Web CMS ABC's

A Beginner's Guide to Content Management

INGENIUX

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Web content management (WCM) is the process of creating, managing and publishing content to your website and other digital properties.

If you are relatively new to the game, you might be doing this manually. Or you might have a very old web content management system that does some of what you need, but in a very cumbersome, time-consuming way.

Today websites are often complex and require features beyond what you get out of a basic blogging system or HTML. For many organizations, the challenge of managing content is beyond publishing; the organization also needs to support collaboration, meeting key standards and compliance regulations, and most importantly delivering a dynamic user experience that engages your customers and helps achieve your goals.

We created this ABC's guide to instill you with the foundations of proper web content management so that you can advance your web program and gain the insight you need to reach your goals.

Let's get started.

Understand WCM Core Concepts

What are the core elements of a WCM that everyone needs to understand for a successful deployment and ongoing management?

Authoring

Authoring is the process of creating, editing and managing content over its lifetime. This isn't just text-based content, but all rich media such as images, videos, and other digital assets.

There are different ways to create and edit content, and most WCM platforms provide two primary approaches: forms-based editing and in-context editing (ICE).

Forms-based Editing

The WCM Administrator/Editor creates a form with different fields for each element or piece of content such as title, teaser, author, metadata, image, main body and so on. Forms are typically based on content types. The content author simply completes the form and submits the content item.

In-Context Editing

Web pages or content types are broken down into a series of sections, or widgets, some of which are editable. The author clicks an editable section of a web page and edits the content. For some sections, a WYSIWYG editor is available for formatting, in others, you can only change the text.

Authoring

SEO is another important element of authoring. When you create a piece of content, you need to apply the proper information and formatting to ensure it is search engine friendly. A Web CMS should help you optimize your pages by applying templates that support good content formatting (H1 Tags, Alt-Image Tags, etc.); applying good titles and descriptions for the page (also called Meta Data), and helping the content get indexed by a search engine.

Depending on your requirements, you may create multilingual content, and it likely needs to be accessible (Section 508a and/or WAI compliant). Before you start authoring content, define your requirements and make sure your CMS can help support them.

In-context editing (ICE)

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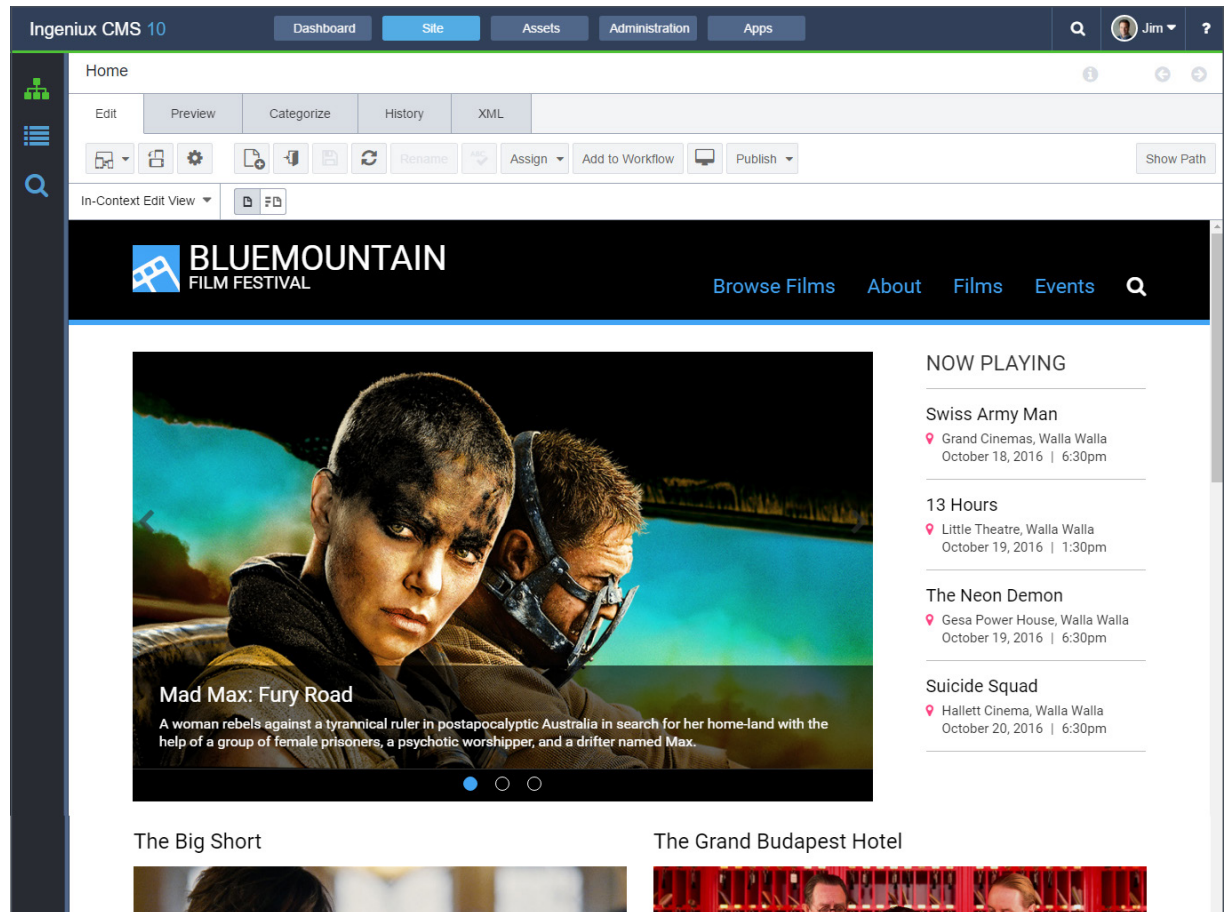
Permissions/Security

Not everyone can manage all the content available on your website. You will likely have multiple authors, reviews, and editors, each with different responsibilities. Security is a key aspect of web content management because it ensures that only the people with the rights to manage content can do so.

In most cases, you will want to integrate your WCM security with your company's internal Active Directory or LDAP system. This allows you to provide the WCM security a list of people in the organization that they can authenticate against to use the WCM. Authentication is the process of determining who can log into the WCM solution. Permissions are then applied to determine what an authenticated user can do.

Permissions are typically role-based and not individual user-based because it's much easier to manage. Groups or Roles are created in the WCM and permissions assigned to the Roles. Users are then added to the Roles. You can apply permissions to web pages, content types, and even elements of a content type. You can also apply permissions based on what the user can do to content, like create, edit, review, and delete.

Security and permissions are critical to a successful and secure web content management system, which makes it one of the first things you should think about when designing your content management strategy.

Templates or Page Types

Templates define the look and feel of a web page and the content that can go on the page. People often use the term template to talk about a very general layout.

The term Page Type is used to talk about a template with a specific use, like a home or cover page, a section front, news page, or general detail page. Page Types consist of two items, the style sheet or view that applies the HTML to render the page (what it looks like), and the schema or form, which defines the content that goes on a page.

If you think about creating a news article, it may contain a title, teaser or short description, copy with the main contents of the article, an image, and perhaps an author bio. A News Page Type will have a schema or form with fields for each of the content elements. Once the Page Type is defined a writer can easily create and publish a news article just by filling out the form. The style sheet will apply the formatting, so all of the pages look professional and consistent, and also the author does not need to worry about using HTML or other mark-up languages. From one Page Type, you can create hundreds of pages.

One of the key principals in understanding templates is the separation between content and presentation. You want to keep your content largely unformatted and apply the formatting using a Style Sheet or template. There are many benefits to separating content from presentation, including:

- The ability to easily update your web design.
- To format or "adapt" your content for different devices or channels (such as a phone or screen reader for accessibility).
- To reuse or share content between sections of your website, or other websites that may have different branding and layout.
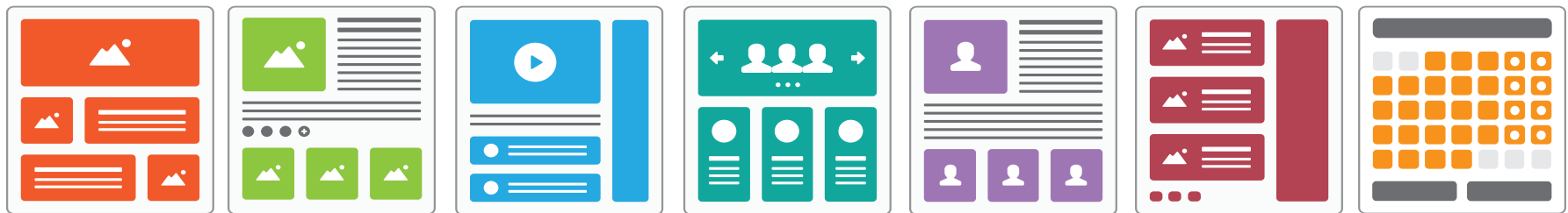
Components or Widgets

Sometimes you may want to group a set of content or apply some advanced functionality, like a Web Form or Image Gallery, to a page. Most Web CMS' use components or widgets to provide a library of items that can be easily added to a web page.

One of the benefits of a component is that it's only managed and updated in one place. This is called content reuse. It makes it easy to make changes and apply those changes to many web pages all at once. Imagine you are creating one of the news articles discussed in our Templates section. On the news article, you have an Author Bio. If you made the Bio a component, you could change the Bio, and all of the news stories with that Bio would be automatically updated with the new information.
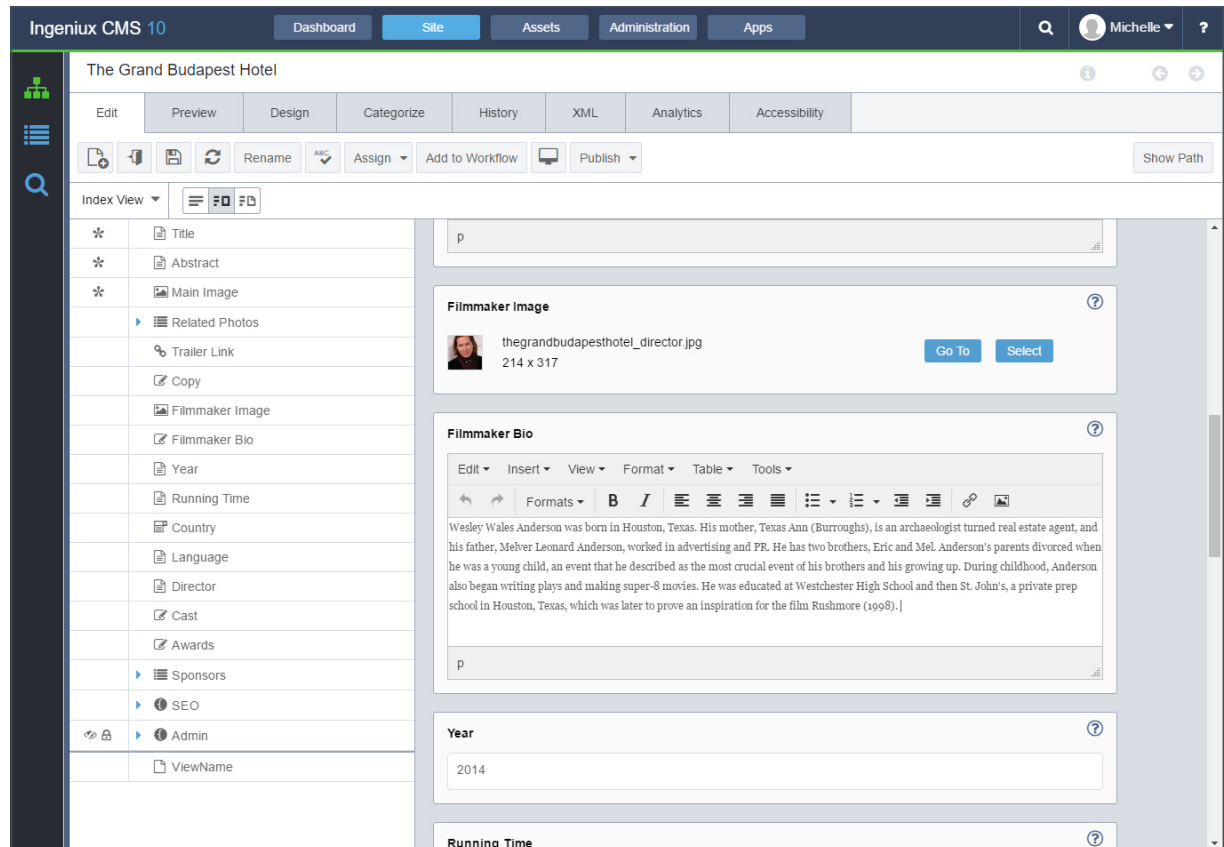
Visual Page Building

Websites regularly undergo changes. Testing and optimization, changes with products and services, changes in the market are all reasons you will consider making changes to your website. Most marketers do not want to wait forever for IT resources to be available to make changes to templates and code. They need to act quickly and want the ability to make changes on their own.

A visual page builder is critical for a successful web content management system. It enables non-technical users to make changes without the assistance of a developer. You want

a visual page builder that allows you to create new templates and web pages, or modify the layout of existing pages, including adding new content types to pages such as video or a form. It`s also critical that this page builder support responsive design so you know whatever you design will work for any device.
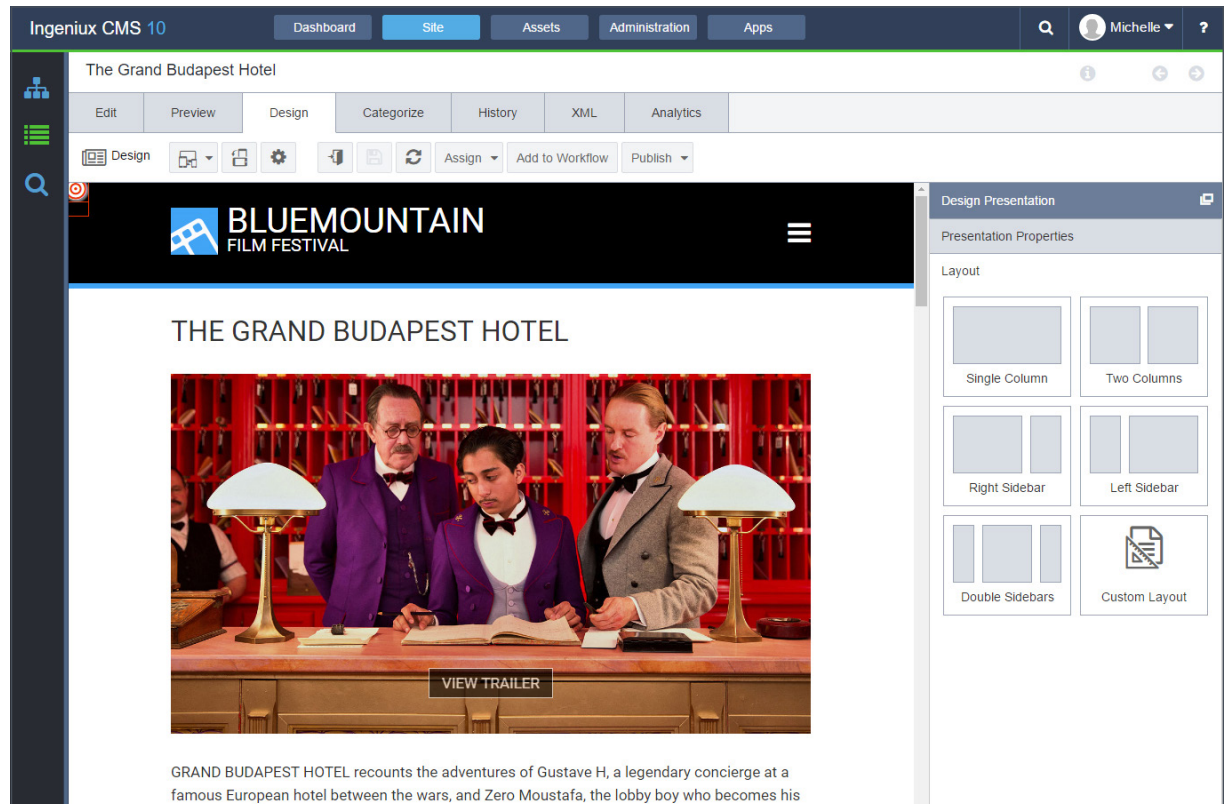
The benefits of a visual page builder are obvious. Non-technical users can make changes quickly and easily, enabling you to evolve your website as requirements change. It also lowers the total cost of ownership for your website because you don`t need to source IT resources for every little change you need to make.

Content Migration

Whether you are setting up a brand new website or migrating to a new Web Content Management system, you likely have a lot of content already created. To get this content into your new WCM you could pay people to manually cut and paste the content from its current location, but it will take time and potentially cost a lot of money.

Your WCM should offer the ability to import content from another location and place it in the new WCM following taxonomy and content rules. It`s possible you can import the content and then put a workflow in place to adjust the content once it`s imported, adding metadata and other information and then publish the content.

Workflow

It's rare that an author can create or edit a piece of content and have it publish live immediately. Most content goes through some kind of review and approval process. This is called workflow. Workflow is a series of steps or stages that content needs to move through before it can be published (or unpublished).

A typical basic workflow is Create, Review, Approval or Deny, Publish. Your situation may be this simple, or it could be more complicated, such as having multiple review stages. Additional workflow could be included for translating content into different languages or publishing content to multiple locations.

Your WCM should provide a tool that enables you to define different workflow processes and apply them to different content types.
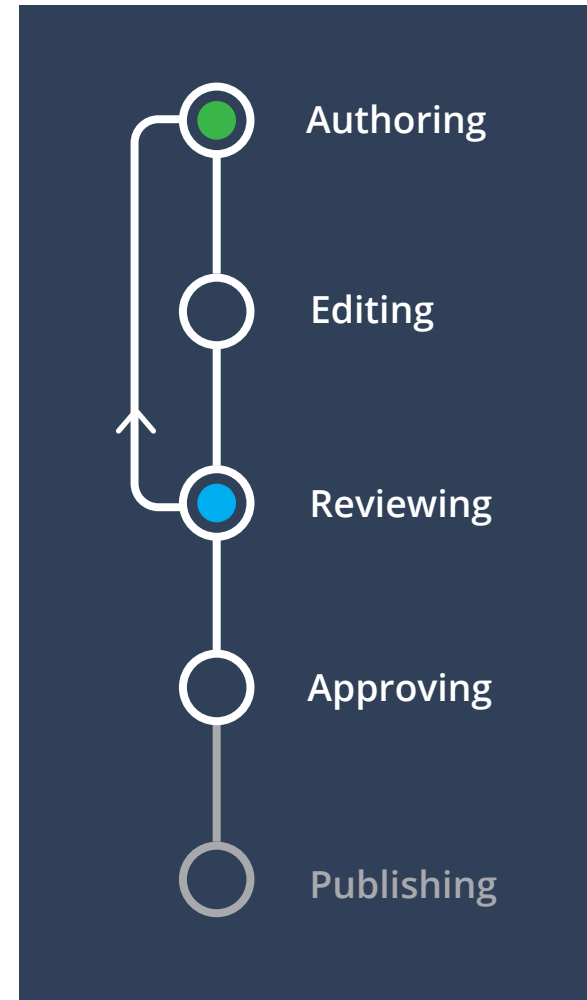
Digital Asset Management

While there was a time when text-based content drove most of the content on the Web, things have changed, and rich media is taking on a larger, more important role. The problem is most WCM solutions treat digital assets differently than they do text and that can cause issues.

Digital assets require the same management and support as text-based content. They require taxonomy and metadata, in some cases translations, and in search they need to be surfaced equally alongside all other content. A WCM solution that enables the management of digital assets alongside text ensures that all the right content is surfaced to the right audience and that you only need to manage one version of the assets to use across multiple channels.
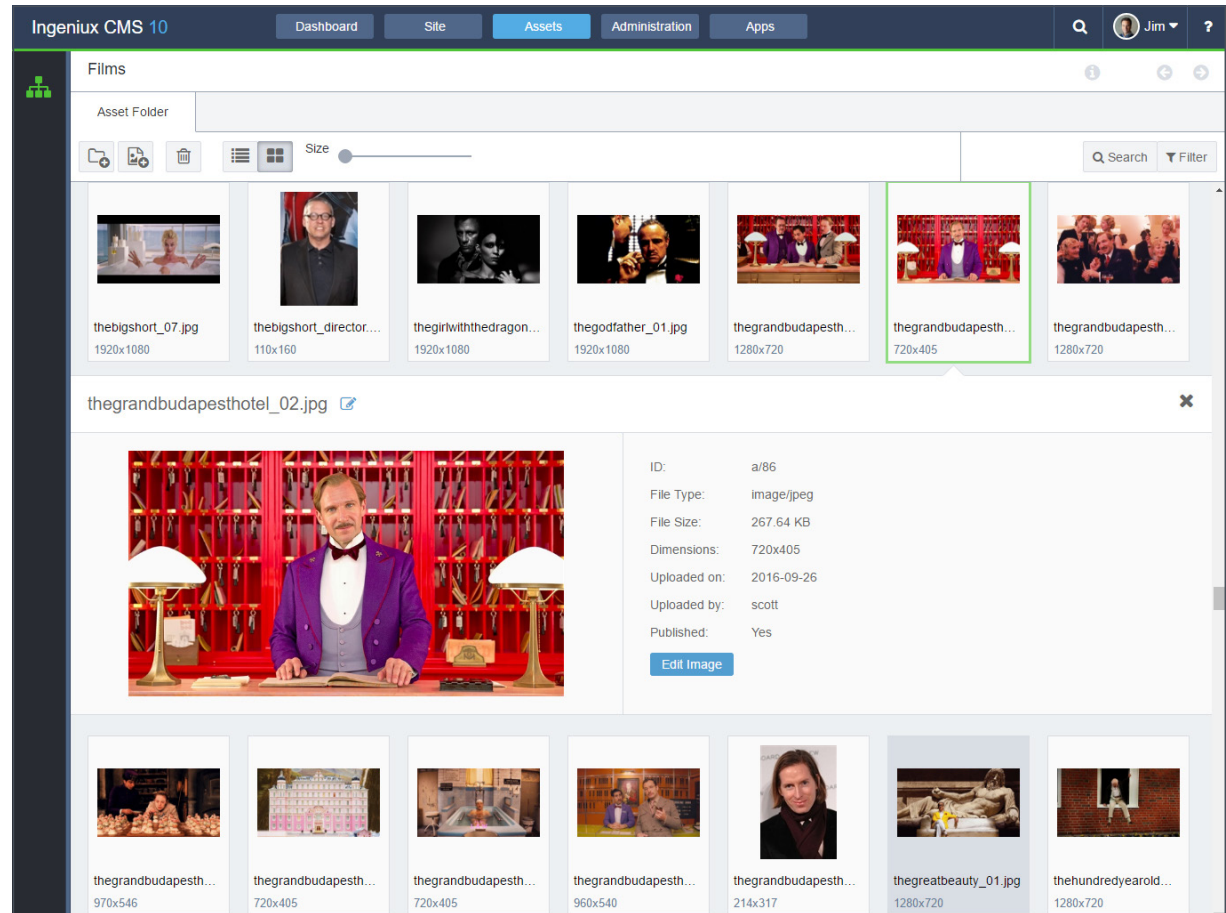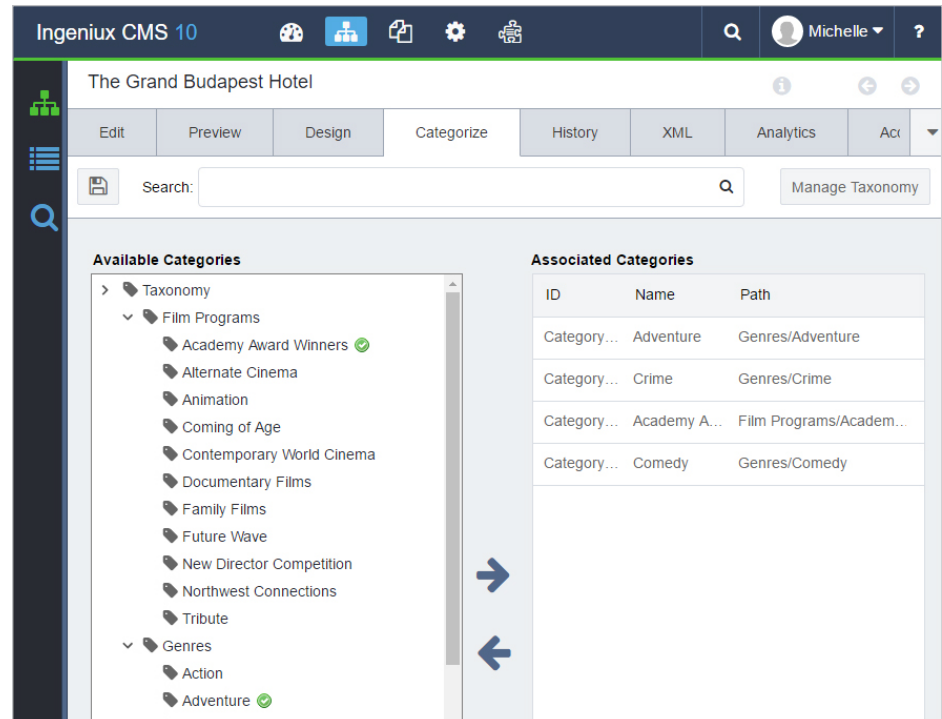
Taxonomy

Taxonomy is a fancy word for categories or tags. What makes taxonomy special is the tags are hierarchical, meaning that secondary tags are nested beneath primary tags.

People often use the family metaphor when talking about taxonomy, as well as general Information Architecture (see page 16), or how you organize your content. Parent tags are your primary tags, children are secondary tags, siblings are on the same level, and ancestors come before (like a breadcrumb). A good taxonomy should help the organization of your content and deliver it based on its topic and relationships.

Taxonomy is leveraged across your WCM to organize your web content, including navigation, improve search, provide related content and even segment/personalize the audience experience.

If you already have a taxonomy developed outside your WCM and you want to use it, your WCM solution should provide the option to import or sync the taxonomy instead


of forcing you to rebuild it. The WCM should also provide a visual tool for managing your taxonomy and enable you to apply the taxonomy to multiple content items at once.

Taxonomy is also critical for content re-use. It allows you to easily find the content you need and use it across different channels.

Content Lifecycle

Content doesn't live on your website forever. Most content has a start date and an end date when it's no longer relevant. When you create content, you identify its lifecycle so that the WCM can automatically manage the content for you.

Publish date, review date, unpublish date are all important dates for your content. Publish date allows you to create content ahead of time and schedule it for publishing at a later date by the WCM system. Review data can be leveraged in a workflow process to examine and surface content that needs refreshing. Unpublish data is used to identify when the content is no longer available on the website. A workflow can be set up to dispose of the content – archive, delete, etc.

Archive

Author

Perish

CONTENT LIFECYCLE

Review

Publish
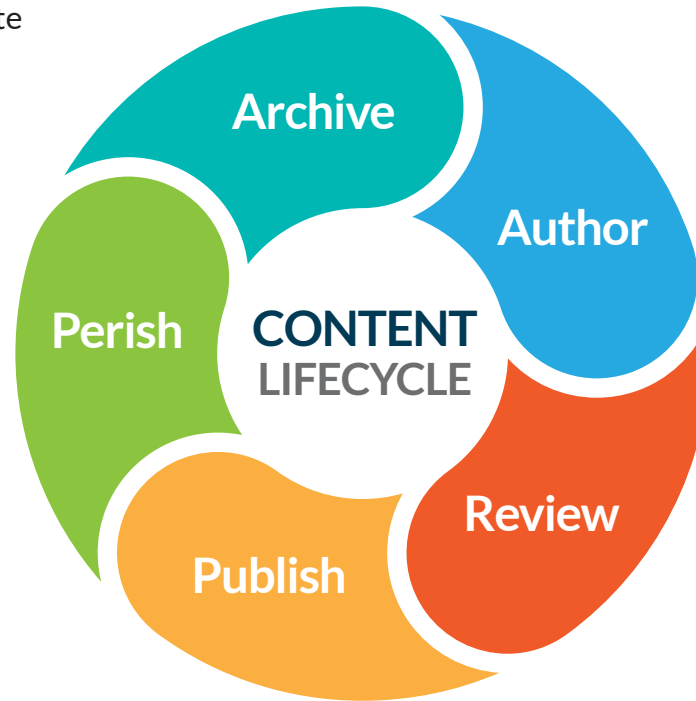
Information Architecture

Information architecture is the review and documenting of content and functionality that will be on your website. The IA describes how the content is organized (taxonomy, metadata), the labeling (nomenclature) to use, how the functionality uses the content or how the content is related to the functionality.

You need to have a solid understanding of what content and capabilities visitors are looking for and how each piece of content relates to another before you can start mapping the user interface (design). There are many ways to map out your IA. Content audits include a list of content you do have and how useful it is, as well as a list of what you need, but don't currently have, what needs to be updated, and so on. Taxonomies define the content you provide, how it's organized by topic, what metadata is needed, how it's used for both navigation and search. How the navigation is organized in terms of placement and priority.
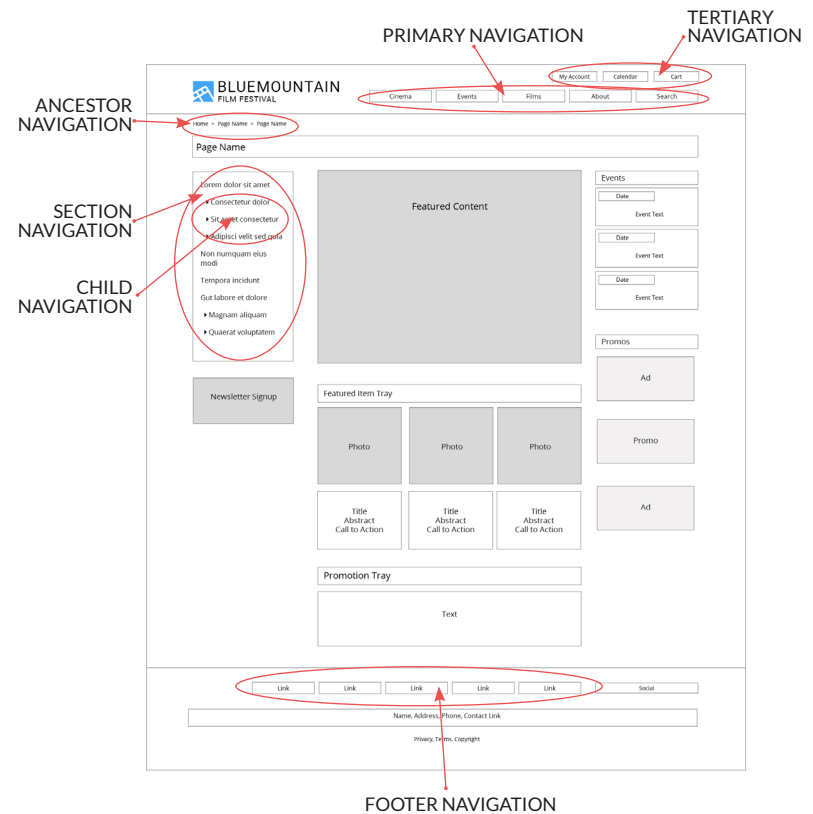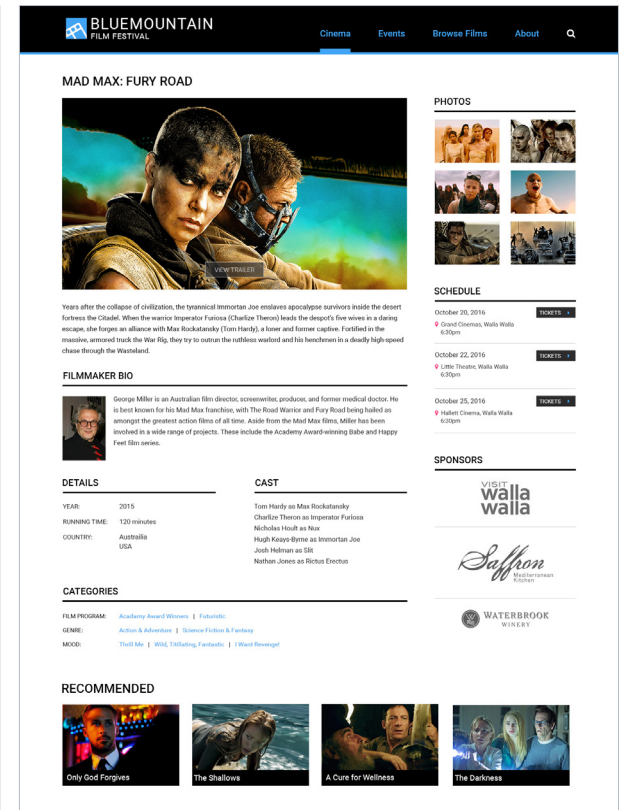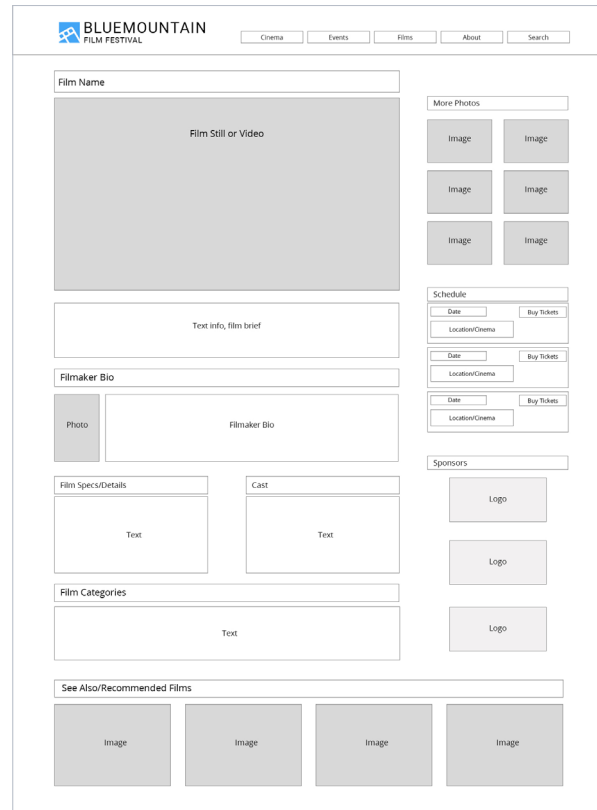
Design

Design is the overall look and feel and layout of your website. How is the brand portrayed in terms of colors, fonts, imagery and other assets? How is the navigation set up? What's on each navigation bar (if you have more than one), what does the navigation item link to, how does your search option work (you do have a search option right?), and so on.

Your design is influenced by the brand and the information architecture. Ultimately, it is all about usability and findability and also visual appearance. If your visitors can't easily figure out how to move through your website to find the information they need, they won't stick around long.

Before you can begin to create the actual website design, you need to conduct a branding exercise and complete the information architecture. Wireframing is the key to creating a great design. Wireframes visually document how each of the main pages looks and what content is found on them. It describes templates to create for reuse, including navigation and indicates dynamic sections of web pages and how they change.

Advanced WCM Concepts

With the foundational web content management concepts identified, let's go a bit deeper and examine a few advanced WCM concepts that are key to great web experiences.

Responsive vs. Adaptive Design for Mobile & Tablets

Your website is viewed on multiple devices, including desktops, smart phones, and tablets. Creating a design that works for all three devices (and others) is challenging but possible. There are two primary ways to ensure visitors can view your website on any device:

- **Responsive Design:** Responsive design is the most popular approach to ensuring websites are easily viewed on smartphones and tablets. It is the process of designing your web pages to automatically resize based on the width of the browser.
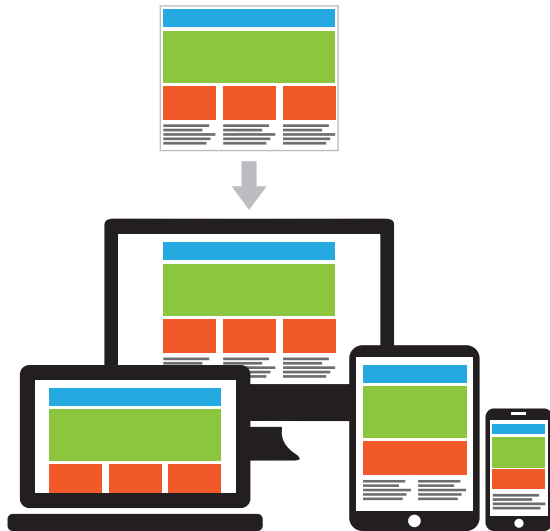
- **Adaptive Design:** Where responsive design works with the browser size, adaptive design focuses on the actual device used, creating the web page according to layout instructions for that particular device. In this case, the WCM maintains a database of potential devices. When a visitor comes to the website, their device is detected and matched in the database. The presentation is then created according to rules for their particular device. Rules are often applied to a range of device types and not for every single device type. What adaptive allows you to do is create a custom view for specific devices, including what content is shown and how or where it's displayed.
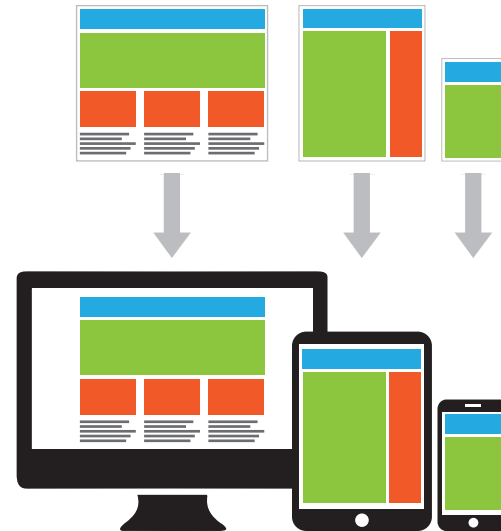
Search-based Architecture

Most websites have navigation and architecture that is defined when the website is created. Search-based architecture is a new approach that leverages built-in search capabilities to drive much of the structure and content of your website.

With a search-based architecture, the search engine and the search index are built into your web content management (WCM) platform, making it a tightly integrated component of your WCM architecture. You can use the search engine to drive navigation, recommend content, and provide related content or personalized offers.
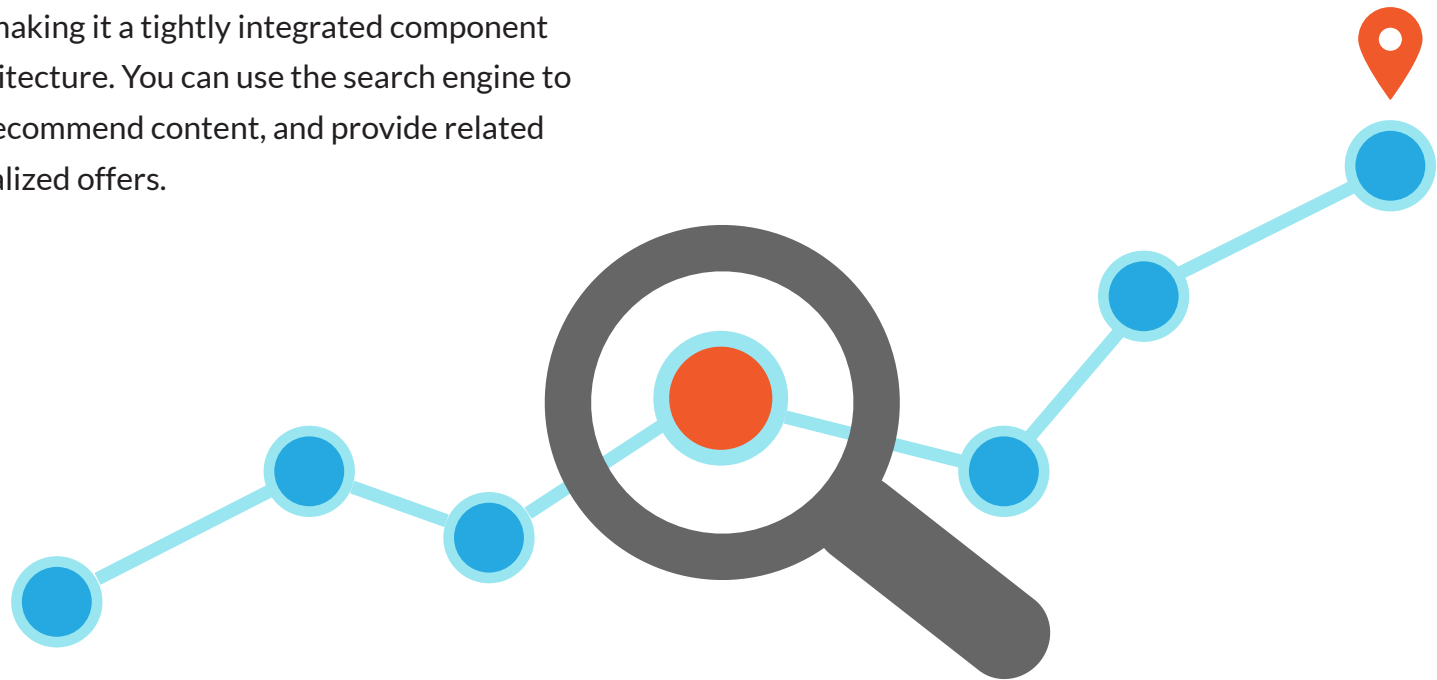
Supporting Multiple Languages

A website that supports multiple languages brings a number of challenges to a Web content management implementation. First, you need to know what languages you want to support and if your WCM solution supports all of them. Then you need to understand how multiple languages are implemented in the WCM.

One approach is the master-clone method. You define your master website first – the primary language of your website. Then for every master web page, you create one or more clones for each additional language. When content is updated on the master, a notification is sent to each of the owners of the cloned pages to update the content

accordingly unless they don't want to translate the content. This approach enables you to create localized versions of your website. There are other approaches, including using versions. You can learn more about the different approaches to multilingual in this blog post: [Managing Multilingual Content: Versions v. Clones & Translation](#).

Other considerations for multilingual websites include the ability to create a multilingual taxonomy, localization reporting, translations workflow, translations dashboard for managing translations using a third-party provider or an internal translations team and side-by-side translation.

WCM for Websites vs. Intranets

So far we've talked about WCM capabilities in the context of a public facing website, but you also use all of these with an internal website – an Intranet. However, there are a few additional things you should understand if you are thinking about WCM for an Intranet.

Supporting Both a Public Website and an Intranet on single WCM solution

Web content management solutions can support a range a use cases including public facing websites, communities, and Intranets. You could have a different WCM for each type of web experience, but it makes more sense to provide a single architecture to support your Intranet and public-facing website, and we aren't just talking financially.

Content Sharing

First, a single WCM solution allows you to create content once and publish it anywhere – your public website or your Intranet. If your WCM leverages taxonomy and structured content, you can also present the content in different ways. The create once, publish anywhere mantra is often used for publishing content across multiple customer-focused digital properties, but it also works equally well for publishing content to internal audiences.

One Tool to Learn

Your employees already have enough applications and business systems to do their jobs. By providing a single WCM for public and Intranet content management, they have one less tool to learn to use, and one less password to manage.

One Tool to Support

The same goes for IT. If your WCM is hosted internally, it's easier for IT to manage one WCM solution for multiple purposes than train IT staff to support multiple WCM solutions. If your WCM is in a managed environment, then you are saving costs related to hosting on multiple platforms and having multiple support contracts by using a single managed solution.

Additional Intranet Features

Intranets also provide additional capabilities not used on public websites:

a. **Social Networking:** Enabling teams and employees to share content and ideas across the company is a great way to enable communication. Activity streams and blogs are great examples.

b. **Communities:** Intranets can offer communities of interest to bring together like-minded employees to share ideas, training, and content on a particular topic.

c. **Collaboration:** Most work is done within teams who need to share content and communicate regularly. Intranets can provide this collaboration through working groups that include activity streams, blogs, folders, and specific security and permissions.
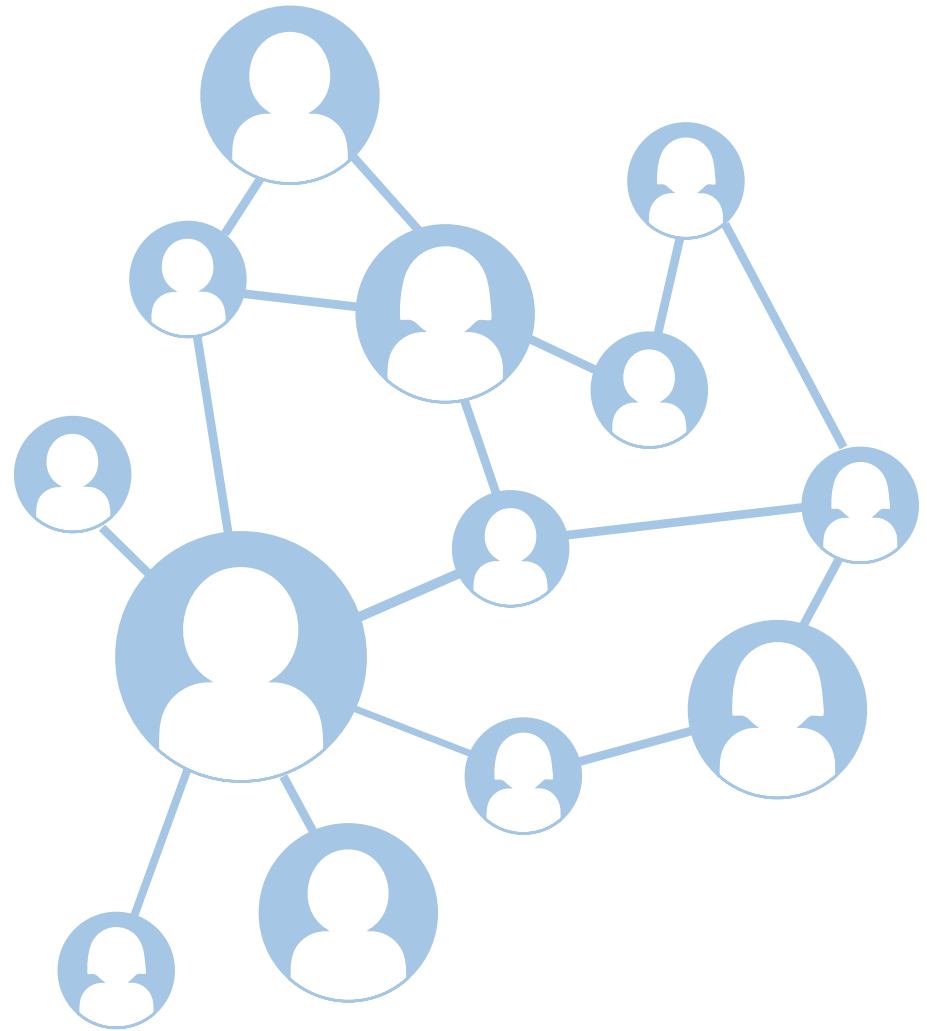
Next Steps

We've walked through the basics of web content management and covered some important advanced concepts. We've even identified some additional capabilities your Intranet needs. So what's next? If you are just getting started here's a list of things you need to do. If you are looking to revamp your current website (or Intranet) and implement a new WCM, these steps are equally critical.

1 Content Audit

To know what content and rich media you want you first need to know what you have. A content audit will review existing website content, plus additional content across the organization that you might want to put on your website. The audit tells you what the content is, where it's located, who owns it, who can create and edit it, when it was last updated, other important information and if the content is good as is, or if it needed to be updated or archived.

2 Requirements

Break requirements into business requirements and functional requirements.

- **Business Requirements:** What is the purpose of your website, who is your audience (s), what business goals will it help achieve?

- **Functional Requirements:** What content is needed? What functionality is required: authoring, workflow, translations, content lifecycle? What interactive content do you want to provide? Calculators? Questionnaires? Forms?

Your business and functional requirements will drive the IA and design your website.

3 WCM Selection

Whether you are starting from no WCM or replacing a legacy WCM, the WCM selection phase works much the same way. You'll need to conduct a review of potential solutions that match your needs. You can issue an RFP ([here's a great guide to use](#)), and get WCM vendors to demonstrate their capabilities in a customized demo you define.

4 Information Architecture

We discussed Information Architecture above. This is an important step in defining your website and how it will support your business and functional requirements.

5 Design Phase

The Design Phase was also discussed above. It is a mixture of your brand, message, and voice with your IA to define how the website will work and look. This phase includes the mockups of key web pages to show structure, layout, and visual design.

From There

You are ready to start the development phase of your project. Be sure to map out a clear project schedule with regular check-ins and milestones. Functional testing, user acceptance testing, training and content migration should all be covered in your plan.

If you already have a website and just want a guide to bring on new authors, editors and/or developers:

- Use this guide as an outline of things they should know

- Develop a user guide for authors, editors and WCM administrators

- Create a Developers Guide which includes templates, mockups, requirements and everything they need to work on and extend your website.

Final Thoughts

Web Content management has come a long way from the static HTML solutions we used years ago. But as far as we have come, the basics of the web content management are still the same. You need to this foundation before you can move forward and think about creating highly personalized dynamic experiences.

About Ingeniux

Ingeniux is the leading provider of web content management and digital experience software. We enable organizations to orchestrate the entire customer experience from acquisition through to sales to support and service, across any device, application, or website.

We build content management software with an unparalleled focus on the content itself. The Ingeniux CMS is designed to manage and deliver modern websites, customer support portals, online communities, and other customer touchpoints.

We believe in intelligent "structured" content. We design our software to enable content reuse, enable true mobile and multi-channel content delivery, and insightful content discovery. Our unique content-as-a-service capabilities deliver content into web and mobile applications, and other key channels.

Ingeniux software is available as a fully managed software service or an on premise application. Ingeniux delivers unparalleled service and support to customers worldwide.

To learn more, visit us at **http://www.ingeniux.com**.