

Content PATROL

Badly-managed Web site content has a very high 'wince' factor – you don't want those emails to your CEO showing up on the company's Web site, do you? Prevention is better than cure, says David Peterson, and the best prevention is a good content management system



FACT OR FICTION? A new CEO has just taken the helm, and messages are flying thick and fast from staff wanting to

make the right impression. Unfortunately, these are all inadvertently published on the company Web site. Heart-stopping excitement; the kind business could well do without, right?

In fact, this did happen in 1998, when employee messages to new BHP CEO Paul Anderson were unintentionally published on the BHP Web site and subsequently in a number of major newspapers.

A content management system (CMS) may not seem very glamorous, but not having one can create the type of embarrassment described above.

Back in the 1990s, the situation was quite different. Sites weren't embellished with all the bells and whistles. In fact, a typical site would consist of a few dozen pages that someone in the IT department created and maintained as a 'spare time' job. The rest of the company was usually disinterested, so content updates were infrequent – and there was a reasonable chance that if someone slipped up and published the wrong thing at the wrong time or in the wrong way, not too many people would notice until it was too late.

Times have changed. There are now effective ways to manage your Web site's work flow and approval process and prevent things inadvertently slipping through the cracks.

The content crisis

Initially, many organisations headed off the content crisis by placing their content in a database, leaving only formatting and layout information in the HTML pages. Separating the content from its presentation produced a number of key benefits, such as:

- **Improved site maintainability.**

Changing the appearance of the Web site could be accomplished by simply altering a handful of template pages – rather than hundreds of pages of content.

- **Simplified content production.**

It was now possible for non-technical staff to produce Web site content – thus giving control of the content back to the business while leaving IT staff to focus on technical matters.

Although databases did resolve a number of problems, they left many others unattended. To manage content workflow, for example, a programmer would need to write additional custom code and link it to the database. Version control modules

needed to be written to manage changes to the templates. Then support would have to be added for meta-tagging, indexing, searching, multiple media types and personalisation.

With each new requirement, more code needed to be written, maintained and documented. For companies with high-end requirements, the cure was starting to look worse than the disease, and people began searching around for a pre-packaged alternative. Enter the dedicated, integrated, purpose-built content management system.

CMS: riding shotgun

A content management system provides a platform to organise and control a Web site – and overcome the problems described earlier. A well-chosen content management system can improve the quality and business value of your Web site, while reducing your total cost of ownership.

So what features should you look for in a content management system? **Content creation and editing.** Naturally, there needs to be some means of creating content and then subsequently changing and editing it. For text-based content, the tools should be appropriate for users with no knowledge of HTML – the technical

skill required should be the same as that needed to use a word processing package. **Templates.** A key contributor to the high maintenance costs of many Web sites is the failure to separate content from its presentation. Once this is achieved, the publishing bottleneck is removed, as content producers do not need to pass each piece of content through technical staff to convert to HTML.

With the use of templates, you can maintain corporate standards and branding – any changes to the look and feel of the site can be achieved at a single point of modification.

Work flow. A good, flexible work flow function is an essential part of the content life cycle – nothing should ever be published on a corporate Web site without some form of review and approval process that can be customised for each type of

document. A news item, for example, might only need to be peer reviewed, whereas a 'terms and conditions' statement would require several more approval steps, including a manager and a member of the legal department.

Work flow should be role-based to ease administration and allow tasks to be reassigned if someone is unavailable. There should also be some form of work flow reporting available to allow an overview of the process and to identify any bottlenecks (such as people failing to review and approve content in a timely fashion).

Metadata tagging. Once the content has been created, there needs to be a way of describing and categorising it. This is of particular importance for non-text content, such as audio, video and graphics which do not lend themselves well to traditional search engine technologies without

additional descriptive tagging.

Versioning. Whenever content is modified, there should be a record of who made the update and when and what changes were made. There should also be the ability to roll back to any previous version if a change turns out to be undesirable.

Collaboration. Larger sites will have many contributors, and there is a good chance that several of them may be creating and updating content simultaneously.

To support this, there needs to be at minimum some form of document locking to ensure that the situation never arises where there are two people working on a document at once and saving over each other's changes. You may also need more advanced collaboration features to allow teams to work together on the one document.

Personalisation. When content is not bound to documents but stored as components of information, these components can be assembled on the fly to create different views of the content, depending on user preferences. This may be as simple as having 'unregistered user' and

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'subscribers only' versions of information, or as complex as having the entire site customised to the preferences and historical usage patterns of the user.

Security. As well as preventing vandals from defacing your Web site, you may also need to prevent unregistered users from accessing 'subscriber only' or pay-per-view content.

Security can also apply to content creators and other members of your own staff. If the people working on your Web site are restricted to modifying only the content that they need to perform their duties, there is less chance of someone inadvertently damaging other parts of the Web site.

Scheduling and archiving. Dated content can make your site look stale and irrelevant,



cause unnecessary clutter and reduce customer confidence. Conversely, content that appears on your site too early can be a cause of embarrassment.

You need to be able to set policies for different types of content to ensure that they are displayed in the correct part of the site in the correct fashion for the correct period of time and then automatically removed if appropriate. For example, a piece of content tagged as a news item might remain in the 'latest news' section for 24 hours, then be moved to 'old news' for a week and then deleted. By contrast, an annual report might stay on the site indefinitely.

Multiple delivery channels. You may need to deliver your content in different formats to different devices. In addition to the age-old issue of browser compatibility, your content management system may also need to handle delivery by email, delivery to mobile information appliances and other media such as CD-ROM and print – without creating multiple versions of your content for each delivery channel.

Syndication. If content is your core business, then you may wish to generate additional revenue by selling it to other Web sites. In some respects, this is just another potential delivery channel, but with the additional need to be flexible enough to accommodate the requirements of a broad range of customers, each of whom will want to view your content in a particular format and

present the content differently to maintain consistency with their own Web sites.

The right choice

The product is cheap; the features are many – and the salesperson is going to take you to that great restaurant you've been meaning to check out for months! But restrain yourself. If you succumb to buying the wrong content management system, you run the risk of paying for features you'll never use or being lumbered with a system that costs you a fortune to configure – but never quite seems to do what it's supposed to.

When you select a content management system – or, indeed, any software package – the first considerations are your business objectives. What will it deliver to your business in terms of lowering costs or furthering its goals? Although not set in stone, examples of the type of questions you should ask yourself would include the following:

- Will it reduce the cost of Web site maintenance by a certain percentage, say by 40 per cent, over the next few years, with no reduction in quality?
- Will it improve customer satisfaction with the company's Web-based customer support by 25 per cent, for example?
- Will it provide a system for delivering the company's information products to the Web, email, CD, print and selected content aggregators?

Essential features

Some systems will perform certain tasks better than others and some may not support a certain feature at all – so which features do you really need to meet your objectives?

For each feature deemed to be essential, what level of service is required? For example, you may require your new content management system to be secure – but does this mean simply keeping out vandals, or having the ability to support a complex multi-tier system of subscription levels? Keep the following considerations in mind when making your decision:

Total cost. Although the cost of a software license is often one of the key factors in comparing products, it's actually one of the least relevant. When you review the total cost of your content management system implementation, the 'sticker price' of the software product is likely to pale into insignificance compared to consultancy fees

for implementation; migration of existing content into the new system; integration with your other corporate systems; and ongoing maintenance support and enhancement.

If cost is a factor in your selection processes, a most likely scenario, be sure to compare on the basis of total cost.

Availability of skilled technical resources. Does the system have enough market standing to ensure a ready supply of skilled resources to maintain it? Are training courses readily available to provide the necessary skills to your existing staff? Is it possible to leverage the skill sets already present in your organisation?

Vendor stability. How financially stable is the software vendor? How committed are they to retaining a presence in your region? How committed are they to the continued development of their product?

Customisation. How closely does the system match your business processes? Is it possible to customise the system to better reflect your requirements? If so, can this be performed at an acceptable price? If not, are you prepared to alter your business processes to suit the system?

Integration. How well will the system work with your existing office systems, your customer relationship management system and your e-commerce Web site? Your costs and risks are greatly reduced if the IT components of your enterprise snap together like Lego bricks, rather than needing to be welded together.

Alternatives

The cost to implement a top-of-the-line content management system can run to as much as \$1 million. For organisations that cannot justify this kind of expense, there are a number of much cheaper alternatives.

Microsoft FrontPage, for example, isn't a genuine content management system, but it may prove to be more than adequate if you only have 5000–10,000 pages to manage and you don't require some of the more specialised CMS features, such as content syndication or wireless device support.

Once you've settled on a content management system, the next step is implementation. In next month's issue, we will discuss this as well as management and more. ☺

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LEADING SYSTEMS

With hundreds of content management systems on the market, there is certainly no shortage to choose from. To help you get started, here is a list of some of the CMS market leaders:

- Atomz – Atomz Publish
- Broadvision – One to One Publishing
- Divine – Content Server
- Documentum Inc – Documentum – Documentum Web Content Management Edition
- Interwoven – Team Suite
- Macromedia – Macromedia Spectra
- Microsoft – Microsoft Content Management Server
- Presence Online Inc – Aprtix Multi Platform
- Rational Software Corp – Rational Suite Content Studio
- Stellent Inc – Stellent Content Management System
- Vignette Corp – Vignette Content Suite