



## About Content Management

### Introduction

Within the framework of business organisations and commercial operations, there are numerous definitions about what content is, or means. It's the same with information. Before we look more closely at what content management is, however, it's important to get a few facts and definitions clear in our minds.

Content is produced everywhere, constantly, in an organisation. It's more than data (which is also produced and processed constantly in an organisation). But put simply, content is data with a context. For example, the numbers 7 and 10 are clearly data values: but they have no context or meaning.

If, however, we use the terms Microsoft Windows 7 and Microsoft Windows 10, they now begin to have a context and start to mean something. Those terms, either separately or used together, have become content. Not very useful content as it stands, but nevertheless qualifying those numbers with a context takes them one step forward in becoming more meaningful to human beings, and not just machines.

But they do not yet by themselves constitute information. It's only when we add a further, higher level of context and also purpose - and make it useful to someone - does it evolve into something we can call information. For example, the statement: 'You need to have either Windows 7 or 10 installed on your computer before you can download and install our application', has now become information.

*That's because it now has a meaning and a purpose (that is, to advise somebody) and now starts to relate to a target audience of people who need that information, for example to perform a task and do a job.*

And then there is also a 'concept' we refer to, often in a vague sense, as *knowledge*. That's another concept that has been defined in many different ways by many different people across both the academic and business worlds. For us, knowledge simply means what we acquire through both the gathering of information and the experience we gain from using that information effectively in any organisation, commercial or academic.

We believe that great content creates great information. And great information helps build residual knowledge. All three are vital assets for any company or body. If you have the information you need at hand to do your job more effectively, you more readily and quickly acquire the experience and the knowledge you need to become an asset to the company you work for. That way, you serve your colleagues and your customers better and you will likely do it better than your competitors.



“ Organisations are flooded with content, but content doesn’t become information and information doesn’t turn into knowledge unless someone knows it’s there, can get to it with minimal pain, and can repurpose it by creating new information from existing content. Content that is inaccessible is not yet a corporate asset. Content that is hidden away in long documents and impenetrable manuals lacks the flexibility we need to act upon it as a corporate asset.

➔ Source: [Dr. JoAnn Hackos, Comtech Services](#)

## What exactly is content management (CM)?

Content management was founded on a vision to improve the user experience in receiving and processing information. It was built upon several key principles that dealt specifically with making information better organised, easier to understand by human beings, more easily stored and managed, and more logically structured to allow it to be reused for different purposes and for different target audiences to fit business and market demands.

Adopting content management is truly a bottom line business decision. That means, from a business perspective, that the right information is being engineered and is flowing out to support the professional needs of company employees, 3<sup>rd</sup> party developer and partner organisations, and all the fee paying customers themselves. It’s a bottom line business decision simply because it’s about value creation, customer retention, and ROI. Companies that don’t understand that will go under and be consigned to the graveyard of companies who failed.

The majority of companies that build and sell products of any kind, not just software, have deployed document management and/or content management systems in an attempt to improve the organisation and upkeep of vital business and product information, including digital assets and more traditional documentation. Companies also need to manage and store content more cost-efficiently and make it more readily available across the enterprise in more useful - and reusable - ways.

The days when technical documents for products were printed out manually and issued in ring binders are now, thankfully, pretty much over.

## Document Management vs Content Management



*Content management systems vary from document management systems in one key area - the type of information they manage. Document management solutions are designed specifically for data contained in documents and files like Word, PowerPoint, Excel spreadsheets, PDF, and other popular formats. Their purpose is primarily to digitize and archive files, and track and manage new documents throughout their lifecycle, as they are written, revised, and updated. Many document management systems include advanced imaging and scanning capabilities (for digitization of hard copy files), that are not usually found in content management systems.*

*Content management systems, on the other hand, are more about the logical organization and improved accessibility of various types of electronic information. This includes not only the kinds of files that are managed by document management applications, but a broader range of digital assets. For example, audio, video, Flash, and multimedia files, as well as raw data collected from various third-party Internet sources.*

➔ Source: [BusinessSoftware.com](http://BusinessSoftware.com)

## Static Content vs Dynamic Content

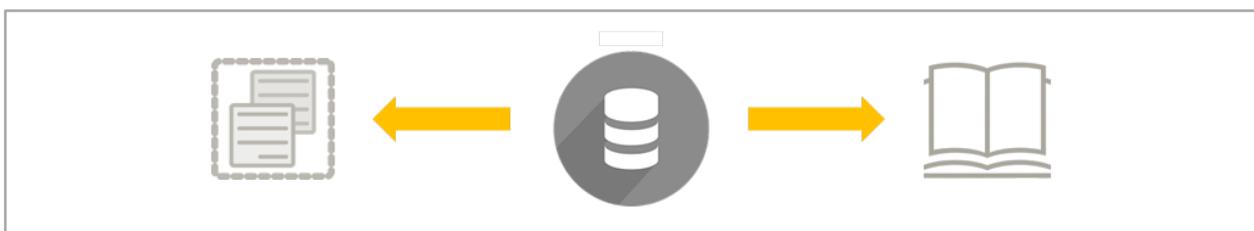
Your organisation's content can also be classified into two other distinct types: static content and dynamic content. Put simply, static content is information that is updated infrequently, sometimes never. Whereas dynamic content is information that is updated regularly, sometimes on a daily basis or even hourly basis.

- Examples of static information that gets published on a website are traditional technical documents and manuals, release notes, user guides, even API source code comments. These are usually delivered with a table of contents that help the user find a specific topic of information embedded somewhere inside the document.
- Examples of the dynamic content we typically see being published includes news releases, discussion boards, knowledge bases, blog posts, website comments, and any content that can be personalised by user preferences.

The majority of companies that build and sell products of any kind, not just software, have deployed document management and/or content management systems in an attempt to improve the organisation and upkeep of vital business and product information, including digital assets and more traditional documentation. Companies also needed to manage and store content more cost-efficiently and make it more readily available across the enterprise in different ways to meet different business needs.

## Structured content versus unstructured content

When it comes to solutions for managing and publishing your content more efficiently and cost effectively, you need to understand how your content is currently stored within your organisation. Essentially, your content exists in two different forms: *structured* and *unstructured*.



- Structured content differs from unstructured content primarily because it can be much more easily searched and processed by computer programs such as a management information system (MIS) or, for example, an enterprise resource planning (ERP) system. More importantly, structured content has been organised in a way that allows its specific ‘elements’ or components to be searched, queried, and accessed directly (by both machines and humans). Examples of structured data, or content, include relational databases, spreadsheets, and the data held inside SGML and XML files.
- Unstructured content can be defined as information or data that has been bundled together into proprietary file formats, making it very difficult for humans and computer systems alike to access, search, analyse, process, manage and, significantly, to reuse or repurpose. Typical examples include Word documents, PowerPoint presentations, PDF files, images and illustrations, and Email.

## The problems with unstructured content

So, let’s consider what happens in unstructured content, say, like a large Word file, when we try to locate information in order to reuse it in another document or presentation or to create a web page. What happens is that a huge underlying problem emerges.

That’s because each time content is copied, shared, and repurposed, another version of that information content is created. The changes made to the new version are not reflected back in the original version. This leads to even more confusion, wastage in human time and effort, frustration, as well as potential non-compliance and regulatory concerns.

*Many industry analysts, including Gartner and Forrester, continue to estimate that up to 80% of information held inside companies remains in unstructured form. This is particularly worrying in companies that operate in highly regulated industries, such as Aerospace and Financial Services, where delivering the wrong information carries a high level of risk and can lead to heavy fines from regulatory bodies, and even legal action.*

## Content in the Digital Age

In today’s digital age, companies are having to transform the way they process and store informational content and re-assess how to deliver it to their customers in a way that offers the greatest value.

The requirement to deliver digital media content such as audio, video, and software has been a game changer. Also, customers now expect to interact online with a company’s brand, products, and services through multiple channels and multiple formats. Digital assets are fast becoming as important to a business as traditional documentation. And customers are redefining the company’s value chain because they just want the informational content that matters to them and their own business operations.

Digital content can only be accessed online, for example via a web browser or from a specialised software development toolkit. Traditional technical information and other product documentation (usually as MS Word documents, PDF files, and help files) can also be made available online for download or can be printed out and distributed manually. But, as discussed above, there still remains a high and inefficient workload in order to get the actual information needed.

In the meantime, though, redundancy and the multiple different versions of an organisation’s content, existing in multiple different places (or silos), continue to grow unchecked.

## What CM solutions are available today?

We wrote above about the subtle, yet highly important, need to understand the differences between data, content, information, and knowledge. In trying to understand what content management is, it's also vitally important to appreciate the subtle, yet highly significant, differences between the types of content management solutions available in the market place today.

So, before we look in more detail about what content management can do for you, your customers, your value chain, and your business bottom line, let's first look at the four main types of content management systems available today.

CM solutions comes in many different shapes and sizes, and the list of new ones (or new acronyms for the same ones) appears to get longer every year. But functionally, they all boil down into four basic variants: enterprise content management systems, document management systems, web content management systems, and component content management systems.

Whatever the label says on the box, they are all 'systems for managing informational content' and they all share similar and overlapping functionality, which is often confusing and also risky for potential purchasers. All four of them also provide their own specific solutions to specific business challenges and problems. It is of course vital that you select the right solution for your content strategy, for your business, and for your customer value chain.

### Enterprise content management systems

Enterprise content management (ECM) is often described more in terms of its 'organisational role' than in terms of a specific technology or set of technologies (even though it offers an impressive set of features and technologies).



That's not surprising because the primary goal of ECM is to manage all a corporation's documentation and other information assets at the various stages of their lifecycle in a secure way that directly supports, and connects with, the company's business processes and the commercial and legal requirements of the company's business operations.

It also usually includes functionality to handle digital asset management, records management, business process management, web content management, and more besides.

### Document management systems

Document management (DM) shares more in common with ECM than the other two variants described below. Its primary role is to organise and centralise a company's documentation, controlling its security and the access to it throughout its lifecycle.



DMS features include secure check in/check out and also version control, as well as automating other standard workflows like review, approval, audit trail reporting, and archiving. Note that a DMS is often considered to be a 'sub-component' of an ECMS because document management is more and more nowadays one of the main features of ECM solutions from a number of different vendors (large and small).

In fact, the DMS is the original 'core' solution, and ECMS simply build on and extends that core. And it's this point, actually, that has been known to confuse and mislead potential purchasers.

### Web content management systems

A web content management system (WCMS) and a content management system (CMS) are terms that are often (and incorrectly) used interchangeably, particularly during the last two decades as informational content went online and web technologies matured.



A WCMS is a type of CMS, not the other way round. Put simply, WCM is about organising, managing, and tracking informational content as digital assets for publication to the Internet or a company intranet. Used effectively, a WCMS can deliver customised content to different audience profiles and also to different channels, such as social networks and mobile apps.

Increasingly, today, companies are not just using WCM for publishing information. They are using it to boost online marketing and support the full range of customer engagement activities.

WCM is another essential building block in a company's content strategy. You'll certainly find WCM being used by the company's corporate communications and marketing departments.

### Component content management systems

Component content management (CCM) works with content at a lower, more modular, level, in which a document's constituent parts have been broken down into elements or components. These components are usually referred to as single-source topics or modules. This capability is very powerful and is very special.



The rationale behind managing content at component level, rather than at document level, is really quite simple. It gives us you the power, the flexibility (and the security) to track and reuse content whenever you want, wherever you want, without copying and pasting and, importantly, without having to amend multiple documents just because one thing changes.

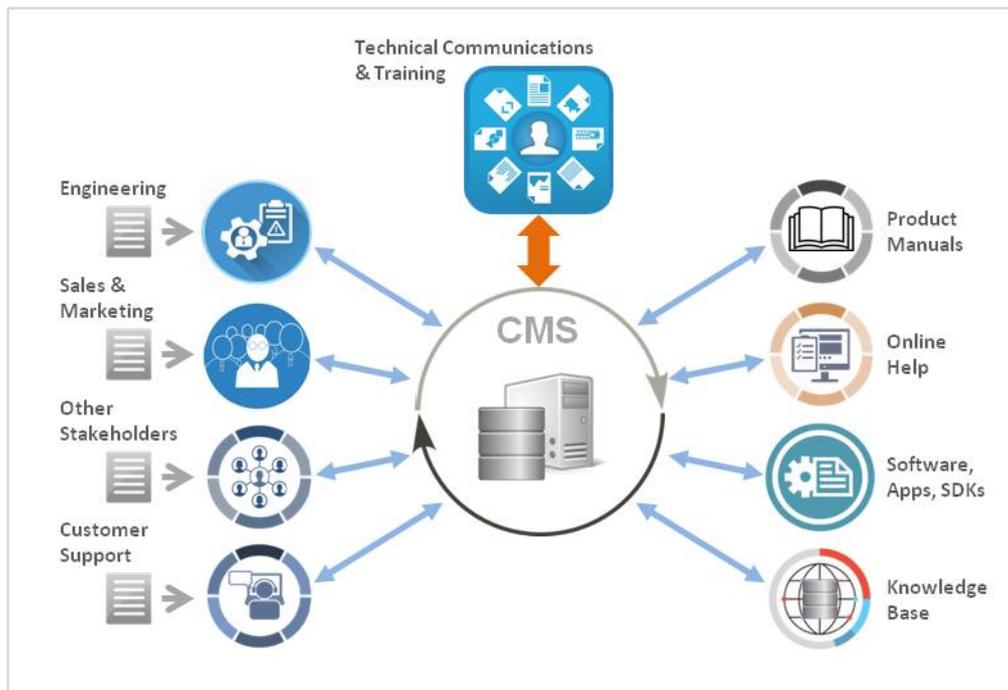
We devote further articles and resources that can help you understand CCM and the power it offers your organisation. Check out our resources menu.

## What could a content management solution look like?

The figure below shows a typical generic solution that we are seeing in operation more and more today, especially in companies building and delivering hi-tech products, such as computers, portable devices and other consumer electronics, software and applications, and even products in the automotive, aerospace, and pharmaceutical industries.

With CM, all the key teams inside the organisation no longer 'do their own thing', sending their own version(s) of documentation directly to the customer. Now, they collaborate with the enterprise as a whole by contributing their specific specialist content into a centralised (and centrally managed) repository - the content management system.

And, from there, the technical authoring and publishing team verifies and reuses the content, building and publishing the documents and information sets that the customer and partner organisations, and the employees themselves, actually want and need. Rather than multiple different versions of information, a single source of truth now begins to emerge. Customers are going to be very happy with this. And much more productive besides.



## The value of content management

The value of content management, whether we are talking ECM, DM, WCM, or CCM, lies with the customer and the customer's ability to optimise, create, reuse, and ensure ROI. Remember, the customer lies everywhere in the 'ecosystem': the entire network of employees and information workers, partners, and 3rd party developers, legal and regulatory bodies, the investors and shareholders themselves, and the bottom line paying customers. Everyone, in fact, with a stake in getting a product or service to market and in the purchase of that product or service.

“Content management has always been viewed through the prism of technologies – what it is. I think increasingly content management will be viewed through the prism of what it does. The content management industry is using new terms and talks about experience management, customer engagement, etc. It's all about the connected customer experience, the combination of analytics, collaboration, organizational processes and mobility to create systems that better engage customers, employees, and partners.

➤ Source: Extracts from I-SCOOP.EU: The present and future of content management: John Mancini, AIIM leader.

The value proposition is essentially quite simple: it's about accessing the informational and intellectual capital locked up inside an organisation, unlocking it, reusing and repurposing it for the ultimate good of everyone in the ecosystem: for everyone involved in the E2E supply and value chain.

When you start to look at building a content strategy for your company's products, the chances are you'll begin by brushing up on the features and technologies behind the different variants of content management systems. Then, only when you understand those, will you feel better placed to make the right decisions and avoid making the mistakes that others have made before you. Mistakes that, in many cases, ended up with the content management budget squandered and the purchased CMS left to gather dust somewhere at the back of the IT server room. **We can help you avoid those costly mistakes.**