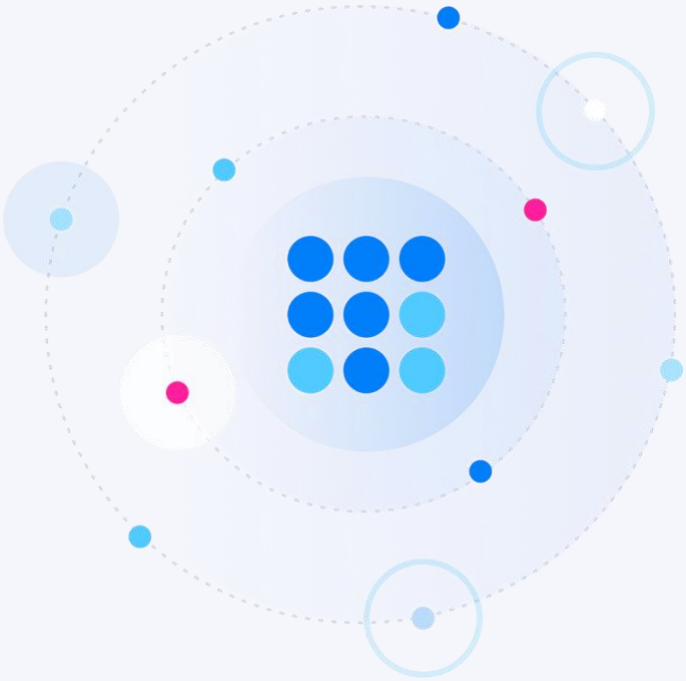
paligo

April 2022

White Paper

Making the Business Case for Intelligent Enterprise Content



About Paligo

We develop Enterprise-grade CCMS with smart content reuse.

Paligo is a cloud-based Component Content Management System (CCMS) with powerful single-sourcing content reuse for technical documentation, training content, policies and procedures, and efficient knowledge management.

What is Intelligent Content?

Before we dive into how intelligent content helps your organization, let's make sure we all agree on what it means. The first and best definition will always belong to Ann Rockley, often referred to as the mother of intelligent content. From her book, Managing Enterprise Content: A Unified Content Strategy, 2nd ed. (Berkeley: New Riders, 2012):

"Intelligent content is content that's structurally rich and semantically categorized and therefore automatically discoverable, reusable, reconfigurable, and adaptable."

Following this definition, intelligent content is:

- Created as a series of building blocks; it's not web pages or documents
- Is tagged with metadata, following a well-defined taxonomy
- Created and stored without formatting (stripped down to its basic structure)
- Published to multiple channels and formats

Intelligent Content vs Structured Content

Some people use the terms "intelligent content" and "structured content" interchangeably. They aren't the same, but the confusion is understandable.

Structured content is defined as an approach to planning and building content that is semantically categorized, modularized, and format independent, making it reusable, automatically discoverable, and configurable.

Structured content is a prerequisite for intelligent content, but intelligent content means much more. Intelligent content is not just about how you create content; it's also about how you deliver that content using personalization (conditioning) and reuse it across channels (multi-channel publishing) in a way that scales.

Why You Don’t Want to Create Bespoke Content for Every Channel

Every organization creates and manages many different types of content, including technical documentation and product content, knowledge base articles and other support content, website content, in-app help widgets, chatbots, and more. Each type of content is typically created by a separate team, using different tools, stored in siloed repositories, and delivered to separate channels.

As customers shift towards self-service and want to find answers on their own, all of this content becomes critical to the customer experience. But when you manage disparate content through different tools and processes, using different formats, the ability to bring it together to support customers and employees is challenging and sometimes impossible.

Creating bespoke content for every channel is time-consuming. It results in inconsistent content across channels, even though much of the content is identical or similar. For example, the product content you make available on the website is different from the product content available on the support portal, which is different again from what's available in the knowledgebase for the customer support team.

Inconsistent customer experiences across channels can affect brand perception, customer satisfaction, drive up call center and customer support costs, and affect overall profitability.

Why Does Your Company Need Intelligent Content?

If you wonder if your organization needs intelligent content, ask yourself how important customer experience is. Content is a foundational element of customer experience. But for that experience to truly be great, that content must be consistent and accurate across all your channels.

Single-sourcing content, also known as "write once, publish everywhere," is critical to ensure content consistency across channels and improve content accuracy and findability. The idea is that you write your content in one place (one "single source"), which allows you to:

1. Publish that content in different output formats: print, HTML, mobile, e-learning, chatbots, etc.
2. Use that content in multiple contexts by piecing together content blocks to produce content for different channels (reusing some or all content).

Intelligent content, when paired with a modern component content management system, also improves the performance of content development, management, and delivery. Successful implementation of an intelligent content model:

- Creates a unified content strategy that supports the entire organization
- Helps content creators and contributors collaborate and review content
- Eliminates content silos
- Enable the optimization of translation costs
- Supports personalized content delivery
- Enables omnichannel publishing and content delivery

"The requirement to produce trusted information that teams can distribute to multiple audiences, or via different interfaces, spans roles and lines of business."

Cheryl McKinnon,
Forrester Analyst
The Future of Documents

The ROI of Intelligent Content

If you look at intelligent content from a return on investment (ROI) perspective, there are many significant benefits:

- Improved Customer Experience: Marketing and customer support can provide customers with consistent information across all channels, creating an experience that improves customer satisfaction and drives loyalty and retention.

- Decreased Support Costs: Improve ticket deflection by providing customers with self-service tools to help them easily find the answers they need when they need them.

- Increased Productivity: Improve content creation using a single-source development model, authoring efficiencies, improved workflows for collaboration, review, and approval.

- Reduced Content Development Costs: Content used across multiple departments and channels is created once and stored in a central location where everyone can access it.

- Reduced Translation Costs: Centralized translation management helps reduce the amount of content translated and improves the overall translation process.

- Reduced CMS technology and authoring tool costs: Develop and manage content through a single component content management system that includes easy-to-use authoring tools and content publishing models.

Enterprise Use Cases for Intelligent Content

Technical Documentation

The most common use case for intelligent content and a CCMS is technical documentation. Technical writers produce a variety of documentation from user guides and datasheets to product documentation, release notes, integration, and troubleshooting guides.

There is often a lot of similar content across these documentation types, lending well to the idea of content reuse. In addition, there are often product variants, versions, and different languages with enterprise products, each needing a set of product documentation.

As products get updated (and updates can happen very quickly through version release processes and rapid delivery of cloud-based software), all this technical documentation needs to be updated as well.

Let's take it another step - customizing technical content to the customer. There are many ways to personalize technical documentation, including market, audience, and user level. Managing content variations is challenging under any circumstances, especially when delivered to multiple digital and print destinations, but add in personalization, and the challenges are even more significant.

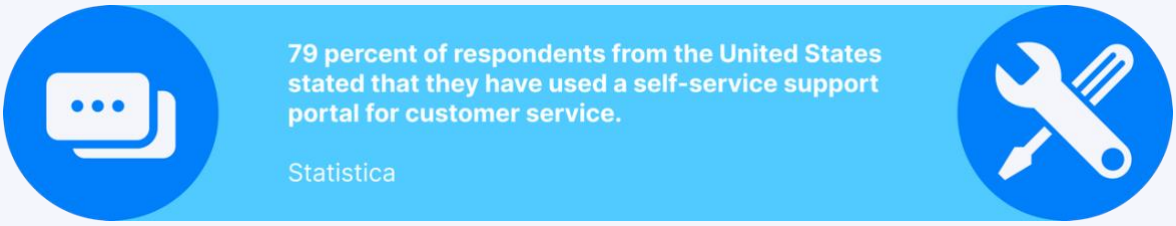
A CCMS leveraging intelligent content empowers your technical team to create single-source technical content, implement variables and conditions to personalize that content depending on the channel and other conditions, and deliver that content quickly to ensure it's always accurate and up to date.

"The only way to provide personalized experiences at scale is to create your content using components that can be mixed and matched, on the fly, at the point of delivery. To be successful mixing and matching components, everything about your content must be standardized."

Val Swisher, CEO, Content Rules

Customer Support – Self Service

Customer support and service is another enterprise use case for intelligent content. Customers don't want to spend hours on the phone with customer support; they want the ability to find answers to their questions and problems themselves.



Intelligent content enables product and customer support teams to create support content that can be reused across channels. Using the CCMS, they publish this content to the channels customers access, including support portals, help widgets and systems, knowledge bases, and even support systems such as Salesforce Knowledge, ServiceNow, and Zendesk.

For example, you can integrate your CCMS with Salesforce to deliver support content to Salesforce Knowledge. Not only does this integration give customers faster access to support content, but it also streamlines the support content creation and publishing process and significantly reduces the time to publish Salesforce Knowledge content.

There are several benefits to providing self-service support content, including:

- Increased ticket deflection because customers can easily find answers themselves.
- Increase customer satisfaction scores because they avoid long wait times to speak to customer support.
- Improved employee productivity because support resources can focus on more challenging support issues.

Bringing Intelligent Content into Support Portals like ServiceNow, Zendesk, and Salesforce

Customer support applications are great tools that enterprise organizations employ to support their customers across various channels, including messaging, email, chat, voice, and social. These applications also include a help center where customers can search and find answers to their questions without speaking with a support person or opening a support ticket.

While these help centers are critical, they are often an add-on with limited content creation and editing capabilities. By integrating your CCMS with your customer support system, you can provide enhanced support content consistent with all your other customer channels.

With the right CCMS, you can implement conditional content filtering and customize your support content based on product, market, audience, or user level. You can also change the source content and update it across all versions.

Policies and Procedures

An emerging use case for intelligent content is content managed in policies and procedures for insurance, manufacturing, financial services, and medical technology companies. These companies create content that lends itself well to single-sourcing and content reuse.

A couple of examples:

- Insurance companies create insurance forms that have similar content blocks across all customers and unique content blocks based on a customer's location or customer age.

- Manufacturing companies create standard operating procedure documents that are similar across products manufactured but also have elements that are custom to the country where the product is made or sold.

In both examples, you could create custom documents for every customer. But what happens when you need to change a content block that is the same across documents? You have to update each document individually, and those updates are usually manual and time-consuming.

Intelligent content supports the production of unique documents from a single source:

- Edit a single content block that is reused across all documents and automatically update all the documents where it’s used.
  Implement conditional content elements in a document that automatically change based on country or audience.

- Intelligent content is also beneficial when adhering to regulatory and compliance requirements because it ensures content is consistent and accurate across all documents and channels.

The Technologies That Support Intelligent Content

Creating and delivering intelligent content requires a modern set of tools and technologies.

Industry Standards – XML, DITA, DocBook

Structured content is usually created using the structured markup language XML (Extensible Markup Language). XML enables custom tag definitions to define your content structure the way you want. Two examples of XML are DocBook and DITA.

DocBook is a type of XML maintained by the DocBook Technical Committee of OASIS. It's a semantic markup language, originally developed for creating technical documentation but now used to support all types of content.

DITA (Darwin Information Typing Architecture) is an open standard defined by the OASIS DITA Technical Committee. Using the DITA specification, you define document types for authoring and organizing topic-based content.

There are many other XML variants, but DocBook and DITA are the most commonly used, are similar in their content models, and are suitable for component-based topic authoring.

While the underlying framework for creating intelligent content is XML, it's only one piece of an intelligent content model.

Component Content Management Systems

Component content management systems (CCMS) have been around for many years, but older platforms are complex, difficult to use, and typically only publish to one or two channels - PDF and static HTML.

Today, modern cloud-based CCMS solutions have emerged that provide the application intelligence necessary to create and manage intelligent content. These platforms offer user-friendly editing and authoring, smart content reuse, and the ability to publish to a wide range of channels, including HTML5, PDF print, eLearning solutions, and customer support platforms such as ServiceNow, Salesforce, and Zendesk.

Authoring Tools

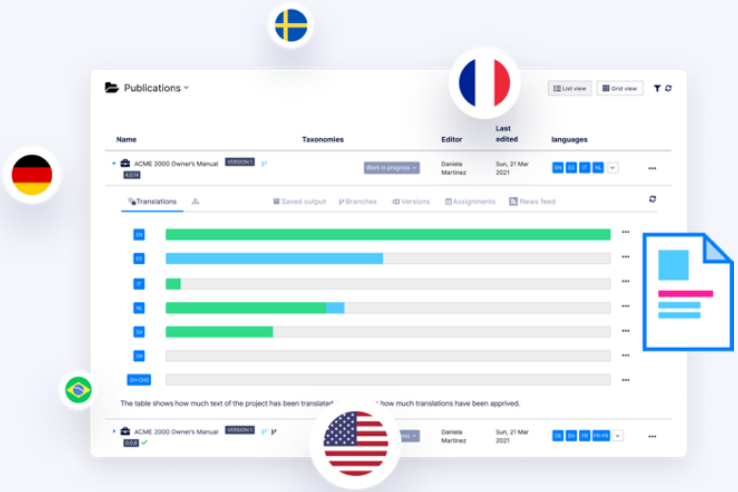
Structured authoring is a standardized approach to writing content where pre-defined rules control the content. The writer is not concerned with style or format but tags the content according to what it semantically represents. Authoring tools are usually XML-based, and rules for content and structure are enforced using a DTD or Schema.

Tip: Here's a great resource for learning about structured authoring: The Basics of Structured Authoring.

Translation Management

For enterprise organizations, translation management is critical for supporting intelligent content in multiple languages, including translating images. It's also one of the costliest aspects of the documentation process.

A CCMS can efficiently manage translation processes, including integrating directly with translation management systems or translation vendors.



Digital Asset Management

While intelligent content is typically considered text-based content, there is an aspect of managing digital assets intelligently, including images, video, and other digital assets. A CCMS often includes digital asset management capabilities as part of its feature set for managing assets intelligently.

Tip: Here's a guide to balancing text and visual content in your technical documentation.

Analytics

Content analytics help authors and editors understand how their content performs in various channels by both people and machines. Analytics show consumption, engagement, findability, and in some cases, sentiment.

Structured Content Languages: DITA v. DocBook

Both DITA and DocBook provide rich semantic structured authoring content models. So how do you know which one to use? It's not about the XML model. It's about choosing a CCMS solution that fulfills your needs best. Both XML models can handle complexities in content development, single sourcing, and content reuse, but they do it in different ways:

- DocBook separates the content model from the application layer, while DITA has features built directly into the content model that makes it unnecessarily complex, such as indirect linking, relationships tables, and more. While these features are powerful and important, they are best left to the CCMS to provide in the application layer, leaving a clean content model.

- Both DITA and DocBook easily accommodate topic-based authoring. DITA is, however, a more restrictive content model. On the other hand, the DocBook content model, while applying strict semantic structure, does not inherently require topic typing, seeing more value in a more pragmatic and flexible content model.

Tip: Learn more about the difference between writing technical content using DocBook versus DITA.

Intelligent Content Requires a New Kind of CMS

Intelligent content is critical to creating and managing accurate and consistent content across your customer channels. It increases the productivity of your technical content team because they are creating single-source content that is reused in different formats and channels.

You can't create intelligent content in a traditional content management system. And while an XML editor tool can help you create structured content, it can't provide the intelligence you need to deliver contextual, personalized experiences and doesn't handle managing and organizing componentized content and collaboration at scale.

A modern, cloud-based component content management system is the answer to creating intelligent content that you can reuse across your channels, including text-based and rich media content.

The right CCMS provides comprehensive functionality to deliver personalized experiences at scale, including dynamic variables, conditional content, taxonomy classification, component and block content reuse, and more. It also provides translation management integration, robust versioning features, and collaboration features that empower your team to work together to deliver the best content for your customers.

Building the Business Case for Intelligent Content

You can't just tell your executive team that you need intelligent content; you have to make the business case. Here's how to get started:

1. Identify your use cases. How would intelligent content help you deliver better experiences? Would it improve the support content in your customer support system? Consistently deliver updated support content into the support portal? Help you quickly build customized policies and procedures based on country? List out all the use cases for intelligent content and then prioritize them by 1) which ones are most important and 2) which ones you think can get buy-in from the fastest.

2. Find a champion (or two) to support you. To get the support of the entire executive team, you need an advocate to share your case and help you explain the importance of implementing intelligent content. This champion can help eliminate barriers at the executive level, and with the team members you need to work with to implement the model.

3. Focus on one use case to start, one that you know management is keen to solve and will show results quickly. For that use case, ask questions like how content is created, who creates it, who needs to collaborate, and review and approve it. Where is it shared? In what format and language? Are there applicable regulations? Think about how the content is structured now and the structure of the forms you want it to take in other channels.

4. Moving to an intelligent content strategy requires changes to how teams create and manage their content. It's critical to identify the cultural changes that need to happen and how you will address them proactively. Getting people on board requires clear and constant

communication of the benefits of intelligent content and everyone involved.

5. Show the ROI. Determining the return on investment of an intelligent content strategy and the implementation of a supporting CCMS is necessary to prove the business case, but it can take a bit of effort. Start with identifying productivity and efficiency improvements; be as concrete as possible. Then map those improvements to time-saved and reduced costs for creating, managing, and publishing content to all your channels. And don’t forget customer-facing benefits like increased customer satisfaction and retention, reduced support tickets, cost center costs, and more.

6. Incorporating an intelligent content strategy into your content operations is the final goal, but it's unlikely that you will switch every department and team over at once. Instead, make a plan to move critical content into the CCMS managed by your content operations teams first and then slowly add additional teams, channels, and content types.

Modern content supply chains need to be able to cross silos. Supporting component-based content throughout the life-cycle changes the game from document management to true modular customer experience orchestration. But it’s not magic! Smart architecture, smart technology, and organized processes bring the pieces together.

Founder of [A] (simplea.com),
content engineering author & speaker

Are You Ready to Start Your Intelligent Content Strategy?

We live in an information-enabled world, and everything we do requires content to help us solve our problems and guide our decision-making. Unfortunately, we have reached the point where the old way of creating and managing content no longer works.

Siloed content creation and management technology have led to content duplication, inconsistent content, and challenges finding the right content for customer and employee experiences.

Implementing an intelligent content strategy using a component content management system can change that if you take the time to plan and implement it correctly. We've walked you through the benefits of intelligent content, the use cases, and the technology necessary for success. When you are ready, follow our guide to building the business case, and feel free to reach out to us to help you on your journey.

Ready to learn more about intelligent content and how a modern CCMS solution can deliver these capabilities? Contact Paligo today.

info@paligo.net

paligo