

A content management system (CMS) is critical to the success of almost every website and intranet, and yet many organisations are not familiar with this technology.

So, while we have written many articles on a range of specific CMS issues and strategies, we now take a step back to answer the question: what is a content management system?

In this article we will focus on *web* content management, and will only touch upon broader content issues at the end of the document.

The business problem

You have a website, or intranet. It has grown organically over time, and while it is very useful, it is far from perfect.

Much of the content is out-of-date or inaccurate, it's hard to find things, updating the site is complex, and the appearance is becoming dated.

Worse yet, you've lost track of all the pages on the site, and by having all the changes made by your skilled webmaster, the updates are piling up in their in-tray.

What was on the site last week, or last year? You couldn't say. In the back of your mind, you know that this could leave you in a difficult position if a customer sues, but there is little that you can do.

If this sounds grim, you are not alone. In fact, it's the natural by-product of maintaining a site using manual tools such as Dreamweaver or Frontpage.

Thankfully, these problems are what a content management system is specifically designed to solve.

About the author

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CMS: A working definition

A content management system (CMS) supports the creation, management, distribution, publishing, and discovery of corporate information.

It covers the complete lifecycle of the pages on your site, from providing simple tools to create the content, through to publishing, and finally to archiving.

It also provides the ability to manage the structure of the site, the appearance of the published pages, and the navigation provided to the users.

Note that we are focusing on the most common use of a CMS: to manage web content. In some circles, these systems are therefore called web management systems (WMS).

Content management systems can be much broader than this, but we won't touch upon these aspects until later.

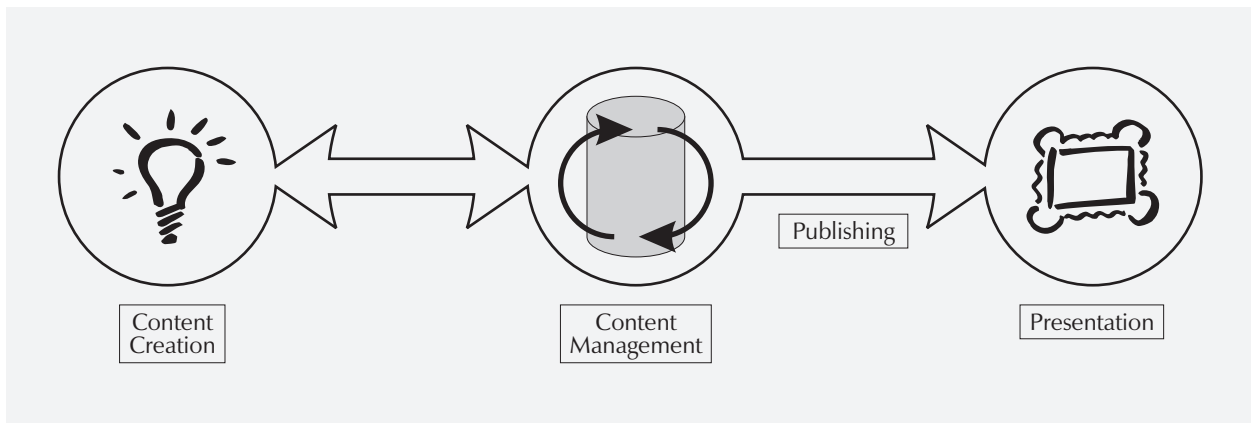
Business benefits

There are a wide range of business benefits that can be obtained by implementing a CMS, including:

- streamlined authoring process
- faster turnaround time for new pages and changes
- greater consistency
- improved site navigation
- increased site flexibility
- support for decentralised authoring
- increased security
- reduced duplication of information
- greater capacity for growth
- reduced site maintenance costs

Beyond these, the greatest benefit the CMS can provide is to support your business goals and strategies.

For example, the CMS can help to improve sales, increase user satisfaction, or assist in communicating with the public.



Anatomy of a CMS

The functionality of a content management system can be broken down into several main categories:

- content creation
- content management
- publishing
- presentation

Each of these will be explored in the following sections.

The CMS manages the entire lifecycle of pages, from creation to archival

Content creation

At the front of a content management system is an easy-to-use authoring environment, designed to work like Word. This provides a non-technical way of creating new pages or updating content, without having to know any HTML.

The CMS also allows you to manage the structure of the site. That is, where the pages go, and how they are linked together. Many even offer simple drag-and-drop restructuring of the site, without breaking any links.

Almost all content management systems now provide a web-based authoring environment, which further simplifies implementation, and allows content updating to be done remotely.

It is this authoring tool that is the key to the success of the CMS. By providing a simple mechanism for maintaining the site, authoring can be devolved out into the business itself. For example, your marketing manager

maintains the press release section, while your product manager keeps the catalogue up to date.

Content management

Once a page has been created, it is saved into a central repository in the CMS. This stores all the content of the site, along with the other supporting details.

This central repository allows a range of useful features to be provided by the CMS:

- Keeping track of all the versions of a page, and who changed what and when.
- Ensuring that each user can only change the section of the site they are responsible for.
- Integration with existing information sources and IT systems.

Most importantly, the CMS provides a range of workflow capabilities. These are best explained by giving an example:

When the page is created by an author, it is automatically sent to their manager for approval, and then to the central web team for their editorial review. It is finally sent to the legal team for their sign-off, before being automatically published to the site.

At each step, the CMS manages the status of the page, notifying the people involved, and escalating jobs where required.

In this way, the workflow capabilities allow more authors to be involved in the management of the site, while maintaining strict control over the quality, accuracy and consistency of the information.

Workflow rules bring order to the chaos of manual processes

Publishing

Once the final content is in the repository, it can then be published out to either the web-site or intranet.

Content management systems boast powerful publishing engines which allow the appearance and page layout of the site to be applied automatically during publishing. It may also allow the same content to be published to multiple sites.

Of course, every site looks different, so the CMS lets the graphic designers and web developers specify the appearance that is applied by the system.

These publishing capabilities ensure that the pages are consistent across the entire site, and enable a very high standard of appearance.

This also allows the authors to concentrate on writing the content, by leaving the look of the site entirely to the CMS.

The CMS fully automates the publishing of your site

Presentation

The content management system can also provide a number of features to enhance the quality and effectiveness of the site itself.

As an example, the CMS will build the site navigation for you, by reading the structure straight out of the content repository.

It also makes it easy to support multiple browsers, or users with accessibility issues. The CMS can be used to make your site dynamic and interactive, thereby enhancing the site's impact.

Beyond the web

So far, we have concentrated on the creation of HTML content for corporate websites or intranets. While this is the strongest aspect of most content management systems, many can do much more.

Central to the power of many systems is the concept of 'single source publishing', where a single topic can be published automatically into different formats.

This could include printed formats (PDF, Word, etc), wireless/hand-held formats (WAP, etc), or XML.

Enterprise content management

There is also a relationship between content management systems and other information systems within an organisation, including:

- document management
- records management
- digital asset management

At present, these are typically sold as separate systems, and achieving interoperability between them is not easy.

Some progress is being made with the creation of so-called *enterprise content management systems* (ECMS), which combine together a central content management system with other tools to manage the full range of content that exists within your organisation.

These systems are relatively immature, however, and there is not much agreement about what they should encompass. This is certainly a market that will evolve rapidly over the next few years.

Take the time to pick the best product to meet your needs

CMS marketplace

This article has presented a general overview of typical content management system capabilities, and how they can be used to benefit your business.

In the marketplace at present, there are literally hundreds of content management systems, all having different capabilities and strengths.

This is the nature of a rapidly changing marketplace: while there are many very good products, there is little consistency between vendors.

Our single best piece of advice: take the time to determine your business requirements, and then comprehensively evaluate the products on the market against them.

Every organisation has a unique set of requirements for a content management system, and there is no 'one-size-fits-all' solution. By allocating sufficient time and resources to selecting the CMS, you can be confident that you have the best possible solution.

Conclusion

Content management systems are relatively new in the market, and while many are still not familiar with them, they have the potential to dramatically simplify the maintenance of both websites and intranets.

This article has given a high-level overview of CMS capabilities. For more information on specific CMS issues or aspects, browse through the other articles available on our website (www.steptwo.com.au).

For example, you will probably find our article *How to evaluate a CMS* to be very useful when investigating specific products on the market.

Other articles of interest

- *Centralised or decentralised authoring?*
- *Losing sight of the content in a CMS*
- *What are the goals of a CMS?*
- *Why every small website needs a CMS*
- *Putting metadata to work*
- *Metrics for content management & knowledge management*
- *Is it document management or content management?*
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