

Choosing and Using A Content Management System (CMS) Guidance for Managers in the Third Sector

Executive Summary

A CMS is an organised way of creating and maintaining a web site. The work is done through the website itself. It could be compared to the change from writing an essay on paper and then getting it typed up, to sitting in front of a word processor and editing it on screen. The content is produced by an Author and changes are approved and published by the Content Manager. The more technical role of a CMS Manager is separate from these responsibilities and can be provided by an external organisation.

CMS offers considerable advantages in planning and maintaining extensive websites, they allow users to be allocated roles within the work-flow required to produce the site. All changes to pages are associated with a user. CMS can also offer advantages in searching the site and in the area of accessibility. Well designed CMS sites are flexible and look and feel can be changed easily.

Management of Change must be considered when deploying a CMS; It is possible to deploy a CMS effectively with very little delegation of content production and this may be the solution for many small organisations. The key technical issue is ensuring the sustainability of the solution.

In choosing a CMS there are strong reasons to adopt an Open Source solution; – this choice improves sustainability. The most important factor in the final selection is the support available, and this means that choosing a popular CMS makes sense.

Deploying a CMS should be part of an overall IT strategy. It is possible to use one within the organisation to improve communication and collaboration, whilst lowering overall IT costs.

Intended Audience

<i>Role</i>	<i>Suitability</i>
Managers and Directors	*
IT generalists	*
IT technical / specialist	

Source

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Table of Contents

1. What is a CMS?	7
2. Understanding a CMS	7
2.1 Creating content	7
2.2 Users, Roles and Responsibilities	7
2.3 Responsibility across the website	8
2.4 Work-flow within a CMS	9
2.5 Having more than one version of a document	9
2.6 Searching the website and the archive	9
2.7 Separation of content and presentation	10
3. Challenges of managing a CMS	10
3.1 Management of Change	10
3.2 Technical Management	11
4. Choosing a CMS	11
4.1 Open Source or Proprietary	11
4.2 Which CMS?	12
5. Strategic use of a CMS	12

1. What is a CMS?

In its most general terms, a content management system helps the organisation, control, and publication of a large body of documents and other content such as images and multimedia resources. **This document focuses on web content management, where the system exists to ease the processes involved in producing and managing web content and the web sites themselves.**

A CMS enables the majority of the work involved in creating the web site to be done through the web site itself. The following are generally identified as key functions of a CMS¹:

- Import and creation of documents and multimedia material
- Identification of all key users, groups and their content management roles
- The ability to assign roles and responsibilities to different content categories or types.
- Definition of the content work-flow tasks, often coupled with event messaging so that content managers are alerted to changes in content.
- The ability to track and manage multiple versions of a single instance of content.
- The ability to publish the content to a repository to support access to the content.
- Searching the content as well as navigating to it.
- Some content management systems allow the textual aspect of content to be separated to some extent from formatting. For example the CMS may automatically set default colour, fonts, or layout. This is often done using cascading style sheets (CSS) which can be customised.

2. Understanding a CMS

2.1 *Creating content*

A CMS will provide tools to help the user create content; in particular, most have on-line editors so the user can work in a familiar environment, similar to a word-processor. The editor produces material in exactly the format that the CMS can handle, so that there are no problems over converting the format of this content.

CMS will often include ways of importing content from external sources such as word-processors, spreadsheets and other software. In this process, there is a risk that formatting will not be perfectly preserved.

Key point:

The efficiency of any computerised process is down to the users being prepared to use it! If the users are not preparing the majority of the web content on the CMS then it will not work as well as it could.

2.2 *Users, Roles and Responsibilities*

Each user of a CMS should have a personal account. These need not, and should not, be

shared. This will give them an area on the CMS in which they can create, edit and store documents – and can then make them available to others for comment, scrutiny, approval and publication.

Users can then be assigned differing roles and responsibilities. Table 1 presents one way of viewing these within in a CMS. Note that a user of the web site who is not logged-in may look at the public web pages, and may also be able to add comments to certain pages if those permissions have been granted.

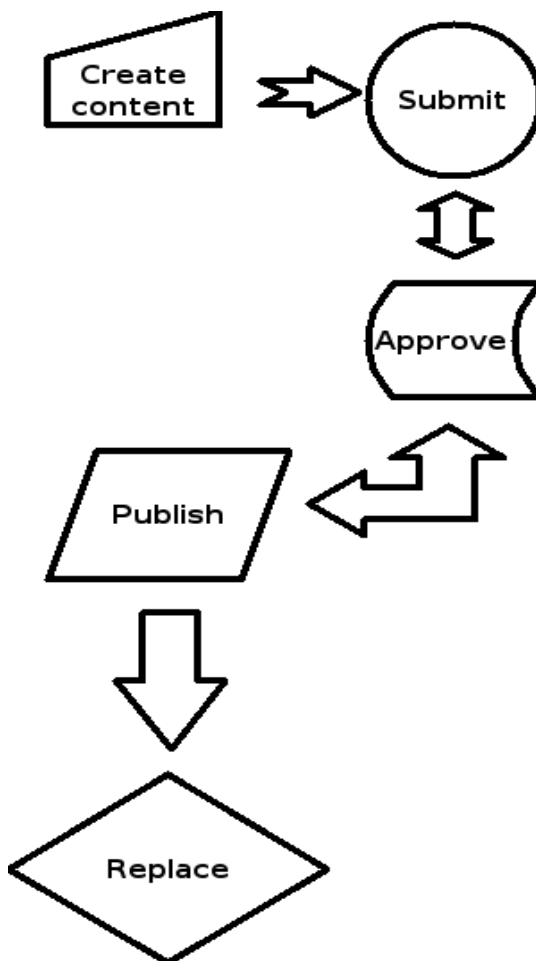
Role	Responsibilities
Viewer	None
Author	<ul style="list-style-type: none"> • Collection and creation of content • Responding to requests to create or edit content
Content Manager	<ul style="list-style-type: none"> • Quality control over the content • Identification of required content • Delegation of responsibility of authoring and editing • Approval of pages for publishing on the website • First line support for authors
CMS Manager	<ul style="list-style-type: none"> • Ultimate look and feel of the website • Production of templates and complex pages • Security and technical issues

Table 1 – Roles and Responsibilities

2.3 Responsibility across the website

Different parts of the website are likely to have different purposes and audiences. As a result the users occupying roles will be different. The first page a visitor sees when entering the main website, often called the 'homepage', is a crucial page, so decisions about changing it may fall to a committee or marketing staff. The general principle is that responsibility should be delegated as far as possible – so that the user with Content Management rights for a particular area of the website should be selected from someone who understands both that area of activity and its relationship to the organisations overall intentions.

2.4 Work-flow within a CMS



Document Life Cycle

CMSs allow many users to create content that can then be combined into a single website.

1. The Author creates the content - under various headings.
2. When ready the content is submitted.
3. A Content Manager approves the page.
4. The page is then published on the website.
5. The page is then retired or modified.

This process can be repeated.

Advantages:

- Many people can contribute.
- Overall control can be maintained.
- The site becomes responsive.
- Each user has a folder which holds their own work.

Communication between the different users is assisted by the CMS.

2.5 Having more than one version of a document

In many situations there is a need to maintain different versions of a document. One example might be the preparation of a set of pages referring to a future event. The page will need to be developed in various forms – one long in advance of the event and one for use closer to the event for example. The CMS allows one page to be published, and then modified for use as the needs change. Some CMS can also keep track of who modified a document and what changes were made, while others expect the user to add a note explaining their changes. These separate versions of the document can be reused.

Key Point:

This ability to add a comment to the document can be used in the editing and work-flow process. It can also be added, with caution, to published pages to allow Visitors to add comments. This feedback allows the website to become more interactive. It is possible with some CMS to hold such comments until they are authorised by a Content Manager.

2.6 Searching the website and the archive

Many CMS allow users to search documents. The range of documents that the user can

search will depend on which documents they have access to. Thus a visitor will only be able to see the public pages, whilst a logged in user will be able to search every document they have been permitted to read.

This ability means many organisations have moved towards using a CMS for internal processes as well as for their public website. One advantage of this is that users have a single system to log into, another is that the web access means that users can work anywhere with internet access.

2.7 Separation of content and presentation

It is common to want to change the look and feel of a website without changing the content. In order to make this easier, it makes sense to separate the content from the precise formatting. This means that the Author should only specify the text as appearing *more important* or in a *bullet list*, for example. The precise detail of how this will appear (colour, size and shape of the bullets, in the second example) need not concern the Author.

Applying these ideas means that the same content can be re-used if the organisation decides that it needs a different appearance for the whole website. An additional advantage of this is that the website can have good accessibility built in.

Key Point:

Though it is mootⁱⁱ whether the UK legislation requires organisations to make their websites accessible; there are strong arguments in its favour. A good CMS will make it much easier to construct a site that can be navigated by a visually impaired visitor.

3. Challenges of managing a CMS

3.1 Management of Change

The key challenges in migrating to and managing a CMS are organisational rather than technicalⁱⁱⁱ. The management of change from a 'webmaster' controlled website, to a devolved system raises the following key issues:

- How comfortable will people feel about delegating control over the content?
- How can people be encouraged to contribute content to the website?
- How can initial enthusiasm be maintained?

As with all change management, it cannot be forced or ignored – it needs to be negotiated and accepted. Each organisation has different needs and expectations. Table 2 presents two solutions that are worth consideration – if only as an intermediate step to complete delegation.

Solution 1:	Redeploy the effort
Assumption:	You have a webmaster who has been regularly adding content to a conventional site for some time.

Solution:	Migrate to a CMS and use your webmaster as the primary author.
Advantages:	Reliance on the technical skills of the webmaster is removed. Editorial responsibility can be placed appropriately.
Solution 2:	Marketing-led website
Assumption:	You have a defined responsibility for marketing and some resources allocated to this.
Solution:	Assign appropriate people involved in marketing to author and manage content.
Advantages:	Initial set-up and training is easy. Authoring can be delegated later.

Table 2 – Management of Change

3.2 Technical Management

Sustainability needs to be considered when looking at the technical solution of a project. Key questions to be considered are:

- Will employing an external provider be more reliable than internal expertise?
- Is relying on a single supplier or provider appropriate?
- Is the content stored in standard format so that it can be transferred if required?
- What potential is there for development and support of the product?

4. Choosing a CMS

There is no best CMS. There is, however, one major decision to be made before selecting a CMS...

4.1 Open Source or Proprietary

The last three of the sustainability questions point towards the selection of an Open Source solution:

- Is relying on a single supplier or provider appropriate?
An Open Source solution means that many businesses or an in-house technical team can support the system.
- Is the content stored in standard format so that it can be transferred if required?
All Open Source solutions have a fully specified and freely available file format.
- What potential is there for development and support of the product?
Selecting an active Open Source project will mean that there will be development and support available; should you require a specific feature your organisation can request or commission it.

4.2 Which CMS?

Unfortunately there is no simple answer to this question. However the key points to bear in mind are:

- Support is the biggest plus point.
- Specify your needs.
- Look at what your hosting or Internet Service Provider provides.
- Think about your users.

There are extensive websites^{iv} that are kept up to date with CMS comparisons. At the time of writing Plone^v and Drupal^{vi} are amongst the most popular Open Source CMS. The final decision should be taken in consultation with your technical advisers.

Key Point:

The most important factor in your decision is about support. You should have a choice in who supports your web provision, and adopting a popular CMS will improve your support options.

5. Strategic use of a CMS

The deployment of the CMS should be part of a wider IT strategy. It is possible to make the CMS a central part of the way that IT is used in your organisation. The important features of a CMS from this respect are that:

- It offers easy remote access to users' files.
- Users can share files with others and work collaboratively.
- Documents can be published to an internal audience – which can be searched by other users.
- It offers a single data store which can then be backed up securely.
- Many users will only require a terminal that will run a web browser
- Several offer integrated e-mail provision.

Strategic use of a CMS can only be done effectively where the users of the system are accepting of the project. The advantages, however, are considerable in terms of rationalising the use of IT and potential costs savings.

i http://en.wikipedia.org/wiki/Content_management_system

ii <http://www.webcredible.co.uk/user-friendly-resources/web-accessibility/uk-website-legal-requirements.shtml>

iii <http://www.adaptivepath.com/publications/essays/archives/000315.php>

iv <http://www.cmsmatrix.org/matrix>

v <http://www.plone.org>

vi <http://drupal.org/>