



The Comprehensive Guide to Modeling content

Crafting Enhanced Strategies for
Customer-Centric Digital Engagement, Growth,
and Content Optimization





Introduction to Contentful

Contentful is a headless content management system (CMS) that empowers companies to leverage content more efficiently and effectively to deliver premium, multichannel digital experiences.

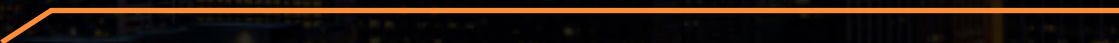
Contentful enables editors to organize different types of content, such as text, images, audio, and data, into impactful vignettes and leverage them in various combinations or permutations across different contexts, channels, and devices.

How does headless differ from a traditional CMS?

A headless CMS separates the content management and storage from the presentation layer.

In a traditional CMS, the content creation and storage are tightly coupled with the frontend or presentation layer, often using a predefined template or theme. In a headless CMS, you can use any frontend or presentation technology plus other best-of-breed solutions for e-commerce, search, etc., allowing greater flexibility and versatility in delivering and displaying your content.

In this guide, we'll dive into how to set up your headless Contentful solution for maximum return on investment.



Businesses gain competitive advantage by reaching consumers faster and on more digital touchpoints through 'headless' CMSes.

The End Of The Monolithic CMS, Chuck Gahun, Principal Analyst, Forrester

What is Content Modeling?

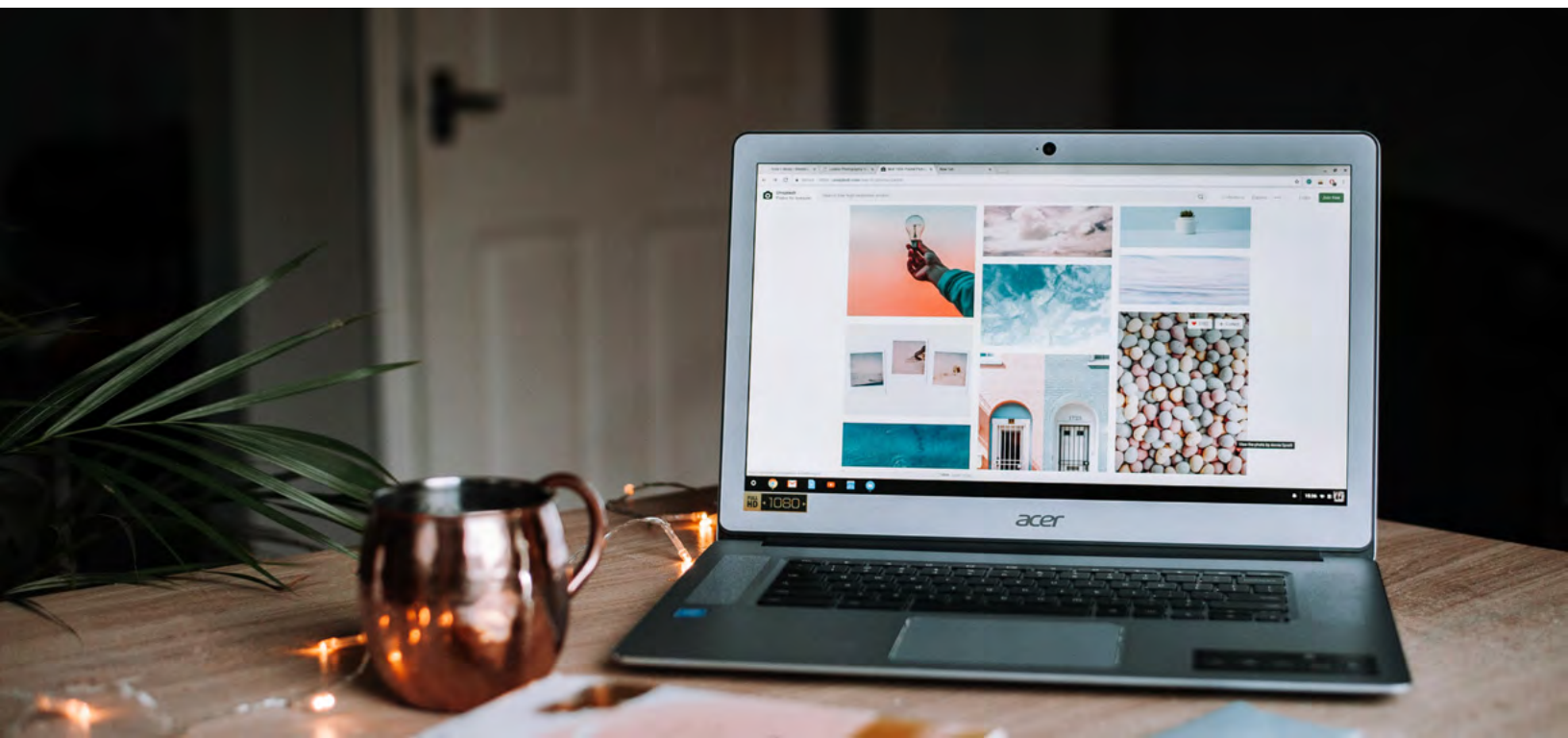
A solid content model is the foundation of every successful Contentful project. It gives structure and organization to your content and tells Contentful APIs what kind of content to send to your application.

A content model is like a blueprint that organizes and structures your content within Contentful. It consists of different content types that act as templates, outlining what information goes into each piece of content.

Within each content type are fields that define what data to include in the content. For instance, a blog post would have fields for title, body text, author, and date. That helps transform your website or app content from a shapeless blob into organized and structured components that you can reuse across different channels and mediums.

Designing your content model is the most important step in creating a well-organized and future-proof Contentful-powered application. If done incorrectly, a content model can create challenges for your editors. That's why it's critical to get your model right from the outset and not risk the headache of editing your content structure later.

But editor experience isn't the only thing to consider when building your content model. A successful model meets the needs of everyone involved in content creation and distribution—from creators to editors to designers and developers.



Laying the Foundation for Good Content Modeling

Before designing your content model in Contentful, you must build a solid foundation for your content structure.

Here's how:

1. **Define the purpose and goals of your content model.** Think of this as the North Star that guides all your content creation efforts. Whether to educate, entertain, persuade, or inform, a well-defined purpose ensures every asset you create serves a specific function within your strategy.

Setting achievable goals related to your purpose will help you measure the success of your content model, be it increasing web traffic, generating leads, or boosting brand awareness.

2. **Identify your target audience and their needs.** Effective content speaks directly to its audience, addressing their pain points, answering their questions, and offering solutions to their problems. Completing thorough audience research and persona development will help you ensure you can create customer-centric content that resonates with your audience, builds trust, and fosters a loyal following.

3. **Align your content structure with your customer journey.** From awareness, to consideration, to decision to loyalty, mapping your content to the customer journey ensures you can deliver the right content at the right time. In the awareness stage, you might focus on informative blog posts and other educational resources, for example. But in the consideration stage, you shift to in-depth guides and product comparisons.

4. **Don't get too granular.** Excessive granularity in your content model can result in increased API calls and restrict flexibility.

By understanding where your audience is in the journey, you can meet them where they're at, tailoring content to address their specific needs and guiding them seamlessly through to purchase and beyond.

Key Concepts and Definitions

You'll also need to understand the core elements of content modeling in Contentful. In this section, we dive into key concepts, including Spaces, Content Types, Entries, and Assets, and explore their significance in creating structured and organized content.

Key Concepts and Definitions

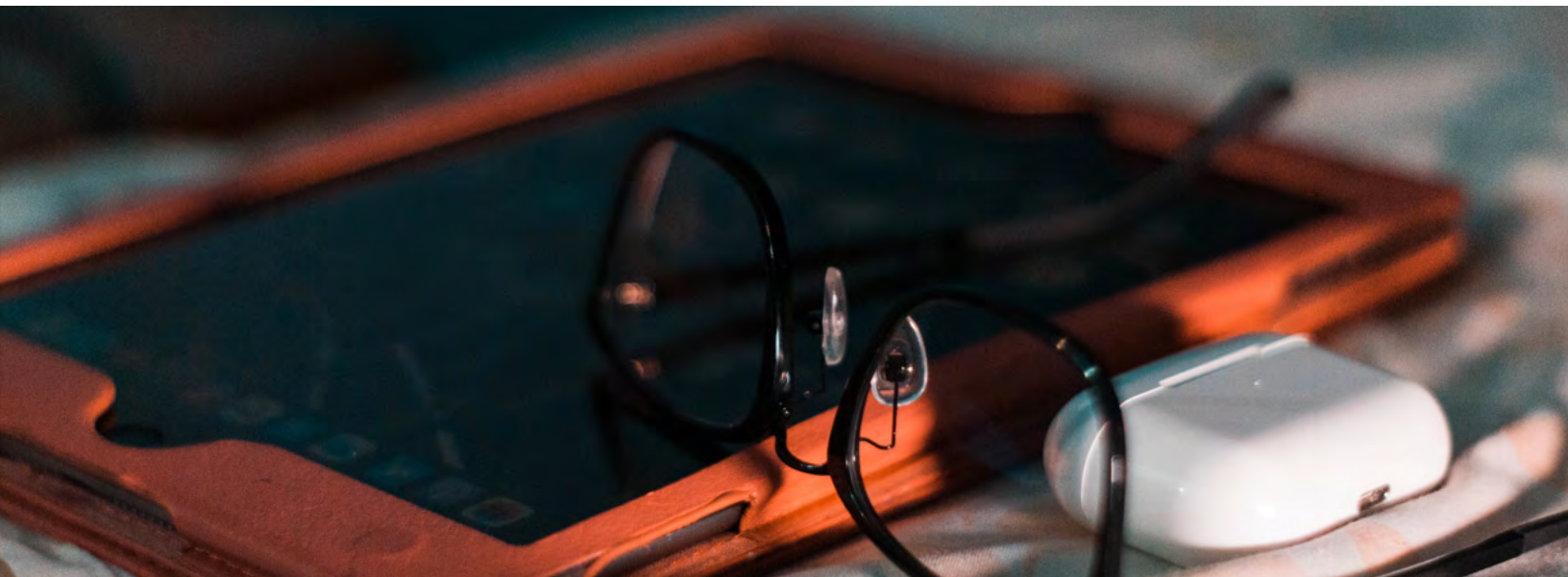
Spaces

Spaces refer to the organizational containers within the Contentful CMS. They act as high-level folders or workspaces, enabling you to efficiently categorize and manage your content.

To create a new Space in Contentful:

1. Navigate to the top left corner of the pane, click your organization name, then click **Organization settings & subscriptions**.
2. On the “Spaces” page, click **Add a new Space** in the top right corner.
 - a. Premium users will see available Spaces. If no Spaces are available, you can contact Contentful to add more.
 - b. Basic users will see available Space licenses.
3. Assign the space to an active license and click **Continue**.
4. Enter the name of the new Space and choose an “Empty” or an “Example” option.
5. Click **Confirm and Create** to add the new Space to your Spaces table.

The number of Spaces you can have depends on your subscription level. Free licenses include one Space, while Basic licenses include 20. If you have a Premium license, you can customize the amount of Spaces included in your application.



Key Concepts and Definitions

Content Types

Content Types are predefined templates or blueprints that define the structure and characteristics of your content. They serve as the building blocks for organizing and standardizing the information within your Spaces. Content Types define what fields or attributes your content can have, such as text, images, dates, and more.

Content Types are different than Content Models. A Content Model is a broader conceptual framework that structures and organizes your content. It includes multiple Content Types, each representing a specific type of content within your Space. Content Types, on the other hand, are individual templates that define the structure of a single content item, such as an article, product, or event.

To create a new Content Type:

1. Log in to the Contentful web app.
 2. Go to the **Content Model** tab.
 3. Click **+Add Content Type**.
 4. Enter a custom name for your duplicated Content Type in the **Name** field to generate an API identifier based on the name.
 5. Enter a custom description for your duplicated Content Type in the **Description** field, if desired.
 6. Click **Create** to create your Content Type.
 7. Click **+Add field** to add the first field to your newly created content type.
 8. Repeat step 7 to add more fields one-by-one to your Content Type.
 9. Click **Save** to apply changes to your Content Type.
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Key Concepts and Definitions:

Entries

Entries are the actual instances of content created using Content Types. These are the tangible pieces of content that fill your Spaces. Entries are where you input and organize information, such as articles, blog posts, product listings, or any other content defined by your Content Types.

To add a new Entry:

1. Log in to your Space. Click the blue **Add Entry** button from the content list.
 2. Select the Content Type you'd like to create from the drop-down menu.
 3. In the Entry editor, add your content to each field required. You can format your text with Rich Text or Markdown, if the Content Type you're working with includes a field containing the text editor.
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Key Concepts and Definitions:

Assets

Assets are any media files or resources that accompany your content. That includes images, videos, PDFs, or audio files. These resources are integral to many Content Types and are used to enhance and complement your textual content.

Follow best practices for naming and metadata to maintain an organized and easily searchable library of **Assets** and streamline asset management. Always include:

- Relevant tags
 - Clear and descriptive file names
 - Relevant tags
 - Proper categorization
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Designing a Hierarchical Content Model

Creating a structure that allows you to organize and represent content in a hierarchical or nested manner is useful when you have content that has parent-child relationships, such as a product catalog with categories and subcategories. That allows you to define a relationship between content without limiting your content model to a specific context.

Here is the step-by-step process for designing a hierarchical content model in Contentful:

- 1. Define Your Content Structure.** Determine how your content items relate to each other hierarchically, and identify any parent-child relationships.
- 2. Create Content Types For Each Level of Your Hierarchy.** For example, if you're creating a blog with categories and subcategories, you might have Content Types like "Blog Post," "Category," and "Subcategory."
- 3. Set Up Fields.** Within each Content Type, define the fields representing the content's attributes. Your "Category" content might include "Name," "Description," and "Image," for example. Use a "Reference" or "Link" field type to establish hierarchical relationships.
- 4. Set Up Entry Validation.** Configure Entry validation rules to enforce your hierarchical structure. For instance, you can use validation rules to ensure that a subcategory can only reference a valid parent category.
- 5. Create Entries.** Start creating Entries for your content. Don't forget to populate your reference fields.
- 6. Retrieve and Display Content.** Use Contentful's API to retrieve and display hierarchical content on your website or application.
- 7. Implement Navigation.** Depending on your use case, you may need to implement navigation elements to help users flow through the hierarchy. That might involve creating menus or category/subcategory listings.
- 8. Test and Iterate.** Test your model to ensure it works as expected. Make adjustments and iterate as needed based on user feedback and evolving content needs.
- 9. Document Your Model.** Document your content model and the hierarchical relationships to make it easier for content editors to understand and use.

Remember that Contentful provides various SDKs and APIs for different programming languages so you can tailor the implementation to your specific technology stack.

Optimizing Your Content Model for Localization

If you need to adapt and deliver content to a global audience, you can and should optimize your content model for localization. Localization involves tailoring content to meet the linguistic, cultural, and regional preferences of various audiences.

In Contentful, locales allow you to specify different versions of the content and choose a particular version when accessing it through the Content Delivery API.

In every Contentful Space, you'll find a collection of locales identified by unique ISO codes (such as en-US or de-AT). When you create a Space, a default locale is automatically set. It is displayed by default in the Contentful web app and used for Content Delivery API requests that don't specify a particular locale.

If you're working with many locales (e.g., publishing content in 30+ languages), there are ways to make authoring easier. First, you can control content visibility to limit the number of locales visible to authors in the Entry editor.

You can also use roles and permissions to limit editors to editing and viewing only specific locales. If your German translator doesn't need to see the French version, for example, make their life easier by eliminating anything they don't need to work with.

Need help setting localization up in your Contentful environment or integrating with a translation service like Translations.com? Let us know.

Best Practices

A poorly designed content model can lead to a bad editor experience, a difficult-to-manage codebase, and scalability issues. Here are some best practices to ensure you can create a well-structured and easy-to-manage content model in Contentful:

- 1. Keep your content model simple and flexible.** Avoid creating too many Content Types and Fields. Instead, opt for versatile ones that can adapt to different contexts with reference fields for differentiation.
- 2. Use descriptive field names and labels.** For example, use "Hero Image" instead of generic names like "Image" to improve content understanding and management for current and future needs.
- 3. Use field types that match the content you're creating.** That can look like using boolean fields for true/false values instead of repurposing number or text fields, or employing rich text and markdown for blog post body content.
- 3. Use field validations to ensure consistency.** If every blog post requires a hero image, make that field mandatory. If you are managing the slug (URL) of each post in Contentful, make that field unique to avoid duplication issues.
- 4. Use reference fields to establish relationships between content types.** As we discussed earlier in this guide, this practice facilitates flexible and independent content modeling.

Case Study

Re:wild

Re:wild, a global wildlife conservation organization, faced the challenge of transitioning from WordPress to a more versatile CMS to showcase their biodiversity conservation efforts. They selected Contentful as their headless CMS but struggled with complex content modeling and management. To address this, they enlisted the help of Nansen's team of expert Contentful developers.

Working with Nansen, Re:wild streamlined its content management, reduced the number of Content Types, and improved its website's user experience. They seamlessly integrated existing systems, including Qgiv and MailChimp, incorporated dynamic video content, and enhanced user engagement with story maps and survey tools. The collaboration allowed Re:wild to leverage Contentful's inherent functionality, minimizing hard coding and customization.

Contentful offered Re:Wild more flexibility in managing their website content, enabling them to focus on creating engaging new content and optimizing the user experience. Their future plans include redesigning the homepage to prioritize storytelling and campaign-based content and exploring tools like heat mapping to enhance user engagement.

The partnership with Nansen has empowered Re:wild to achieve its digital goals and inspired confidence in the organization's conservation efforts.



Troubleshooting

Content modeling in Contentful is a powerful way to structure and organize your content, but it's not without challenges. The most common issues organizations run into when launching a website or application on Contentful CMS include:

1. **Inadequate planning** - Rushed content modeling without proper planning leads to inefficiencies and potential disruptions.
2. **Complex relationships** - Misconfigured or overly complex relationships result in data inconsistencies and retrieval issues that damage the user experience.
3. **Versioning and history** - Managing changes to content models in a collaborative environment can disrupt workflows and lead to data loss.

To avoid these roadblocks:

- Regularly audit your content models to identify issues and drive consistency.
- Provide clear documentation and training for content editors.
- Foster open communication and collaboration for content model changes.
- Utilize version control systems or Contentful's Content Management API (CMA) to track changes.
- Leverage staging environments for risk-free testing.

And when managing structural changes, don't forget to:

- Ensure backward compatibility.
- Develop migration scripts for seamless content updates.
- Thoroughly test changes before implementing.
- Keep stakeholders informed for a smooth transition.

Employing these strategies to address the challenges above will enhance your Contentful content modeling process and improve content quality and consistency.



Preparing for Future Growth

In the digital realm, change is constant. To ensure the longevity and adaptability of your Contentful Content Model, consider the following:

Scalability: As your content needs expand, design modular content models that can grow with your organization. Implement version control for tracking changes and optimize performance to ensure smooth scaling.

Extensibility: Make your content models extensible from the start, accommodating future content types and fields. Use Contentful's user-friendly Content Type Editor and provide documentation and training to your team for seamless adaptation.

Continuous learning and experimentation: Be open to emerging technologies like AR, VR, and voice interfaces, and future-proof your content models for what lies ahead to remain relevant and flexible in the ever-evolving digital landscape.

Wrapping Up

A solid content model is the foundation of every successful Contentful project. From an operational perspective, it organizes and structures your content for easier management, but it's also the keystone of exceptional customer experiences.

Your content model empowers you to create, manage, and deliver content that resonates with customers on a deeper level, fosters loyalty, and drives results. Companies that invest in a strong content modeling strategy position themselves at the forefront of customer-centric marketing and competitively differentiate their organizations in today's dynamic digital environment.

Are you struggling with content modeling in Contentful? We can help. Contact us to schedule a consultation today.



Charting what's possible

nansen.com

About Nansen

At Nansen, we are devoted to powering your business growth through innovative digital solutions. Our services include consulting, design, and technology services, all tailored to propel business success. Our methodology hinges on synchronizing technology, data, and unique insights to help our clients fulfill their aspirations. We infuse innovation and optimization into our approach, applying fresh perspectives to new technology. Our solutions are geared towards accelerating revenue growth and costs reduction, achieved more efficiently than in-house efforts. What sets Nansen apart is our emphasis on enduring partnerships with our clients, working meticulously and inclusively to ensure that the solutions to immediate necessities contribute to sustained success.

Engage with Nansen, and you're not just getting a service provider; you're gaining a partner committed to your digital voyage. We stand ready to help your business not just navigate but thrive in the digital realm. Your success is our success, and together we will explore the endless possibilities that the digital world has to offer.



A Better Way to Build Content

contentful.com

About Contentful

Contentful helps digital teams assemble content and deliver experiences, faster. Our open and flexible content platform adapts to how digital builders work to meet business goals through easy customization and deep integration with any tech stack. Digital teams can reuse and automate content across devices and channels, so they can worry less about content maintenance and more about their customers.

As stated in the Forrester Wave™: Agile Content Management Systems (CMSes) Q1 2021 report, Contentful has “a well-articulated vision for helping companies become digital first, plus the capabilities to help them get there.”

With offices in hubs including Berlin, San Francisco and Denver, and a global team distributed across every time zone, we help thousands of businesses across the spectrum of digital maturity to move fast and meet customer demands. Contentful supports IKEA, Vodafone, Electronic Arts and over 30% of the Fortune 500 to deliver market-leading digital experiences at scale through every stage of the customer journey.



Let's chat!

How can we work together to chart the possible?