



Implementing a Content Management System

Better Practice Checklist

Practical guides for effective use of new technologies in Government



Introduction

Australian Government departments and agencies are increasingly using content management systems (CMS) to streamline the management of a variety of materials on their websites. Content management is a complex area. The selection of a CMS is the topic of *Better Practice Checklist 9, Selecting a Content Management System*. However, the success of the selected CMS will largely depend on how it is implemented and used.

A key role of the Australian Government Information Management Office (AGIMO) is to identify and promote 'Better Practice'. This checklist has been created to help agencies implement their CMS effectively. The items in the checklist, however, are not mandatory.

This checklist is intended to be used by those staff in agencies who have been given the responsibility to implement a CMS. The information within this checklist may also be relevant to Chief Information Officers, Information Management Steering Groups

and other senior managers. This checklist focuses on non-technical issues.

It should be noted that the checklist is not intended to be comprehensive. Rather, it highlights key issues for agencies. The checklist is iterative and draws on the expertise and experience of practitioners. The subject matter and issues are reviewed and updated to reflect developments.

Comments about the checklist and suggestions for additional checkpoints can be directed to:

Better Practices and IMSC Secretariat
Australian Government Information
Management Office
Phone: (02) 6271 1514
Email: better.practice@agimo.gov.au

Copies of this and other checklists are available at www.agimo.gov.au/checklists.

Acknowledgments

This checklist was developed with the assistance of Australian Government agencies. In particular, AGIMO would like to thank the Bureau of Meteorology, the ACT Chief Minister's Department and members of the Content Management Community of Practice www.agimo.gov.au/resources/cop/cm.

In addition, AGIMO would like to thank Step Two Designs Pty Ltd.

© Commonwealth of Australia 2004

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and enquiries concerning reproduction and rights in this publication should be addressed to:

Manager
Public Affairs
Australian Government Information Management Office
GPO Box 390
Canberra ACT 2601

10. IMPLEMENTING A CONTENT MANAGEMENT SYSTEM

Overview of implementing a CMS

Implementing a CMS presents a number of challenges, which may include:

- Considering a range of issues associated with content management, including usability, information architecture and information management.
- Actively involving many staff throughout the organisation in content management, as reviewers and administrators.
- Requiring extensive participation from staff to be successful and sustainable.
- Integrating with (or modifying) many business processes.
- Implementing the CMS as part of a broader information or knowledge strategy.
- Implementing a relatively new and immature product within the administration of the agency.
- Interrelating to other information systems, such as document and records management.
- Ensuring long-term viability of the system and supporting processes.

While the benefits of CMSs are well recognised, these challenges introduce risks into the implementation project, which must be managed accordingly. This checklist outlines a number of approaches that can be used to mitigate these and other risks while ensuring that project outcomes are achieved.

Basic issues associated with managing online content are covered in *Better Practice Checklist 8, Managing Online Content*.



SUMMARY OF CHECKPOINTS

IN GENERAL

- Consider the time required to complete the implementation
- Focus on business outcomes and goals rather than technical issues
- Ensure that the implementation delivers visible benefits

MIGRATING CONTENT INTO THE CMS

- Conduct a content audit
- Use the opportunity to migrate to a new site structure if appropriate
- Check to ensure that all content has an owner
- Consider rewriting content if necessary
- Consider user-centred design to ensure that the site best meets users' needs

ADDRESSING NON-TECHNICAL ISSUES

- Focus on content management processes
- Consider an appropriate governance model
- Consider change management and internal communications
- Develop a network of stakeholders

MITIGATING PROJECT RISKS

- Constrain initial project scope
- Minimise custom development
- Identify areas of greatest risk
- Build internal capabilities and knowledge
- Improve organisational information management
- Plan to reassess CMS suitability
- Learn from the experiences of other agencies

ONGOING DEVELOPMENT AND MAINTENANCE

- Increase content management usage
- Continue content redevelopment

CHECKPOINTS

IN GENERAL

Consider the time required to complete the implementation

Industry experience has shown that it may take up to 12 months (or more) to fully implement a CMS. While the deployment of the actual software is becoming increasingly rapid (as little as a few weeks), there remains a range of supporting activities (such as the content migration) to be completed before the launch date.

Focus on business outcomes and goals rather than technical issues

Business goals are often identified for the CMS project, as outlined in *Better Practice Checklist 9, Selecting a Content Management System*. These goals will also underpin the setting of priorities and allocation of resources during the implementation phase. Agencies may wish to consider how they can ensure that the technical implementation of the CMS does not lead to the business goals being overlooked.

Ensure that the implementation delivers visible benefits

The initial implementation of a CMS may face a number of challenges within an organisation. For the solution to be sustainable into the future, the active participation of staff (as authors, editors or administrators) can be particularly important. This support can only be gained if the initial implementation delivers tangible and visible business benefits.

It may be useful to ensure that the CMS implementation focuses on a broader scope than simply resolving underlying technical issues or improving behind-the-scenes authoring of content. Effective CMS implementation often delivers a solution that can be widely promoted throughout the organisation.

MIGRATING CONTENT INTO THE CMS

In many projects, CMSs are implemented to resolve deficiencies in the content and structure of the current site. The implementation of a CMS is a good opportunity to address these issues. However, appropriate time and resources will be required for content migration activities.

Conduct a content audit

Before implementing the CMS, a full content audit will help to inform decisions. The audit will list all pages on the site, and indicate whether they are to be migrated, revised or deleted. The content audit can also specify where each page is to be placed in the new site structure.

In many organisations, content audits will identify a significant percentage of content that can be immediately removed from the site, both increasing the overall quality of the site and reducing content migration effort.

Use the opportunity to migrate to new site structure if appropriate

Consider whether the existing site should be migrated into the CMS as it is, or whether the opportunity should be taken to migrate only reviewed (and revised) content into a new site structure. By doing this, it is possible to start again with a complete and accurate site, which can then be more effectively maintained using the CMS. Further information about identifying appropriate site structures is available in *Better Practice Checklist 15, Information Architecture for Websites*.

Check to ensure that all content has an owner

It can be useful to identify an owner for all content that is migrated into the CMS. This can help ensure that the content is kept up-to-date in the future. Ownership can be allocated to a role rather than a specific person, to protect against the effects of future reorganisations.

Note also that the content owner may be different from the original author of the material, depending on the governance model used.

CHECKPOINTS

Consider rewriting content if necessary

Beyond simply restructuring the site, it may be necessary to rewrite some of the content. The content audit may identify pages that are out-of-date, difficult to understand or not written in a form suitable for online use. It can be useful to address these issues before migrating the content into the CMS.

Consider making use of a professional technical writer to improve the quality of key content areas (such as policy and procedures).

Consider user-centred design to ensure that the site best meets users' needs

Agencies may find it helpful to use best practice usability and information architecture techniques when designing the site that will be managed using the CMS. This will help ensure that the site is effective and easy to use for staff or external visitors. Usability testing the final site before the project launch can also help identify any remaining design or structural issues.

ADDRESSING NON-TECHNICAL ISSUES

Content management is not a technology problem. Instead, a CMS is simply an 'enabler' that supports the improvement of content management processes, skills and strategies. Consider the non-technical supporting activities that may have the greatest impact upon project success.

Focus on content management processes

The ongoing currency and usability of the site relies on the processes put in place to create and maintain content. While a CMS can provide a technical enabler for content authoring, the establishment and support of appropriate staff processes are often key.

The initial implementation project is often the key to determining authoring models and processes. In practice, authoring can be centralised, decentralised or a mix of both. Regardless of the approach taken, it will be necessary to closely monitor the effectiveness of the processes and to revise as required.

Determining suitable authoring processes for the agency may have the single greatest impact upon the long-term viability of the CMS solution and of the project as a whole.

Consider an appropriate governance model

It may be useful if the implementation project determines a suitable governance model for the CMS and the site(s) it supports. This governance model can provide a framework for the processes that are established and can outline the responsibilities of the various business units involved in the project. Multimedia Victoria provides guidance on developing a content management policy at www.mmv.vic.gov.au/content.

Consider change management and internal communications

The deployment of the CMS can impact upon many areas of the organisation and lead to considerable changes to business practices. For the implementation to be successful, it may be useful to consider change management issues and activities. Internal communications will play an important role in promoting the role of the CMS in the organisation and in gaining the enthusiasm and involvement of authors and reviewers.

Note that these activities will often be in addition to training programs for authors and administrators.

Develop a network of stakeholders

Both business users and web administrators will often be involved throughout the implementation project. The creation of a network of all stakeholders of the project can be useful. This group may take ownership of the implementation process and help determine the most effective way of meeting the desired business objectives.

MITIGATING PROJECT RISKS

As outlined earlier in this checklist, CMS implementations are confronted by a number of unique challenges and risks. Mitigation of these risks can help the project to meet business objectives while remaining within budget and time constraints.

Constrain initial project scope

The deployment of content management solutions can require considerable organisational change. Large-scale changes are more difficult, and it may be useful to constrain the scope of the initial implementation. This can help in managing risks and in providing opportunity to determine how best to establish content management processes and policies.

Agencies have used a number of approaches for constrained scope implementation, including:

- Implementing the CMS for only one of the sites maintained by the agency (for example, one website or intranet). Starting with the simplest site allows the initial challenges to be overcome before more difficult site issues are tackled.
- Conducting a 'pilot' project that limits the functionality deployed and moves the more complex issues to post-release activities.
- Deploying a centralised model of CMS authoring for the initial release, with a staged migration to decentralised authoring following the initial 'go-live' date.

CHECKPOINTS

Minimise custom development

The customisation and further development of a CMS can be costly and give rise to project risk. By selecting an appropriate CMS product that is installed largely 'off the shelf', agencies can minimise custom development.

Taking this approach can minimise exposure of the organisation to the complexities of the software. This can also protect against a CMS marketplace that is rapidly changing, by leaving the agency less committed to a single product and therefore better placed to change solutions in the future.

Note that certain aspects of the CMS (such as the appearance of published pages) are usually customised to match the unique identity of the organisation. Larger 'enterprise' projects will also require additional development and customisation.

Identify areas of greatest risk

Not all aspects of a CMS implementation entail the same level of risk. Some CMS capabilities install 'out of the box' with minimal effort, while others are more challenging to implement.

The greatest risk in a CMS project may stem from areas of uncertainty caused by:

- difficulty in determining concrete business requirements
- unknown future business directions
- complexity of requirements or implementation
- people issues.

Agencies may need to manage these uncertain aspects closely during the project, to ensure that risks are mitigated while project goals are still met.

Build internal capabilities and knowledge

Agencies can use implementation projects as an opportunity to further develop internal capabilities and knowledge regarding content management issues and approaches. This expertise can help meet the ever-growing information challenges within organisations.

Improve organisational information management

The implementation of a CMS can be conducted in the context of a broader information management plan that includes the other information systems within the organisation (such as document management, records management and database systems). This will allow policies to be put in place indicating how each of these systems is to be used and how they should be integrated.

Plan to reassess CMS suitability

With the CMS marketplace still rapidly evolving, it may be useful for agencies to plan to reassess the suitability of their deployed product after a defined period. This re-evaluation can help determine whether the currently deployed solution is still the best option, or whether the agency would be best served by going back to the marketplace to obtain a more capable or functional solution.

Learn from the experiences of other agencies

One of the best sources of content management knowledge is the experience of other agencies that have already implemented a CMS solution. Best practice approaches (and problems to avoid) can be identified by examining the activities and outcomes of completed projects.

Information about the Australian Government's Content Management Community of Practice is available on the AGIMO website at www.agimo.gov.au/resources/cop/cm.

ONGOING DEVELOPMENT AND MAINTENANCE

CMS implementation projects may be constrained in terms of time; and while considerable work may be undertaken to support the initial project development, ongoing maintenance will also be required. Agencies may wish to allocate resources to further improve and expand the content management solution.

Increase content management usage

While initial implementation projects are often restricted to a single site or subset of the business, in order to constrain scope and mitigate risks, CMSs may also need to grow in order to reach a 'critical mass' of usage to be viable in the long term.

Agencies may wish to consider ongoing 'roll-out' of the CMS after the initial launch date and to resource these activities.

Continue content redevelopment

The content and usability of the site being managed by the CMS may benefit from further development following the initial launch of the CMS solution. By providing simpler editing and improved management tools, the CMS can facilitate this 'continual improvement' of content, thereby enhancing the value delivered to staff or visitors.



Better Practice Checklists

practical guides for effective use of new technologies in government

SERIES ONE, VERSION 3 2004

1. Providing Forms Online
2. Website Navigation
3. Testing Websites with Users
4. Use of Cookies in Online Services
5. Providing an Online Sales Facility
6. Use of Metadata for Web Resources
7. Archiving Web Resources
8. Managing Online Content

SERIES TWO, VERSION 1 2004

9. Selecting a Content Management System
10. Implementing a Content Management System
11. Website Usage Monitoring and Evaluation
12. Online Policy Consultation
13. Knowledge Management
14. Designing and Managing an Intranet
15. Information Architecture for Websites
16. Implementing an Effective Website Search Facility
17. Spatial Data on the Internet
18. Digitisation of Records
19. Access and Equity Issues for Websites
20. Marketing E-government

www.agimo.gov.au