Six Common Factors to Consider When selecting a CMS

By Akshaya Ray, Technical Support Leader, Revize Software Systems

When you create a search on the Internet you will find many web content management solutions (also referred to as a CMS – content management solution) available from small web page editing tools to expensive six digit enterprise solutions from which to choose. It's definitely a challenge to select the right CMS for your organization. The best strategy is to first evaluate your organization's CMS needs and requirements. Then select the best software that meets these specifications at an affordable investment. To assist you in your search, here are the six most common factors that should be evaluated while choosing a CMS system:

1) The CMS Technology Factor:

Does the CMS use dynamic publishing technology or does it publish static pages?

In most of the modern web content management systems, content is stored in a backend relational database like MS SQL or Oracle. To find out whether the solution is dynamic or not, find out what happens when a web site visitor selects a web page. Ask if the page content is either dynamically assembled or if it is preassembled into a static page. If you are more concerned about quicker web site performance for the web visitor then the preassembled static page technology should work for you. If it is dynamically assembled, you may want to investigate whether the following characteristics of dynamic publishing technology will work for your organization or not.

High Load Performance:

With a dynamic publishing CMS there could be a performance drag if millions of hits are taking place simultaneously on a webpage that's dynamically assembled from your CMS system. This can significantly delay the page loading time, potentially diverting traffic from the site. With today's quick pace lifestyle nobody wants to wait for ten seconds to view a web page, especially if they are a dial up web visitor.

With a CMS that publishes static pages, the page is dynamically preassembled upon content change and the page will load faster when selected because it stays static on the web server. Only when content authors log in to update the site, the page is dynamically assembled from the CMS database. Once the page is changed and saved, the CMS system publishes the static page to the web server through FTP or secure FTP with the latest approved content. That way, the site visitor will always load a static html page in the browser instead of a dynamic page which takes longer to load.

Security:

In a dynamic content management system, the site visitor is accessing the CMS database while loading the page. The website and CMS database has to be outside the corporate firewall for visitors to use this kind of CMS system making it vulnerable to hackers. As the system runs outside the firewall, it's not secure and potentially the system can be easily hacked thus causing a significant downtime to get the site live from the back ups.

If this is a concern, you may prefer a static publishing CMS system because the CMS can be installed separately away from the web server on an application server behind

Six Common Factors to Consider When selecting a CMS

your firewall. With this type of architecture your CMS server can work like a staging server with a full back up copy of your web site. In the case of a hacker damaging your web site you can easily republish your entire web site back to the web server and again be "Live" and productive with minimum downtime.

Search Engine:
It's very common that dynamic pages have lower search engine rankings compared to static pages. Since search engine ranking is one of the most important aspects of any web site, it's traditionally better to choose a CMS that serves static pages.

With CMS systems where the page is dynamically preassembled, upon a content change the web page stays static in the web server. Only when content authors log in to update the site, the page is dynamically assembled from the CMS database. Once the page is changed and saved, the CMS system publishes static page to the web server through FTP or secure FTP with the latest approved content. That way, the site visitor will always load a static html page in the browser instead of a dynamic page which takes much longer to load.

2) The Ease of Use Factor

There are several web content management systems on the market. So selecting the right CMS vendor can be a laborious task. A lot of systems boast about their back end technology. The general perception is that the more complex a systems is, the more powerful the solution is. But from a business perspective, many CIO's feel the primary concern should be how easy it is for the non-technical end users to use the solution. At the end of the day, business users/content authors are the ones who will use the system the most. Many studies have indicated that if end users spend hours in posting content to the web site, the complex system will not be utilized to its fullest potential. Weeks of research to select the right vendor will fail miserably if the system is difficult to use by non-technical people. Technical programmers like complex systems, but the fact is, after the deployment the system is mostly used by non technical people. In most case they are individuals in Marketing/Human Resources and executive assistants in an organization who are responsible for updating their respective content. The following points must be considered to determine if a CMS is easy to use.

End User Content Editing Interface:
Is the content editing interface contextual? What that means is if I am the end user trying to update a piece of content in the site, can I edit the content in the web page itself? This is so I can see how my content will look like when it's published without having to browse to several screens to preview the page. Most of the enterprise class CMS systems give you the ability to edit a content block using a proprietary interface, but you have no idea how the content will appear in the page until you save that content and preview the corresponding page.

Previewing the corresponding page is another tedious task as you might have to click on several screens to locate the right page and where the content will appear in the site. Therefore it's very important to choose a system that uses a contextual edit form so that you can browse to the page where you will be editing the content and the content editing interface is right on the web page. In this manner, you can edit

Six Common Factors to Consider When selecting a CMS

the content exactly how you want the content to appear in the page and greatly reduce content editor training time.

Interface to build templates and content modules:
As most CMS systems use master CMS-enabled templates, it is important to evaluate how easy it is to build these templates in a CMS system. Templates are basically the lay out of the web page with content blocks replaced by CMS object tags. So to run a web page with a CMS, you need to build the corresponding templates. By having a small number of these master CMS-enabled templates you can better manage the entire web site and make changes to the look and feel easily during the life of your web site design. To build the CMS-enabled templates, a lot of systems provide an Integrated Development Environment (IDE). If the IDE to build the templates is not intuitive and not wizard based, you will end up in doing a lot of program scripting and that can greatly increase the deployment of the entire system.

Content Approval System:
How long will it take to set up a workflow approval system? How easy it is to track the pages during the approval? A lot of workflow configurations can take hours/days to set up. Most of the vendors use table based workflow system. CMS's with a flowchart based workflow approval interface are the easiest to use and quick to test. Content comparison features make it quick to approve content if you are an approver. Rather than searching an entire page only to find several minutes later that the content editor only added a comma! It is very important to evaluate these features while selecting a CMS and how easy they are to use.

3) The Total Cost of Ownership (TCO) Factor

Every fiscally responsible IT, Public Information, Communications, and Marketing executive needs to determine how much a solution will cost in the long run. That includes initial investment to buy the license, professional services, web developer training, end user training, any additional software licenses costs (such as database or web server software licenses), and software maintenance. You should also investigate how a solution is priced. A lot of systems are priced based on the number of content authors (end users), number of domain names, number of processors on the server where the CMS will be installed, and the number of URL's in your web site. Although some CMS's have a low base price, when you add up all the options, the investment can be much more than the installed price advertised.

The on-going maintenance cost is another factor to consider. It is always advisable to buy a system where there are no restrictions like number of users or number of URL's in the site. If professional services are required during the deployment phase, the consulting cost can add up at the rate of $200-$300/hour. So it's very important to consider a system, where you can avoid as many of these additional costs as possible. If the solution has all of these costs, then it is a good indicator that this system will be costly not just now but also during the life cycle of the product. Again, check for the ease of use for the end users!

Applications:
Consider how you want to use the CMS.   Most of the CMS systems may require the purchase of additional web applications to meet your web site needs. Examples of this are add on modules for web analytics, document management, and wikis/blogs.

Six Common Factors to Consider When selecting a CMS

Most of these applications can be integrated free with any CMS. Commonly added applications are Google's web analytics as well as their search engine. Google web site analytics is considered the "best of breed" in the market because this is Google's main line of business. There are CMS vendors who specialize in core CMS applications. Be careful selecting a system that comes with a lot of "bells and whistles". They can become quite costly but in reality they could be inferior applications with a lot of limitations. Rather buy a system that manages web content only but scalable enough to integrate with the best known applications that the market place has to offer.

4) The Cross Platform Support and Scalability Factor

Many organizations use several different operating systems like Windows, Unix, or Linux for varying reasons. Sometimes IT Managers use Linux operating systems to reduce the amount of OS license renewal fees on an annual basis. Whatever the reason, it is good to select software solutions that are platform independent and can run on multiple operating systems. Even if you are in Windows environment, it's always better to use the technology that will work in both Windows and Unix or Linux in case there is a technology change in the future. Then all of the software investment is not lost.

Another question to ask is can the system integrate well with other server side technologies? Can I manage a Cold Fusion page with the CMS that I select? How well can the system's API be used to build dynamic server side pages? Those are things to consider while thinking about scalability.

5) The Web Presence Management Factor

Although most organizations roll out their CMS to their Internet web site first, it is rare that an organization has only one web site. Many organizations also have an Intranet as well as an extranet web site. A CMS can greatly benefit these web sites as well. Some organizations never integrate a CMS with their other web sites because it is cost prohibitive. If this is your case, then look for a CMS that does not charge you for a separate license for each web site or every domain name. Rather find a CMS that allows you to securely manage each web site or each web presence separately in a secure manner so that changes made in one web site cannot affect another web site by mistake or accident. The CMS license should allow you to login to each web site's administrative console separately in a fashion were you can grant permissions to separate web administrators if need be.

6) The Solution Deployment Factor

This is one of the most important things to consider while selecting a CMS vendor. Sometimes it takes a year to deploy a CMS system. You can read about difficult deployments if you browse to CMS blogs and forums.

How will you migrate your current site content to the new CMS web site? The best migration methodology is to rolling out each department at a time in order to test each section before moving the next department.

How do you manage the cross department links on the department pages which are not moved to CMS yet? You should evaluate if the CMS vendor has any tool to address this concern. Without proper content migration strategies, enabling a site

Six Common Factors to Consider When selecting a CMS

with a CMS can be a bitter catastrophe. The best option could be to use an automated tool to move the content from the existing site to the new site running with your new CMS. If the vendor has a tool like that, you should be very clear about the cost of the tool before you make your final decision.

Managers and decision makers should evaluate the above six factors while selecting a CMS. It can be very confusing to select the right CMS as there are thousands out there. The best idea is to prioritize your needs and short list the points when evaluating the CMS based on that will lead to a successful implementation of the system and be the easiest to use by your end users. The result will absolutely be worth the effort.