

A decorative graphic consisting of numerous orange circles of various sizes, scattered across the page. Some circles are larger and more prominent, while others are smaller and more subtle. They are arranged in a way that suggests movement or a cluster of data points.

CONTENT MANAGEMENT SYSTEMS (CMS)

Breaking the shackles of complex programming



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"This guide is intended to condense and present to the reader a practical overview of Content Management Systems (CMS).

With CMS your content people can manage the content by themselves, freeing up your design and server people so they can stay focused on what they do best. The net result is a much more efficient process that saves you time and money."



John Shenton, President - Global Millennia Marketing Inc

TABLE OF CONTENTS

***Content Management Systems (CMS)*3**
 Market Trends.....3

***Do You Need a Content management System?*.....5**

***What content do you have, and where is it going?*6**

***CMS Benefits*8**
 No more accidents8
 Job sharing8
 Advance and refresh8
 Speed to market8
 Version Control8
 Simplified CRM Implementation9
 Content Syndication9
 Control of non-web content, channel integration and business re-engineering9
 Reduced maintenance costs10
 Reduced risk of litigation and adverse customer reaction10

***What is the Downside?*.....11**
 6 core CMS requirements11
 You don't need a CMS (yet) if.....11

***Conclusion*12**

***About Global Millennia Marketing*13**

CONTENT MANAGEMENT SYSTEMS (CMS)

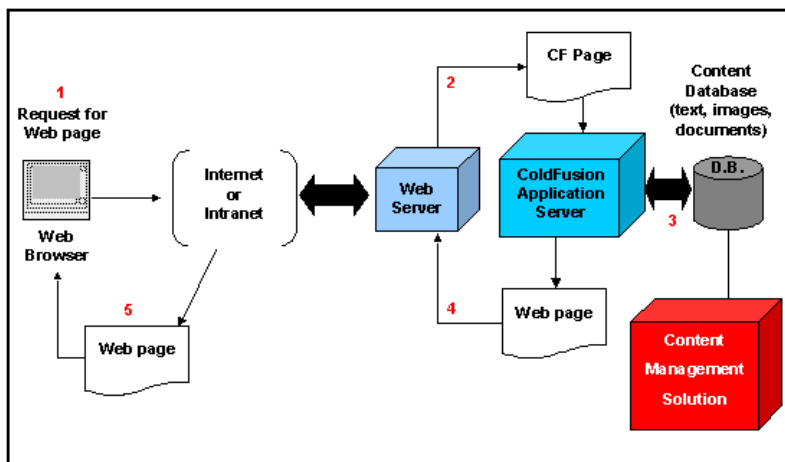
Web content management solutions have become necessary because of the proliferation of Web sites and the explosive growth in Web pages. In 1992, just 1,000 pages were on the Web (Digital4sightCorp.). However, as of June 2000, over 2 billion Web pages were posted on the Internet (Cyveillance). In addition to Internet sites, corporate Intranets are also causing massive demand for up-to-date Web content. By end 2001 over 133 million people worldwide will be using corporate Intranets, according to an International Data Corporation 1999 projection.

Market Trends

Many companies are now starting to realize that using the Internet can save them money even though they will need to add new categories of staff, CM solutions, and Web editing tools. Additionally, many companies now face the daunting challenge of making their Web sites suitable for international non-English speaking visitors.

Web migration increases profitability: Companies using the Internet have benefited from improved operations and better customer service. In fact, migrating to the Internet will save companies worldwide \$1.25 trillion by 2002. In putting business applications online, Cisco alone saves more than \$800 million per year. By moving supply chain management to the Web, IBM has improved on-time delivery by 95% (Giga Information Group).

How easy is it to make a change to the content of your website? For most businesses, changing a web page is a process that involves at least three people. One person writes the content, another person designs the page, and then the person who manages the server makes sure the new page is published. Changing content is a slow, inefficient, and expensive process.



With your site hosted using a CMS, you can build and maintain web content from any computer using a simple web browser.

Quickly and easily, without knowing code or using specialty software, you can add sections, articles, pages, photos, tables, ads, forums, forms, calendars, user polls and more.

Content Management Systems break the shackles of complex programming and puts the power of the Internet into your hands, or into your team's hands.

Content management creates a team approach to website building and management. It allows you to make your website inclusive, and yet keep control of design and content.

Defining Your Website

- Is your website more like a brochure or a newsletter?
- Is it more like a TV program, or a newscast?
- Is it more like a book, or a magazine?
- Does its content change seldom, or constantly?
- Is it more static, or dynamic?

If it is more static, changing infrequently if at all, it is probably best created using traditional HTML methods. Using HTML, a web designer can build a great looking site, and using specialized software, update its content for you when the site needs change.

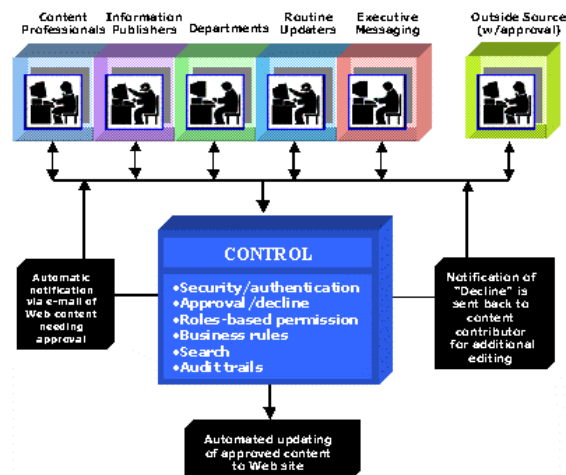
If your website is more dynamic however, changing often and including lots of people and departments as contributors, it is probably best created using content management software.

With CMS, the designer builds great looking templates, and the content comes from select contributors. These contributors can add information to the site without disrupting its design (because of the templates), and do so without any specialized software. All material is added into a database before posting onto a site page. In this manner, an editor or manager has the opportunity to review and approve any material before it goes onto the web.

A major task of a true content management system is distributing the management of Web development.

Control over content is routine when one person or a small group creates content for an entire site. But as more people are involved, the difficulty of managing the flow of data is magnified.

In their most basic form, Web content management systems should allow each content producer to create pages and feed them to the publishing system.



The system should have customized and automated checks and balances to ensure that pages get placed correctly, that navigation trees are created and maintained, and that the appropriate people control the process along the way.

To make this happen, good Web content management packages separate content (written material, images, streaming audio and anything else that makes up Web pages) from presentation of content, and they include strong workflow capabilities.

DO YOU NEED A CONTENT MANAGEMENT SYSTEM?

Marketing and sales managers are realizing that manual systems for managing their online offering could leave them vulnerable. If that doesn't keep you awake at night, consider the following situations, all drawn from actual events:

- It takes a month to sign off the site's Terms & Conditions because every time any one of your organization's lawyers changes a full stop, all the other ones need to sign it off.
- You realize that your site's visual design isn't working, but it will take a month to wrap a new design around the same words.
- Your web design agency insists on all content being signed off two months before it goes live... and then transcribes it incorrectly.
- In a parting gesture, the Web publisher you fired replaced photos of board members with goats.
- You can't update one section of the site because another section has a major overhaul underway. You can either publish the entire site, with both complete and incomplete updates, or hold until both are completed.
- You have to work through the night to publish the company's results at market opening time because you don't have a secure area to develop them in advance.
- You send email promotions about 'upgrading' to Windows2000 to registered Mac users.
- You're employing an army of skilled web publishers just to update the system requirements of your software.

Make no mistake - if you are running a substantive web site without a CMS, you will hit a wall where your eBusiness is no longer sustainable because you can't update your site reliably or quickly enough. From that point, you will need to tear down almost your entire web infrastructure to put a CMS in its place.

As more and more companies are hitting this wall, it's no surprise, then, that the CMS market is at the start of an escalator.

Faulkner Information Services conservatively estimates the entire market will develop to \$65billion by 2003.

Pricing for purchasing and integrating a content management solution varies depending on the number of and size of Web pages needing to be updated, as well as on the complexity and frequency of updating.

For example, a small 30-page Web site, with ten business users updating content on a weekly basis could cost between \$10K and \$50K.

A mid-size site with 150 pages and 50 employees making daily updates may require a \$100K to \$200K solution. However, an enterprise level Web operation, with thousands of pages, hundreds of content contributors, and very sophisticated needs may require a \$250K to \$500K+ CM solution.

As more and more CM solution vendors enter the marketplace, prices may soon become more affordable for small and mid-sized companies. However, there are very good CM solution providers such as ourselves, who can build solutions priced in the \$5K to \$75K range.

WHAT CONTENT DO YOU HAVE, AND WHERE IS IT GOING?

Think for a moment about all the content assets that you need to manage. On your site, you might have:

- Your products' specifications, prices and benefits.
- Product illustrations
- Production information
- Product categories
- Special promotions
- Terms and Conditions
- Site navigation links
- Availability
- Support information
- Developer features
- Press releases
- Jobs
- Office addresses, maps and directions.
- Logos, photographs and diagrams



Even if you're not currently communicating at a multinational level, your site can (and will) be seen around the world. Intentionally or not, you are communicating - and potentially selling - to many cultures, and it's worth investigating. However, to communicate effectively, you need to be considering publishing in multiple languages.

In Europe alone, this implies up to 15 different language versions of your site, each with their own cultural sensitivities over imagery, strength of sales pitch and so on. You may not be managing this effectively; some of your competitors will be.



These might be sourced from:

- Internal systems
- External suppliers
- R&D
- Marketing
- Photographers
- Production
- Operations
- Site users

You then need to integrate this content into a consistent site and funnel it towards:

- External customers, prospects, pressure groups, shareholders and other external audiences (Internet site)
- Employees, including R&D, Support and Admin staff (Intranet)
- Sales force, suppliers and partner companies (Extranet)
- Non-PC access devices (kiosks, PDAs etc)
- Internal and external systems
- Intelligent devices

With the appropriate story being told to each audience.

Add to the mix the spice of personalization where each individual user may have a unique version of the content and you have a recipe for extremely complicated production processes.

CMS BENEFITS

No more accidents

With a CMS, it becomes very difficult for content assets to be on the site accidentally. Any updates must pass through commissioning, creation and one or more predefined signoff steps before the system will publish it. The resulting audit trail provides accountability for each action.

Job sharing

A team distributed between offices operates many sites, companies or even countries and notifying a participant of an assigned task becomes more complicated than calling across the room. The CMS could notify a participant by email, by SMS (mobile phone text messaging), by fax or even by auto-generated letter. Because all the major tools have a web interface, participants can perform their task and view its results from anywhere with web access. And with a sensible CMS security model, you can be sure that only authorized people can perform authorized tasks.

Advance and refresh

You can specify dates and times for the content to go live and be archived or removed, along with the contents target audience segments. You can also impose review dates to ensure that information is not simply left on the site to rot until a new product replaces it.

The responsible area will need to rubberstamp the content as still valid, commission a replacement or archive/delete it. If content is removed or archived, the CMS will ensure that the remaining content is still structurally consistent, without leaving orphaned links to the deleted asset.

Speed to market

When you have a CMS, you suddenly have a tremendous advantage in the time it takes to react to market intelligence. You can write, edit and publish updates in a matter of minutes without suffering from "WebMaster Bottleneck".

Alternatively, you take the decision that the visual design isn't working on a Monday morning, and can have a new design implemented by Wednesday. Why? Because your CMS is maintaining the site's structure, content and visual presentation in separate layers, and will pour your content and its structure into a few visual templates.



Similarly, you can restructure a site, merging and splitting areas, without substantial manual intervention, as this layer is also maintained separately.

Version Control

At its simplest, this means that you know, and can control, what content is supposed to be live today, what is sitting ready to go live next week, and what is being prepared by your team for the week after, and keep them separate on an piece-by-piece basis.

It also means that you can have one version of a news story live now, one being written to update it in an hour's time, and one incorporating the press release which is embargoed until tonight.

Simplified CRM Implementation

In many traditional Direct Marketing scenarios, an audience may be segmented into a dozen segments. In the online environment, where all user interactions are mediated by IT systems, users may be segmented into unique individuals. Managing many thousands of individually customized sites is not a simple job.

Campaign Management tools will manage the users' preferences and behaviours, while Content Management tools will manage content that they will access. At the point of delivery (the web site, or email campaign), the two groups meet and content will be selected for a user to reflect their preferences and behaviours. Best-of-Breed players in each segment will relatively easily integrate, enabling rapid construction of eCRM solutions.

Content Syndication

Many sites are now pulling content from, and pushing content to, systems run by other organizations, best handled by a CMS.

At its simplest, this will allow you to pull headlines and articles from a relevant news site, or gain an income stream by syndicating your own material to other site. Alternatively, it could be a way to share product specifications, prices, marketing information and availability with suppliers and vendors.

If you're selling to a large retailer, expect them to demand product features delivered directly to their CMS within the next year. Planning and building this facility before they do so will win you a major advantage.

Many business-to-business suppliers are struggling with many catalogue formats they are managing, and are unable to satisfy either suppliers or buyers. A CMS will automatically handle the interfaces and pull content from multiple vendors without missing a beat.



Control of non-web content, channel integration and business re-engineering

Companies traditionally put web-production into a silo. Often, the first that a web team would hear about a new product would be when the first public ads were released. To be really effective, the web channel needs to be integrated into the core business as other communication channels are, which has implications regarding workflow and signoff of communication.

In the journey towards an effective CMS strategy, conflicts between departmental silos will be unearthed. Introducing a CMS can be the lever to ensure that R&D talk to marketing, rather than throwing products over the wall and expecting them to be sold without customer insight. If implemented completely, product information can flow between marketing, R&D and suppliers in a smooth flow, reducing departmental conflict.

Reduced maintenance costs

By automating the building of pages on your site, you will cut substantial sums from the site's maintenance costs. A reasonably content rich site could need 250 or more updates a day, each averaging around 2 man-hours to produce and test.

As a Web Publisher with the competence to get the edits right and not break the site will cost from \$300 - \$500US per day, you could be cutting \$20,000US from your bottom line every working day.

With a CM solution in place, the potential annual savings ranges from just under \$18K for a small Web site with one person (full-time) to more than \$175K for a large Web operation with ten full-time people responsible for updating Web content on a daily basis.

Furthermore, it can be the lever which ensures that the eCRM nirvana of cross-channel, single customer view comes about, as the customer will be able to view the same content as the call centre and the sales force and the marketing department.

Number of full-time* people responsible for updating Web content	Savings per hour using non-technical staff instead of IT/Web staff	Projected total annual savings with Content Management solution deployed
1	\$ 8.55	\$ 17,784
3	\$ 8.55	\$ 53,352
7	\$ 8.55	\$ 124,488
10	\$ 8.55	\$ 177,840

Source: Salary.com salary wizard using data as of October, 2000.

Non-technical staff average median hourly pay = \$17.07 Estimate includes the following titles: Human Resources (\$15.65/hour); Office Manager (\$17.77/hour); PR Specialist I (\$17.33/hour); Marketing Assistant (\$17.54/hour);

IT/Web staff average median hourly pay = \$23.91 Estimate includes the following titles: Web Copy Editor (\$26.15/hour); Web Designer (\$24.20/hour); Webmaster (\$24.99/hour); Web Content Specialist (\$20.30/hour)

Calculation: \$23.91 - 17.07 = \$6.84, plus 10% of non-technical staff salary needed for approval and revision to content = \$8.55 x 2080 hours/ year for a full-time person responsible for updating Web content (e.g., text, graphics, documents, audio files, video files).

* "Full-time" assumes 40 hours/week with 100% of time spent updating Web content

Reduced risk of litigation and adverse customer reaction

Publishing the wrong price or availability information on your site can bring strongly negative PR and class-action lawsuits, and hit your margins. Similarly, some industries - finance and pharmaceuticals for example - are highly regulated, where communicating the wrong interest rate or disclaimers can have serious legal consequences.

By systemizing the publishing of your content through automated workflows, you can ensure that all content is checked and signed off before it is publicly exposed. Alternatively, you may wish to develop a user community by enabling users to contribute to your site.

In particular, ensuring that all content supplied by a user group perhaps numbering in the thousands is approved and launched in appropriate timescales and is available for removal will require all the automation help that you can get.

WHAT IS THE DOWNSIDE?

Introducing a Content Management System is no small matter for an eBusiness. It is after all a strategic tool. In developing your system, you will expose process and infrastructure issues that may have been papered over for some time, and be forced to resolve them. However, as the scope and scale of content delivered to customer touch points increases, it becomes a basic requirement of being in eBusiness. Without it, your ambitions for growth are unsustainable.

6 core CMS requirements

Almost every CMS will require the following:

1. Automated, audited workflow/signoff process
2. Templates
3. Roles-based security management
4. Scheduled launch and archiving
5. Integration with back office systems such as campaign management tools
6. Scalability

You don't need a CMS (yet) if...

At least 4 of the following are true:

- You have a small organization where web publishing is in-house, and can communicate exceptionally well with content creation
- Your site is small and doesn't update frequently in content or structure
- Your online operation doesn't perform any personalization
- You don't integrate content between the web site and retail outlets, call centres, email newsletters or other channels
- You don't need to manage specifications from R&D to customer support
- You are not offering customers a community where they can contribute to a site
- One individual has intimate knowledge of the entire site (and others have intimate knowledge over their own sections)

You should revisit this regularly at least quarterly and whenever you add additional functionality or content areas.

CONCLUSION

Businesses and organizations currently using a dynamic Web site (or planning to upgrade their static site to dynamic) should consider implementing a CM solution. With an appropriate solution in place, employees (and sometimes vendors) are empowered to contribute content while IT and Web professionals maintain control over a site's look and feel.

The ultimate objective is to provide a process whereby timely and engaging Web site content encourages site visitors to stay longer and make frequent repeat visits. When up-to-date and relevant Web content becomes a reality, the customer experience is greatly improved—translating into increased customer (or employee) satisfaction and loyalty.

"Always remember... on the Web, a good customer experience brings higher revenues, more customer retention, and better branding".

–John Shenton, Global Millennia Marketing, Inc..

Whatever revenue model a site is based upon, companies and organization can directly increase their bottom-line metrics with an affordable and simple Web content management solution in place.

ABOUT GLOBAL MILLENNIA MARKETING

Global Millenia Marketing Inc. is one of the first of a new breed of integrated Internet marketing communications companies and is comprised of four on-line divisions. Our ability to work closely at all levels optimizes synergy between the different divisions from the strategic planning stage right through to tactical execution of all our projects.



John Shenton B.Eng., President of Global Millenia Marketing, is a dynamic, adaptable and results driven Senior Executive with many years experience in building and operating companies in N. America & Europe, creating market presence and increasing sales throughout domestic and International markets worldwide.

His strong technical and analytical background is supported by comprehensive sales, marketing, operational, and general management skills in the computer, Internet and telecommunication industry.

He has a great deal of International experience, having lived and worked within the United Kingdom, Germany, Switzerland and Canada.

As the use of New Digital Media such as the Internet, CD-ROM's, DVD's, increases, the importance of coordinating its use with traditional printed media becomes paramount. We are uniquely placed to address this need, having evolved from genuine specialists in both fields. We work with our clients to develop effective, long-term partnerships, which encompass every facet of the management and marketing functions, from initial project consulting through creative design and production, to corporate presentation management.

Our teams have many years' industrial experience in the fields of Sales & Marketing, Finance and Information Technology in North America, Europe and Asia. This background allows us to quickly empathize with our clients to understand their markets, their objectives and to identify their business needs. Through strategic planning and the creative application of our skills and experience, we deliver effective total marketing communications solutions, which meet, and typically exceed, their pre-defined goals and expectations.

Operations are controlled from Montreal, Canada. From here we are able to provide service on a global basis in English, French, Chinese and Arabic to a diverse range of companies from start-up to established corporations.



Integrated Internet Marketing & Web Site Design



Graphics, Identities, Illustrations and Branding



A leading Internet Solution Provider



Consulting, Promotion and Planning