupled components. This ensures that if one element of your workflow changes, that it will be possible to swap out an older component and swap in a new one. It also future-proofs your investment and keeps your workflow under your control.

The other factor that you will want to weigh out is hosting. This may seem like a trivial element, but how and where an application is hosted can be a big decision. With the popularity of software as a service (SaaS) solutions, even amongst enterprises, the concept of leasing an application is more and more accepted. With a SaaS application, everything is provided and hosted by the vendor.

Some organizations still have a corporate culture that favors in-house management of all data and applications. Be sure to talk to your in-house IT team and executives to validate the preferred model. Certain solutions are designed with different packaging and licensing structures to accommodate either model.

The final element you will want to assess in choosing technology is the ability for you to manage the eLibrary once it's launched. Does the application you are considering account for adding and managing content and users? Does it contain powerful administrator tools that allow you to pull reports and actively manage day-to-day operations? If so, this may be a significant differentiator, as it will make your job easier and will make you more autonomous. Ask to see a demo of these tools upfront so you know what they look like and how they work.

Making a Recommendation

Once you've evaluated the different types of technology solutions and have consulted with the appropriate departments, you will want to formally compare the solutions and make a recommendation. For the recommendation, it is wise to prepare a summary of all of the positive attributes for the recommended solution, mapping out how the solution compares to the identified needs established earlier in the process. In this summary, you can compare it to other solutions you've evaluated and can show a summary of the key decision factors that are outlined in the section above.

Building Your Project Budget

The final element in your recommendation is the project budget. This is a document that will cover the projected investment for all elements of the project. Be certain to break out your budget in terms of cost to show:

- Capital expenditures (equipment purchases)
- Software licensing fees
- Customizations
- Maintenance and Support
- Labor (time investment by you and members of your team)

When possible, it is also important to include projected numbers for future phases or years. This will help to show the total cost of the project before it's signed off. There are some great articles and resources on this topic on TechRepublic.com. ²

Building Your Business Case

Once you've looked at the needs, the alternatives and the landscape, it's your turn to work on a business case for your eLibrary project. The role of a business case is to lay out your response to an opportunity and to provide the background and context for your project.

The business case should present the description of the project scope, an overview of the options investigated, a detailed summary of the required investment, an overview of expected results and projected benefits, and a summary of key performance indicators.

The best place to start is with a strong outline of the problem or opportunity your organization is facing. Is demand for information services up? Is your company becoming more global or geographically diverse? Are your resources being limited? Outline why you are looking toward an eLibrary and what issue it will solve or opportunity it will fulfill. Define the opportunity as it relates to your customers and market, to operational efficiencies, to organizational development and learning, and to your employees.³

Then outline the alternative solutions you've looked at and what options you've investigated as part of your research? These can include other technologies as well as alternative ways to address the issue. For example, if you looked into creating a Wiki, and investigated hiring a student, you should cover these options here, along with any competitors to your chosen solution.

Once you've outlined the options, you will want to narrow down the pack and provide a compelling case for your recommended path. Explain why you believe that your recommendation is the best way to address the opportunity and which factors played into your decision. Whenever possible, back up your argument with facts, stats and metrics. Show how a colleague has achieved results, share other success stories, run scenarios and ROI models to show projected figures and outline how you will continue to track and monitor the success of the project when it's deployed.

The next step is to provide a detailed project cost outline. This includes a breakdown of total project costs, from software licensing and customization fees, to allocated time of dedicated resources. The budget should show all capital costs, time investments from internal teams and ongoing fees for maintenance and support. Break out costs into first year expenditures and ongoing fees to show any multi-year commitments, if applicable.

Then, provide a strong overview of the implementation plan, including an overview of the project schedule, and an explanation of key milestones and phases.⁴

Add a strong conclusion and finally ask for approval of your project. Don't forget to break out what you are asking for. You are looking for approval of the budget figure, but you also want the approval to proceed with the project and the assignment of resources and responsibilities. Always offer to present the business case face to face to address any questions that the decision makers may have.

Moving Forward

Once your business plan has been approved and your project has been given the green light, it's time to put your plan into action and move forward with implementation. Gather your team and schedule your project kick-off meeting.

Planning a Successful Deployment

In order to ensure a successful launch of your eLibrary, it's important to plan for:

- **A multi-phase deployment** Don't try to roll out everything at once. Think of your deployment in milestones, and layout a plan for successfully hitting each one.
- **Modifications** Plan to have access to your technical team (either in-house or with your vendor) for a few days or weeks after the initial deployment for any last minute or critical modifications.
- **Deployment** Plan to have additional help to offload some of your regular tasks to for a short-time around deployment. Things like testing, focus groups, providing feedback must be planned for and incorporated into priorities. These take time, so having a back-up resource can help balance things. Look for a student, an intern or perhaps a temp worker to fill in on low-level tasks.
- **Promotion and communication** Keep in mind that simply building a solution does not guarantee success. You should also plan for time to promote your eLibrary. Think of ways to inform potential users about the new resource and involve them in the launch (ask for feedback, offer lunch and learn sessions and get top-down buy-in from your senior team).

About INM

Integration New Media, Inc. (INM) helps companies create rich user experiences in both online and offline environments. With projects ranging from Rich Internet Applications (RIAs) through to interactive sales and marketing tools and searchable libraries, INM has developed solutions for organizations large and small in a variety of different industries. A well-known player in the industry for over 15 years, the company offers top-level interactive project consulting and development services as well as a successful line of products that includes some of the best-known add-on technologies for Adobe (formerly Macromedia) Director, Flash and Authorware.

INM has helped a number of different organizations successfully rollout eLibrary projects. With clients ranging from consultants, through to public and corporate librarians, INM is the perfect partner to help you successfully plan, deploy and manage your eLibrary.

For more information about our eLibrary offerings, please visit http://www.INM.com/eLibrary/ or call +1 514 871 1333, Option 4.

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