A BUSINESS USER’S GUIDE TO CONTENT AS A SERVICE

UNDERSTANDING TRADITIONAL, HEADLESS AND DECOUPLED APPROACHES TO CONTENT MANAGEMENT
Users today engage with brands across many platforms, channels and devices. Customer journeys are truly multichannel experiences and businesses need to consider content delivery as a top priority for digital success. Sites are still the hub of digital experience for many brands but every organization today should be taking advantage of its content above and beyond the web.

Content management systems (CMS) are becoming more flexible, enabling businesses to create touch points with customers on the web, in apps and connected devices. Businesses are increasingly delivering Content as a Service (CaaS) and there is a growing number of new solutions baptized as headless CMSes. A new Forrester report, *The Rise of the Headless CMS*, features eZ as an innovator in this area.

Because the topic of Content as a Service is evolving—and maybe confusing to non-experts—we have built this guide to help you understand the differences between traditional and headless CMSes and how decoupled CMSes fit into the mix. We hope this primer helps you make sense of this evolving trend so you can decide which approach is the right fit for your business goals.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHAT IS CONTENT AS A SERVICE?</td>
<td>4</td>
</tr>
<tr>
<td>WHAT IS A HEADLESS CMS?</td>
<td>5</td>
</tr>
<tr>
<td>TRADITIONAL VS HEADLESS</td>
<td>6</td>
</tr>
<tr>
<td>WHAT IS A DECOUPLED CMS?</td>
<td>7</td>
</tr>
<tr>
<td>WHY THE REPOSITORY IS KEY</td>
<td>8</td>
</tr>
<tr>
<td>SELECTING THE RIGHT APPROACH</td>
<td>8</td>
</tr>
<tr>
<td>WHEN A HEADLESS CMS DOESN’T MAKE SENSE</td>
<td>9</td>
</tr>
<tr>
<td>THE MODERN CMS: EXTENSIBLE AND DECOUPLED</td>
<td>10</td>
</tr>
<tr>
<td>HOW EZ SUPPORTS CONTENT AS A SERVICE</td>
<td>11</td>
</tr>
<tr>
<td>SUMMARY AND TAKE-AWAYS</td>
<td>12</td>
</tr>
</tbody>
</table>
**WHAT IS CONTENT AS A SERVICE?**

Content as a Service refers to a use case where content is created and authored independently from the place it will be used. A range of different applications may consume this content, be it websites, mobile apps, kiosks and connected devices. Over time, this could mean everything from your Smart TV or Apple Watch to your fridge or your car dashboard. The concept of Content as a Service draws a clear line between the people creating the content, the people delivering the content, and of course the people consuming it.

Content as a Service, often referred to simply as CaaS, implies that content is available via a web service through an API over the Internet. In its purest form, we can consider Content as a Service to not only contain the access to the content but also all things referring to its provisioning, such as:

- Does the user have the right to get the content?
- Has the user paid for the content?

Content as a Service includes more than just requesting content but also delivering it through an API. In addition, there may be e-commerce and transactional processes to get the content.
Headless sounds catchy but what does it really mean? Is the front-end supposed to be the head and the back-end the rest of the body? Let’s break down the basics.

A headless CMS is a content management system (CMS) that’s focused on the back-end work: providing content creators the tools to get their workflows ready to be consumed in a Content as a Service use case.

A headless CMS focuses naturally on supporting users with the following tasks:

- Modelling content
- Creating and authoring content
- Facilitating the workflow and the collaboration around content (including translations)
- Organizing content in the repository (semantic, collections, taxonomies)

**WHAT IS A HEADLESS CMS?**

**DID YOU KNOW?**

A headless CMS does not touch how content will be delivered or presented to the end users. This is the main distinction between a traditional and a headless CMS.
A traditional CMS has a presentation layer baked in, which is responsible for assembling and delivering web pages. This locks the development team in to a standard type of presentation process and a single development platform, and it limits the user interactions that can be built.

On the other hand, a headless CMS gives the development team full freedom to use any presentation process, and allows for more precise, pixel perfect user experiences. A headless CMS allows presentation to be handled in a variety of ways, from interactive JS frameworks like angular, to static generators to mobile apps or even other CMSes. Essentially, multiple front ends can exist.

With a headless CMS, the content for the website is accessible via web-service APIs, usually in a RESTful manner through the JSON format. The content is stored on the back-end in the CMS—the repository, to be specific—and editors use the CMS's user interface to manage the content.

In a Headless CMS, APIs facilitate more options for content delivery.
If you’re considering implementing Content as a Service, it’s important to understand the term decoupled CMS. Decoupled can really be understood on two levels. Let us demystify the term for you.

First, decoupled refers to distinctly separating the process of creating content from delivering it. In this context, decoupling relates closely to content strategy and implies you structure your organization and systems around different functions. The role of creating content is not the same as the role of delivering it, even if it is sometimes hard to imagine. You can accomplish this with either a headless CMS or a traditional CMS but it must offer a true separation between content and presentation.

The second way to look at the concept of decoupled takes us deeper into the software architecture. In this sense, decoupled refers to separating the different components of a software solution from a software perspective. Taken to the extreme, it would imply your content management solution ends up being an assembly of a large number of very dedicated components which have been built or selected individually. It’s fair to say this approach can quickly put you into another role, the one of software maker, building a product on top of many components. Congrats, you’re now in the software business!

Regardless of how you contextualize decoupled CMS, the term can be misleading. Is it the back-end or the front-end? Both? The truth is, there’s no clear definition.

We recommend speaking more about “decoupled content management solutions” instead of a “system.” The way we see it, a solution is made from the assembly of different systems, while systems are from the market or built bespoke.

Now, is a decoupled solution to be provided by a single provider, or many different ones? There are pros and cons for both but the important thing in almost any case is to ensure there is a real decoupling between the core functions, as follows:

- Making sure you can access content and deliver it on any application/technology
- Making sure you can eventually plug in the tool you want to feed the content to
- Making sure the repository can be accessed directly from APIs in read as much as in write mode
WHY THE REPOSITORY IS KEY

Ultimately, the cornerstone of good content management, in a decoupled or a coupled system, is the content repository you use. There is no point to use a headless CMS if it is only able to deliver blobs of information unfitted to your different channels and if it does not come with the power of a semantically rich content organization. There is also no point to decouple if the presentation and styles that will apply to your content are stored within the content.

To manage your content efficiently and effectively, your repository needs to provide the ability to:

• Store any content type to fit your information architecture as well as the ability to modify the content model you are creating

• Semantically create relations, or collections, to allow different ways of navigating and discovering content that can be meaningful

• Read and write your content in different ways and different formats such as XML and Json, just to name a few

• Enable flexible workflows for different processes such as reviews, approvals and sunsetting of content.

• Facilitate localization and translation of content, with a customizable translation workflow that is easy to implement

SELECTING THE RIGHT APPROACH FOR YOUR NEEDS

When it comes to content management, there’s no “one size fits all,” and organizations have many different needs. That is what makes content management so different from other domains such as marketing automation or CRM, where there often are configurations but much lower levels of customization are needed.

In general, we can say that going headless or decoupled is an excellent approach for all use cases which are clearly Content as a Service by nature. For example, news and media organizations would benefit greatly from a headless CMS in order to make their content available to other platforms via API.

It’s also a very good approach for all companies who have the need for building very specific front-ends, eventually blending in the front-end content and other services. In this case, the traditional CMS template system might be too limiting.

The decoupled approach makes it possible for developers to integrate content via APIs over the Web (ie. Json or XML content over RESTful communication) and literally build any kind of front end they want.

If your digital product is mostly based on mobile apps for instance, or if it is about displaying content on very specific devices such as digital displays in airports or museums, the decoupled approach might also be a good choice, enabling you to use the different displays at their best, with the technology they provide (even if it ends up being HTML-based).

THINK ABOUT YOUR FUTURE!

A CMS should adapt to the organization’s business needs so you don’t get stuck with limited technology that hinders your plans to innovate. Looking for a new platform? Be sure to consider how each CMS will support your business now and for years to come.
WHEN A HEADLESS CMS DOESN’T MAKE SENSE

While a headless CMS approach can be a very strong fit for certain cases, there are many projects where the decoupled approach adds little value and may very well generate additional costs and challenges.

For instance, if you are launching a simple corporate website with very few pages, you have very little to gain to go decoupled. You’ll achieve your business objectives as well if not better using a traditional web content management (WCM) approach and site maintenance will be simplified, as building custom front end generates extra maintenance work and costs.

Another example would be an information portal, extremely heavy on content and heavily structured, but with relatively simple requirements when it comes to presentation. Think informational-rich internal or external sites for large organizations such as what you often find in governmental websites, biopharmaceuticals, medical or even heavily structured product catalogs. A traditional CMS can provide great value and there is not necessarily added value in decoupling.
Most enterprises today, especially those with many brands, international audiences and multiple digital properties, need flexibility. With a modern CMS based on a decoupled architecture, organizations have the freedom to go headless or traditional—or a combination of the two depending on the project. By consolidating multiple digital properties on a single system, businesses can reuse content across projects, streamline workflows and reduce costs.

A decoupled CMS has the flexibility to serve content the traditional way through content delivery and page management. Alternatively, organizations can use a custom front-end delivery system and feed content from the repository through APIs.
HOW EZ SUPPORTS CONTENT AS A SERVICE

At eZ, we’ve always ensured our software was highly versatile. For over 15 years, eZ’s CMS has been based on a strong decoupling that lets developers choose different models when it comes to content delivery. This flexibility makes our technology an exceptional fit in a cross-platform, cross-channel scenario.

Our new open source CMS eZ Platform and our commercially supported system eZ Enterprise both provide a modular toolkit that covers every area of content management from the repository and its REST API to the editorial interface and the web delivery framework. Organizations can use and extend eZ Platform to build a full suite of digital solutions relying on one or all of these components—from brand sites and news portals to native apps and the Internet of Things.

Many of our clients and partners use eZ partly or entirely as a headless CMS to build very specific front ends based on Angular.js or React. This is a great architecture that our engineers and solution architects love since it really makes the best of our APIs.

On the other hand, as I mentioned earlier, while the decoupled approach opens up a wide range of possibilities and value, it doesn’t mean all organizations should go this way for every project. A traditional content management approach can make a lot of sense.

At eZ we’ve implemented a decoupled approach to traditional content management, where organizations can use our platform as both a traditional and headless CMS depending on the project. With eZ, organizations manage as many sites as they want in a single system, share content across properties, manage translations and localize information seamlessly.

eZ’s versatility is perhaps where we provide the most value and differentiate the most from other players in the CMS landscape. Our technology keeps the door open for further projects, catalyzes innovation and future proofs your content.

Finnish cruise company Viking Line uses eZ as a headless CMS. They partnered with the global strategic design firm Ixonos, an eZ Partner, to deliver content to their new on-board app. Content is fed from eZ’s repository to the app, which is designed using a custom front-end delivery system beyond the CMS. Viking Line also delivers content from the repository to in-cabin TVs and digital signage. Passengers can do tax free shopping on-board the ship, meet like-minded travelers via social features and communicate with Viking Line staff, even when cell phone coverage or Web access is unavailable.
The content management discipline is evolving, driven by the need to create digital experiences that are increasingly cross-platform and richer and more personalized than ever before. Users are engaging with brands across many platforms and channels, and APIs are becoming a necessity. This explains the rise of headless approaches to content management.

New technological approaches can blur your view on what’s best for your organization. It’s important to ask the right questions and do your research.

Here are some things to consider before selecting a headless CMS:

- Evaluate the business value of a decoupled approach. What is the rationale for your organization?
- Analyze the costs of maintaining custom front-end(s) vs implementing a traditional web content management system. How do they compare?
- Do a **SWOT cost-benefit analysis**, comparing capabilities of a headless CMS to a traditional CMS.
- Think beyond your current web project and assess your full set of digital properties. Would it benefit your organization to consolidate your properties into a single technology stack? What technology set-up will support and sustain your digital business for the long run?

Ultimately, it’s difficult to foresee the future so unless you are certain a headless approach will fit all of your digital projects, you’ll be better off investing in a flexible, decoupled yet integrated platform that enables both headless and traditional approaches.

Beyond this, don’t forget the importance of a clear information architecture and a CMS that enables you to customize your content model. Invest in information architecture and content strategy before jumping too far into technicalities.

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**FURTHER READING**

If you’re interested in Content as a Service, here are some other resources.

- **The Rise Of The Headless Content Management** Forrester (for pay)
- **Decoupled yet Integrated** eZ Systems
- **Choosing a content management system** Mark Rodseth, Hugenic
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eZ in Brief

eZ Systems is a global content management platform provider that is dedicated to helping businesses maximize the value of their content. Our software simplifies the way enterprises create, deliver and optimize their content in order to engage customers. Thousands of organizations rely on eZ to deliver digital experiences that foster business growth.

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eZ Facts

• eZ Systems AS was founded in 1999 in Norway
• 15+ years experience as a commercial open source provider
• Supports 500+ enterprise customers in 25+ countries
• Ecosystem contains 80+ business partners and a community of 45,000+ members
• Over 5 million downloads and 250,000 installations

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eZ Links

» Website: www.ez.no
» Blog: www.ez.no/blog
» Case Studies: www.ez.no/Resources/Case-Studies

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About Inviqa

In a world where digital is redefining business, choosing the right technology partner is fundamental to achieving your goals.

Inviqa is the technology partner you can trust to put your business first. A specialist in content management systems and ecommerce, Inviqa helps pioneering brands and organisations to engage, convert and retain their customers through digital innovation.

Inviqa has offices across the UK and Europe and employs more than 200 professionals, including software engineers, business analysts, project managers, and designers - a combination that has supported some of the largest organisations worldwide.

Visit inviqa.com to learn more about our work and how we can support you.