

Content management systems getting it right

David Green passes on some tips on deploying a content management system.

I've tried to write this article in plain English, avoiding the excesses of the business-speak lexicon but, despite my best intentions, some acronyms and jargon simply refused to go away – the nasty things.

At the most basic level, a content management system organises content and the publishing workflow and processes it as a finished web page or document. Just some of the issues driving the uptake of content management systems include:

- an ever-expanding growth in electronic communications across multiple media
- the recognition that content is critical to basic business operations
- regulatory requirements to provide an audit trail and ability to recover particular versions of documents
- economies of scale and operational efficiencies resulting from everyone using the same systems
- ability to provide greater control over the presentation of content, particularly for business brand identity.

Content management (CM) is nothing new – but it has been undergoing massive change. CM emerged from the document management software market in the late 1990s. Originally CM applications were focused on managing discrete, single websites but in 2000 the market evolved to span content management across entire organi-

sations (the 'enterprise'). In addition to a new breed of software vendors focused on CM (e.g. Vignette, Interwoven), other CM vendors included document management companies (e.g. documentum, OpenText, FileNet, Stellent), software companies (e.g. Hummingbird, Autonomy, Microsoft) and IT behemoths (e.g. IBM).

In the aftermath of the dot.com stock market crash and subsequent retrenchment in technology investment, the public sector emerged as a major driver of the CM software market – in the US, the Health Insurance Portability & Accountability Act (HIPAA) and DoD5015, which required federal agencies to comply with conversion to paperless contracting, acted as stimuli. Meanwhile in the UK the government's 2005 deadline for delivery of e-government, together with the Data Protection Act and the impending Freedom of Information Act (which comes into effect on 1 January 2005) have prompted local authorities to act.

Distinctions blurred

Over the years, the distinctions between document management, website content management and enterprise content management have blurred and the technology continues to improve and mature. Just 18 months ago an enterprise content management (ECM) system was basically a software toolkit that had to be built out.

Vendors now offer products that can work 'out of the box', and that can easily be configured to your specific needs.

Now that IT investment by private corporations has been picking up, ECM is identified as a major area for expenditure in the next few years. According to research firm Forrester, 32 per cent of US firms

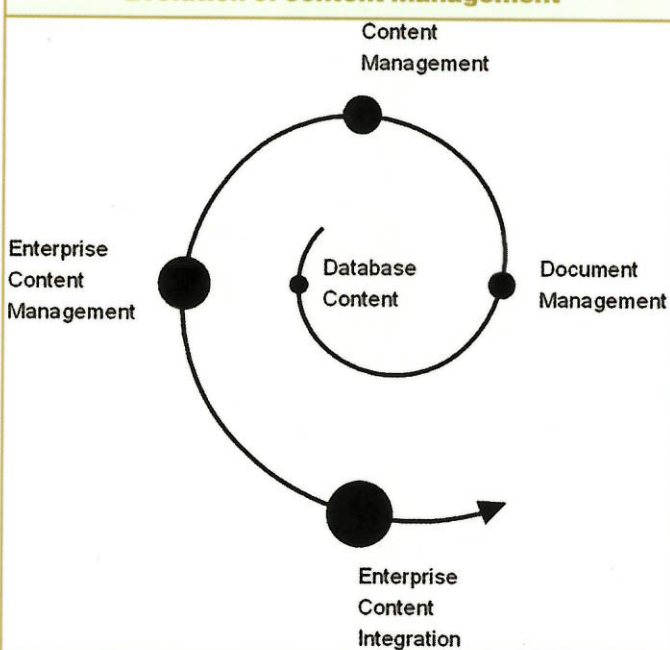


intend to invest in ECM over the next year. A survey of 206 companies in Western Europe by another IT research firm, the Meta group, for ECM vendor Stellent, revealed that many firms recognised the benefits and cost savings of ECM.² Again regulatory changes are having an impact on the market – the Sarbanes Oxley Act in the US, the Higgs report on corporate governance in the UK, Basel 2 for the international banking sector, etc.

More recently, vendors are pushing packages referred to as 'enterprise content integration', reflecting the broader range of functionality they offer – based on open standards, broader application and infrastructure platform support (e.g. portal integration) and sophisticated metadata and digital asset management capabilities. US research firm Gartner refers to such products as 'smart enterprise suite', and in mid-May published a ranking of 22 vendors in this area.

Not surprisingly, the drive towards enterprise content management is also fuelling the uptake of enterprise search (e.g. Verity, Convera, Autonomy and FAST) – well, all those documents do need to be comprehensively classified and readily retrieved. With the broadening scope of ECM and the growing importance of both electronic records management and web-based communications, there is fierce competition between ECM vendors and increasing rivalry with their enterprise search partners. In what are viewed as

Evolution of content management



Features of a content management systems

- Integration of the editorial and publishing process across an organisation
- Streamlining of the workflow of the content lifecycle: capture > create > manage > deliver > maintain (expire/archive)
- Distinction between different content types and templates
- Audit trails and version control
- Online business process automation
- Administrative tools for workflow, security, archiving, etc.

defensive moves, Verity has acquired CM vendor Tower Technology and e-forms specialist Cardiff Software in an attempt to broaden its scope.

Interoperability is a critical issue and open standards are an increasingly central element for ECM vendors. It is therefore interesting to note that, despite the rapid evolution and maturation of ECM over the last two years, Microsoft, with its proprietary code and .NET framework, has the most up-to-date product in this area – with the dead-pan title Microsoft Content Management Server 2002 (although the MS SharePoint portal product has been doing well).

Such has become the importance of ECM, that it is now regarded as 'mission-critical' in many organisations.

However, ECM demands a holistic approach. To meet this need, vendors have either acquired, or sought partnerships with, other technology firms and consulting firms. Content management services are provided by companies such as IBM, Accenture, Xerox, KPMG, Cap Gemini and EDS. (My employer, Deloitte, also offers such services in a number of countries.)

An IDC report, *Worldwide and US Content and Document Management Services*, identifies five key areas that content management services can help an organisation with:

- **Planning & Design:** needs analysis, vendor selection, capacity planning, etc
- **Implementation:** project management, system configuration, user interface design, integrating other applications, documentation
- **Operations:** business recovery/contingency planning, systems and asset management
- **Training:** technical, user and information science (content classification, information architecture, metadata/indexing, search engine performance) – although readers of this magazine are suitably qualified to dispense with the need to pay for such services (indeed we could sell to the consultants!)
- **Support:** telephone, email, onsite and preventive maintenance.

Selection advice

Despite the almost bewildering array of products and services on offer, and issues to address, there are some basic rules that apply to anyone considering purchasing a content management system:

- Be clear that you actually need a content management system. While a CMS will improve the delivery/retrieval of content across an organisation it will not improve the quality of the content on a website – that's an editorial and writing issue (any complex website will need a managing editor – which a CMS is no substitute for)
- Think long term: secure senior management support and understanding of this

Stages of a CMS

- Specification
- Product development (less of a task these days)
- Implementation/Deployment
- Support maintenance
- Development/update

commitment

- Avoid the word 'project'. It implies it's a one-off event and that no future funding will be required for maintenance, continuing development and support – content management is a process
- Decide what scale of CMS is required. Single site? Business? Enterprise scale?
- Carefully consider information architecture, metadata (whether automated or manual) and a taxonomy (a third party taxonomy, common XML schemas or your own custom-created taxonomy)
- Ensure that you comply with legislation (e.g. data protection), security and regulatory obligations
- Detail your required specifications and conduct a vendor 'beauty parade' – IT research firm Forrester produces a useful checklist of questions to ask³
- Realise the decision-making process will be longer due to the very nature of what's involved. You will need stakeholders from at least the major departments in your organisation, so allow sufficient time for this if working to a deadline
- Don't forget a Digital Asset Management library.

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Pitfalls to avoid

Some of the typical problems that arise with the deployment of a content management system include:

- It wasn't needed in the first place (doesn't apply if you're thinking on an enterprise/organisation-wide scale)
- It was seen as a one-off 'project' with no planned development
- It was driven solely by IT
- Change management was not sufficiently considered
- Content staff fail to specify requirements clearly, e.g. a flexible, detailed editorial calendar function, iterative, rather than straight-line editorial workflows, etc
- There are poor internal communications. IT developers and content generators and writers wail they are 'from different planets'. (Except of course they aren't. As a feminist postcard goes, 'Men are from earth – so are women – Deal with it!')
- It was 'built in a bubble' – the configuration of the CMS developed was not aligned with your business strategy.

Deployment

Of course it's no use building a CMS platform if it is not successfully adopted within the organisation. Users don't have to be enthusiastic, but it is important that they are informed and able to contribute to developments as they occur – early user support is critical to user acceptance.

As part of a team that has deployed an enterprise content management system

across Deloitte practices in more than 90 countries, here are some of the deployment lessons I've learnt:

- Establish support processes for deployment, operations/use and technical troubleshooting – each will generate different types of enquiries which need to be routed appropriately
- Train users according to their preferred learning style – whether its one-to-one or as part of a group. There will always be a spectrum of ability in any large group of people
- Develop thorough documentation – there should be separate manuals for general CM users and more sophisticated CM administrators. Good documentation can reduce support costs by addressing queries at the point of source. Occasionally highlight certain topics/aspects of your CM tool in your communications
- Specify standards and guidelines (e.g. web style guide)
- Ensure you are using every available channel of internal communication and that your messages are consistent across these. Communication also needs to be regular
- Work with early adopters. Certain departments (or more accurately the personalities

within those departments) will recognise the benefits to be gained by adopting the ECM. They will help generate internal 'success stories' that can be used to win over more recalcitrant departments. One size does not fit all, so be flexible in your approach to deploying the ECM system to different departments or communities

- Involve users and stakeholders in the process. This can operate on a variety of levels, ranging from a web form to submit enhancement or development requests, to general conference calls to discuss ideas and issues more broadly. Adopt an 'account management' approach to important groups.

An important barrier to ECM deployment is that it can be viewed as a series of semi-connected projects. Content management systems are not a one-off project – they should be viewed as a continuing and iterative process that provides the comprehensive information support that business processes increasingly require. ☺

References

- ¹ Vendor profiles can be found at www.forrester.com/techrankings or in the May issue of *Information World Review*.
- ² This report complemented a previous Meta survey of US firms and is available for free – registration required – at www.stellent.com/metaresearch
- ³ *Information World Review*, February 2004.

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