



# CMS is to Content, as SOA is to Enterprise Applications

| How your content management system is at the core of an efficient online strategy |

► How your content management system is at the core of an efficient online strategy

## Table of Contents

Executive Summary.....	3
SOA and CMS: What is the common thread?.....	4
Independent layers.....	4
Separating design from content and structure.....	4
What can a CMS do for you in such a situation?.....	5
Reusing content across multiple mediums.....	6
Benefits for the entire value chain.....	6
Conclusion.....	7

- ▶ How your content management system is at the core of an efficient online strategy

## Executive Summary

Service Oriented Architecture or SOA has taken the enterprise world by storm. And if you think about it, SOA and CMS are quite closely related. The concepts of reuse, ability to loosely couple services or functions, and the ability to combine services into a new form are shared between SOA and CMS.

This whitepaper will explain how the forces that have made SOA such an important part of the enterprise world are the same that make Web content management a must for Web site management.

- ▶ How your content management system is at the core of an efficient online strategy

## SOA and CMS: What is the common thread?

The goal of SOA is to enable consumers to reuse the services of a particular application, and liberate the service from the boundaries of the application it is part of. Integration between applications becomes relatively easy, as there are different well-defined layers of architecture – and every layer is independent of the other. Thus, an application may have a presentation layer, a process layer, and a data layer. This gives unprecedented flexibility to any organization.

In the past, when a process changed, an organization would have to change the code and tackle interdependencies, as the presentation and data layer were not separate of each other. With SOA, processes are abstracted, giving organizations the flexibility to make changes in the process without affecting the underlying application or the code.

## Independent layers

Taking this concept further, you can break a single large application into granular blocks of functionality that solve specific needs. These blocks of functionality can be reused by any application or even combined – making them far more flexible and effective. For instance, you may combine a credit management process to an ERP system, a billing process to a CRM, and a sales order process to an SCM system to create new applications. It's easy to see how this can provide significant advantage.

The important point to note is that the process is not constrained within the application, and is independent of the application code and the presentation logic. In essence, the GUI is independent of the data and the process. So, you can make changes in any of the three layers – without one affecting the other.

## Separating design from content and structure

Now, let's look at your content information landscape in the same way. In a typical organization, you have different areas of expertise – each playing a part in their own way to make contributing content easier, managing it more efficient, and the end user experience better. You have content contributors, content reviewers and approvers, designers, and developers who are all responsible for making your Web site successful.

Consider, for example:

- ▶ As is typical with most organizations every 18 months, you have decided to redesign your Web site. Which means you have a new look and feel, structure, architecture, and of course content.
- ▶ You are happy with the new content; however, there are some slight changes in site structure and design.
- ▶ You'd like certain directories or folders which were placed earlier under certain sections to be moved to a different section.
- ▶ Typically, this would involve the services of a HTML professional who would have to manually go through the code, and recreate the structure as desired.
- ▶ As all these processes are interlinked, a change in structure will mean a change in design and a design professional may have to redo some of the layout.

- ▶ How your content management system is at the core of an efficient online strategy

## What can a CMS do for you in such a situation?

A CMS is similar to an application based on SOA, because it allows separation of processes. For example, just like the presentation layer and the data layer in SOA-based enterprise applications, an organization's Web site can be changed totally. You can immediately change the look and feel of your Web site while leaving the content or page layout unchanged and vice-versa. This is extremely significant as you can update design without having to redo all of the other site components.

With this separation of design, content, and structure, organizations realize tremendous advantages throughout the lifecycle of the project. Each area of a Web site can be created or reworked completely without affecting the rest of the pages. Structure can be changed, and a new user interface can be quickly created with no impact on the underlying pages.

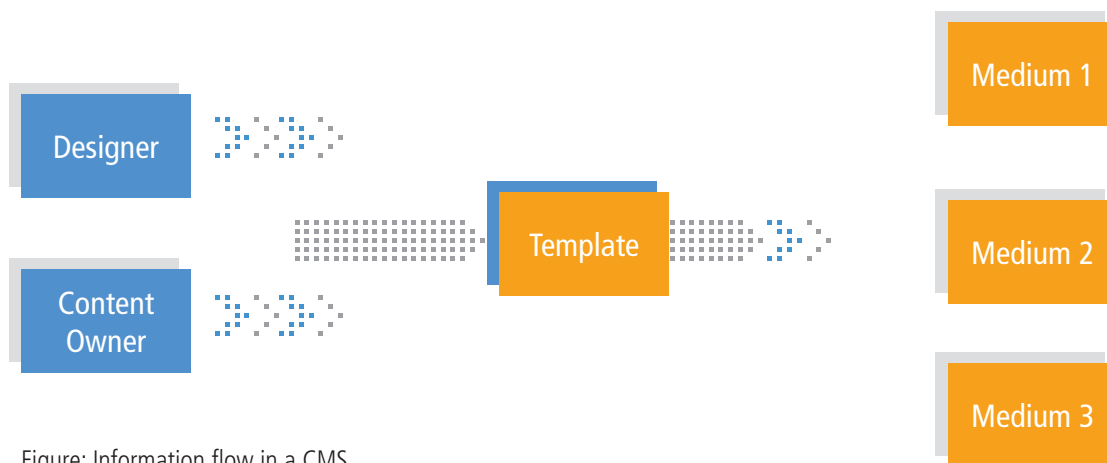


Figure: Information flow in a CMS

As the above figure shows, a content owner can create content independent of the design and put it in a basic template. This template can also allow the same content to be presented in different ways:

- ▶ If the user has selected viewing over a high-bandwidth link, then the Web site can serve him image intensive pages
- ▶ A low-bandwidth user will see pages with smaller image sizes
- ▶ Some users may even be offered 'text-only' browsing if they are on a dial-up connection
- ▶ It is also possible to maintain the same Web site in multiple languages
- ▶ While the navigation and structure will remain the same, only the content will differ

In essence, you can target multiple mediums with the same content.

- ▶ How your content management system is at the core of an efficient online strategy

Similarly, a design professional can work on a custom design that adheres to the CMS guidelines, without affecting the content. Thus, the content owners can focus on content, while the design people can concentrate on presentation. The result – it is easy for both groups to complete the task faster, while adhering to corporate guidelines.

## Reusing content across multiple mediums

Similarly, you can use a CMS for repurposing the same content and publishing it in different forms such as wikis, blogs, XML, RSS or emails. Additionally, you can use a CMS for enabling users to directly post data with tags, ratings or comments – which an organization can later use to measure the success of their online initiatives. The same data can be used by the CRM or Web analytics system to analyze user trends.

Every bit of design and content passes through a proper workflow approval process. This helps maintain consistency across different digital assets of a Web site so that branding and design are controlled to the level desired (through style sheets, templates, etc.), regardless of whom is responsible for the actual content. As a result, visitors have a consistent and professional experience.

## Benefits for the entire value chain

A CMS provides benefits for every entity in the content information landscape. For content owners, a CMS helps in creating content once, and reusing it many times across multiple mediums effortlessly. Similarly, designers can create mockups and give them to content owners to populate with content.

Just as SOA has changed the paradigm of enterprise applications, a CMS too has brought in significant benefits. Some of these include:

- ▶ Decentralized maintenance and workflow
- ▶ Consistency of design and content structure
- ▶ Automatic generation of menus
- ▶ As content is separate from design, look and feel is the same irrespective of the author
- ▶ Faster updates and greater collaboration between authors

# Conclusion

Just as SOA has liberated processes from the silos of their applications, a CMS has freed both designers and content owners from the vagaries of content presentation and design.

As a result, organizations can reuse content across Web sites and across multiple mediums without having to reenter content as the design or the structure changes. By separating content from design and structure, a CMS can improve efficiency and save both time and money – important, in today's hyper-competitive markets.

**CrownPeak**  
5880 W Jefferson Blvd  
Unit G  
Los Angeles, CA 90016

[sales@crowpeak.com](mailto:sales@crowpeak.com)  
[www.crowpeak.com](http://www.crowpeak.com)  
Toll Free: 800-887-1944  
Tel: 310-841-5920

**CrownPeak**<sup>™</sup>  
MANAGE CONTENT NOT TECHNOLOGY