Web CMS – An Evaluation Guide
Introduction

Choosing a content management system (CMS) for your organization is a big decision because of the potential effects on time, money, and improvements to essential business processes. So it’s critical to look for and understand the essential features that will address business needs now—and grow with the organization in the future.

This overview provides you with an understanding of the features you should expect from content management software, beginning with the essentials that should be in any CMS and then moving to more advanced features that are often overlooked or misunderstood during first-time evaluations. This information can help you make a better-informed decision about selecting and implementing an effective content management system that will serve the organization for the long term.

Essentials to Meet Today’s Needs

Whether you are looking to install a new content management system, upgrade to a more scalable system that can grow with the business, or are replacing a solution that doesn’t fit your business model and needs, there are some features that are essential to meet immediate needs and provide for future growth.

There are six characteristics of any reputable CMS should provide. These include:

- **Ease of use.** Your CMS should not require specialized programming or design expertise in order to fit into the organization, it should offer design flexibility, and provide tools and features like solid support for search engine optimization.

- **Content flexibility.** Creating, managing, editing, and auditing content will be common if not daily activities, so there should be an abundance of features that provide many different and easy-to-use content management capabilities.

- **Easy-to-use templates.** A CMS should offer “templating” capabilities that you to create and then easily duplicate content as well as structural details such as page layouts.

- **Content security.** Having controls over who can add, modify, or the content on site— from small paragraphs to the entire site—is critical for quality control and to protect the site from abuse or malicious acts.

- **Scalability and business-friendly licensing.** A good CMS should be able to grow with your organization and offer licensing models that fit your business needs.

Let’s take a closer look at each.
Ease of Use

Web content management systems have been available for years. However, any of them offering more than the most basic capabilities were usually expensive and difficult to use—often to the point of requiring either trained in-house expertise or third-party consultants.

In today’s business environment, most organizations are forced to do more with less. Personnel and budget resources are usually stretched thin, so devoting extra resources to installing and managing a CMS falls way down the priority list. It’s important, therefore, to choose a CMS that provides ease of use on many different levels.

For example, a CMS should provide an intuitive, easily understood interface that lets non-technical users perform basic tasks, such as uploading new content or rearranging the structure of a web page, without needing to call the IT department. A CMS should be compatible with all of the most popular web browsers, including Internet Explorer, Safari, Firefox, and Chrome. It should work regardless of the computer operating system that your editors and site visitors use. And it should be easy to upgrade yet offer backwards compatibility. This ensures that you can add new and great features when they arrive, while still leveraging existing extensions.

Ease of use should extend to the smaller details of running your site. Organizing and managing the hierarchy of content on a site should be straightforward. A website’s navigational structure should be easy to build and rearrange with minimal technical knowledge required.

Easily implemented yet strong design elements are important for your site. A good CMS should provide different “skins”—sometimes known as “themes”—that can get you up and running quickly. Or, you should be able to easily customize a site’s look—either internally or with the help of an outside designer—by altering colors, fonts, and other visual elements of a site. Once design and layout changes are in place, the CMS should allow you to distribute those changes across the entire site without having to reengineer and dig into code. A good CMS should also let you easily reuse content for all the different devices that now access the web, from laptops and desktop PCs to smartphones and tablets.

**CMS CHECKLIST:**

- Intuitive for non-technical users
- Compatible with major web browsers
- Works with multiple operating systems
- Managing content hierarchy is straightforward
- Easy to make design changes across website
- Supports many types of device
- Strong SEO support
Look for strong support for search engine optimization, or SEO. Strong SEO functionality should help you quickly define characteristics such as page titles, descriptions, keywords, and URLs. It should have built-in tools like Google Analytics to help you view metrics and other information that will help refine your SEO efforts. And it should help you conform to the World Wide Web Consortium (W3C) standards, which will help improve search engine results and drive more visitors to your site.

In most organizations, individual departments and employees are responsible for creating their own content—but IT departments and administrators are often saddled with the responsibility for getting the content published on the organization’s website. A CMS should offer the ability to give specific individuals, departments, or job roles permission to publish, edit, and delete content. This “granular permissions” capability empowers employees with more responsibility while reducing the workload on IT staff.

Features that enable workflows—the steps involved in getting content from creator to website—are also valuable. Workflows that can be defined based on established policies and standards can help ensure that all content is properly vetted and achieves a satisfactory level of quality and accuracy before it goes public. Workflow features should be complemented by easily conducted content audits, versioning that keeps older versions of documents on file after they are updated, and version-compare capabilities that let editors and authors see what has changed between different versions of a document.

Content flexibility is also important if you have, or are planning, multiple websites. A CMS that allows you to host multiple sites while easily sharing similar or identical content across those sites can be an important benefit for saving time and money. A CMS should also make it easy to create and distribute content through RSS and XML feeds for audiences that prefer to get their information in these abbreviated formats.

**CMS CHECKLIST:**

- Granular permissions for individuals, departments, and job roles
- Customizable workflows to ensure proper vetting of content
- Easy distribution of content across multiple websites
- Support for version compare, versioning, and audits
- Content can be distributed through RSS and XML feeds

**Content Flexibility**

Your website is all about the quality of the content. That quality depends on any number of variables, such as who can create content, review it, post it, edit it, and delete it. A CMS should provide clear, easy-to-use features that provide tight controls over all of these activities.
Easy-to-Use Templates

If your website is growing rapidly, if you are planning multiple websites, or if you need to replicate content over and over again, you should look for a CMS that has easy-to-use templates. Templates can perform two vital, time-saving functions.

First, you can use templates to duplicate the layout of a page—or even an entire site—in order to create another page or site. The benefits are obvious: If you are planning a section of a website that will have, for example, 20 or 30 different pages covering different products, you can use a template to create a “master” page that is easily repeated across the site as needed. Or perhaps you have a company with more than one branch, and each branch needs its own site; a template can be used to create and reuse a website structure for multiple sites.

Content Security

The potential damage that can be done to an organization’s website—and its reputation—due to lax security can be immense, ranging from simple but embarrassing mistakes or a vandalized site to angry customers and possible lawsuits. It’s important to keep the security of your website content in mind as you review your CMS options.

An important feature to look for in a CMS is the ability to select individuals and groups of users and give them rights to access content to perform specific tasks on specific portions of a site. These “access control lists” should provide precise, granular controls that will determine which individuals and departments can add, modify, and delete content as well as make changes to the design of a site.

For example, you could use an access control list to allow the vice president of sales to not only add and edit product descriptions and other sales-
related content, but also to rearrange or delete web pages based on business needs. At the same time, a sales department intern might be restricted to editing descriptions or adding pictures to a product catalog.

Access control lists should work well with the previously mentioned content workflows to ensure that only the properly authorized employees are involved in a review-and-approval process. And to simplify management of security, it’s helpful if a CMS integrates with commonly used employee identity systems, such as Microsoft’s Active Directory.

**Scalability**

A common drawback of low-end content management systems and web design software is that they often fail to keep pace with an organization’s growth. As your organization grows, the demands on the website are going to increase.

A good CMS should work seamlessly with existing enterprise systems. This includes bi-directional Microsoft SharePoint integration and support for SharePoint lists, as well as Active Directory authentication.

A CMS also should easily handle growing demands for large volumes of pages, many different subsites, multiple URLs, and even different domains. It should also easily accommodate more users without raising concerns over license fees.

If your business and website is growing quickly, your CMS should support expansion of your coverage with a web farm. This will allow you to easily increase the number of servers through quick acquisition of licenses.

**CMS CHECKLIST:**

- Access control lists for granular permissions to add, modify, or delete content and website components
- Integration with system-wide employee directories such as Active Directory
- Seamlessly integrates with workflow processes so only authorized employees can "touch" content

Access control lists should work well with the previously mentioned content workflows to ensure that only the properly authorized employees are involved in a review-and-approval process. And to simplify management of security, it’s helpful if a CMS integrates with commonly used employee identity systems, such as Microsoft’s Active Directory.

**CMS CHECKLIST:**

- CMS should be easily scaled to handle additional pages, URLs, domains, subsites
- Easily obtained licenses to add servers for large-scale growth
- Use of “BSD” licensing model so custom modifications can be kept confidential
Business-Friendly Licensing

When it comes to licensing, carefully evaluate the licensing model used for a content management system.

CMS solutions that are based on the “GPL” (GNU General Public License) model generally require organizations to make available the substantive changes that they make to their content management system. In other words, custom work that they do, including changes that may provide a competitive advantage, can wind up in the public sphere.

Instead, look for a solution that uses BSD (Berkeley Software Distribution) licensing, an open-source model that permits the modification and distribution of CMS software without requiring any return obligation. This kind of licensing provides greater protection of your intellectual property. Moreover, it is typically associated with software products that are a better deal for your business. Open-source CMS products are usually more affordable, they frequently come with pre-built components, they do not lock you into single vendor for making updates, and they often provide an extensive ecosystem of service providers to enhance your CMS implementation.

Advanced Features for Growth

So far we’ve covered some the basics. But if you are doing any kind of complex or high volume activities with your website—now or possibly in the future—it’s a good idea to consider advanced CMS features. More sophisticated functions can help you build a web presence that adapts to evolving business demands and emerging market trends, turning your website into a competitive differentiator.

Advanced CMS features should help you address three broad categories:

- Building a richer web presence with tools that help you extend your website while making it easy for visitors to find information
- Capitalizing on emerging trends such as social media and mobile web access
- Getting support for technical issues and to create custom features and capabilities

Let’s see what these entail.

Building a Richer Web Presence

With the essentials in their toolkit, organizations will want to look for additional features that can take their web presence to the next level.

One option is support for multiple websites. The ability to have multiple, stand-alone websites, or sites that share both users and content, is an extremely valuable because of the flexibility it provides for organizations that have, for example, multiple lines of business, different branches, or ecommerce-enabled catalogs that are separate from the main website.
Another useful feature is the ability to easily add extensions using native CMS tools. This helps developers avoid having to learn another language or go outside of the system to obtain third-party extensions. Creating extensions within the CMS eliminates the need to modify core code or go through potentially expensive or time-consuming fixes when the CMS is upgraded to the next version.

Social media has become an essential path for information and communication for many web-savvy users, particularly in the “digital generation” demographic that has grown up with social media outlets like Facebook and Twitter.

To attract these kinds of users, look for CMS tools that make it easy to link to third-party services for authentication so people can use the logins they’ve already created. Also look for tools that will support the easy creation and management of internal and external social networks that can improve collaboration and communications while enhancing customer and employee productivity. Social networks can provide compelling benefits for users and the organization, so a good CMS should include support for sharing images, documents, and videos; forums and internal messaging systems for interact with others; and the ability to maintain unique profiles and status updates.

In terms of mobile computing, keep in mind that while desktop and laptop PCs still represent the majority share of website activities, smartphones and tablets are fast becoming a big part of overall Internet traffic. To make website visits easier for mobile users, look for tools that can quickly translate standard web pages into streamlined versions for easy web viewing on small screens. It’s also useful to have a CMS that can detect when mobile devices are hitting a site and then redirect the visitor to a mobile version of the site for easier viewing and navigation.

A third feature to look for is solid search capabilities. When visitors go to a site, they’ll commonly look for a search box to find products or information. When evaluating CMS options, look for one that has built-in search capabilities and doesn’t force you to use external services that may require additional licensing.

Capitalizing on Emerging Trends

The rise of social media and ubiquitous mobile devices, including smartphones and tablets, is reshaping the way that people use the web. CMS tools designed to accommodate these trends can help you attract and retain more visitors.

CMS CHECKLIST:

- Building a Richer Web Presence
- Support for multiple websites
- Easy to add extensions within the CMS environment
- Built-in search tools for end users

In terms of mobile computing, keep in mind that while desktop and laptop PCs still represent the majority share of website activities, smartphones and tablets are fast becoming a big part of overall Internet traffic. To make website visits easier for mobile users, look for tools that can quickly translate standard web pages into streamlined versions for easy web viewing on small screens. It’s also useful to have a CMS that can detect when mobile devices are hitting a site and then redirect the visitor to a mobile version of the site for easier viewing and navigation.
Extensive Service and Support

A quality content management system should be straightforward to install, configure, and manage. However, there will be times when external support will be useful, if not essential.

When weighing your CMS options, make sure the CMS vendor provides varied and comprehensive levels of support. This could start with a rich user community where you can find free information, as well as fee-based services that can respond to business-critical or time-sensitive issues. Look for support options that cover a broad range of activities, such as solutions for fixing something that is broken, performing installations and upgrades, and supporting developers and designers. Additionally, look to see what kind of training is offering, including free training such as online tutorials, on-site training, classroom training with labs, and training at conferences.

A vendor’s partner ecosystem can also be an incredibly valuable asset. As your business grows and there are more demands on your website, easy access to partner networks can provide you with products, solutions, and ideas that can be hard for your organization to implement internally due to resource constraints. In these situations, being able to find external, certified partners to work to asset on web projects can be invaluable.

Conclusion

Building and maintaining a strong web presence should not be an afterthought for your business planning—it should be viewed as a critical asset for strengthening communications and relationships with customers and employees alike.

 Websites can have a tremendous impact on business performance, so it’s essential to pick a strong web content management system that will provide the power and flexibility to easily manage content, design compelling sites and pages, and adapt to changing market conditions.
While free or low-cost CMS solutions might be tempting in the short run, consider the long-term benefits. When evaluating your CMS choices, look for the value of the solution and the reputation of the vendor, keeping in mind that you are selecting a core business asset that will bolster the business today while supporting new opportunities in the future.

About DNN

DNN provides a suite of solutions for creating rich, rewarding online experiences for customers, partners and employees. Our technology is the foundation for 750,000+ websites worldwide and our customers include True Value Hardware, Bose, Cornell University, Glacier Water, Dannon, Delphi, USAA, NASCAR, Northern Health and the City of Denver. In addition to our commercial solutions, DNN is the steward of the DotNetNuke Open Source Project.