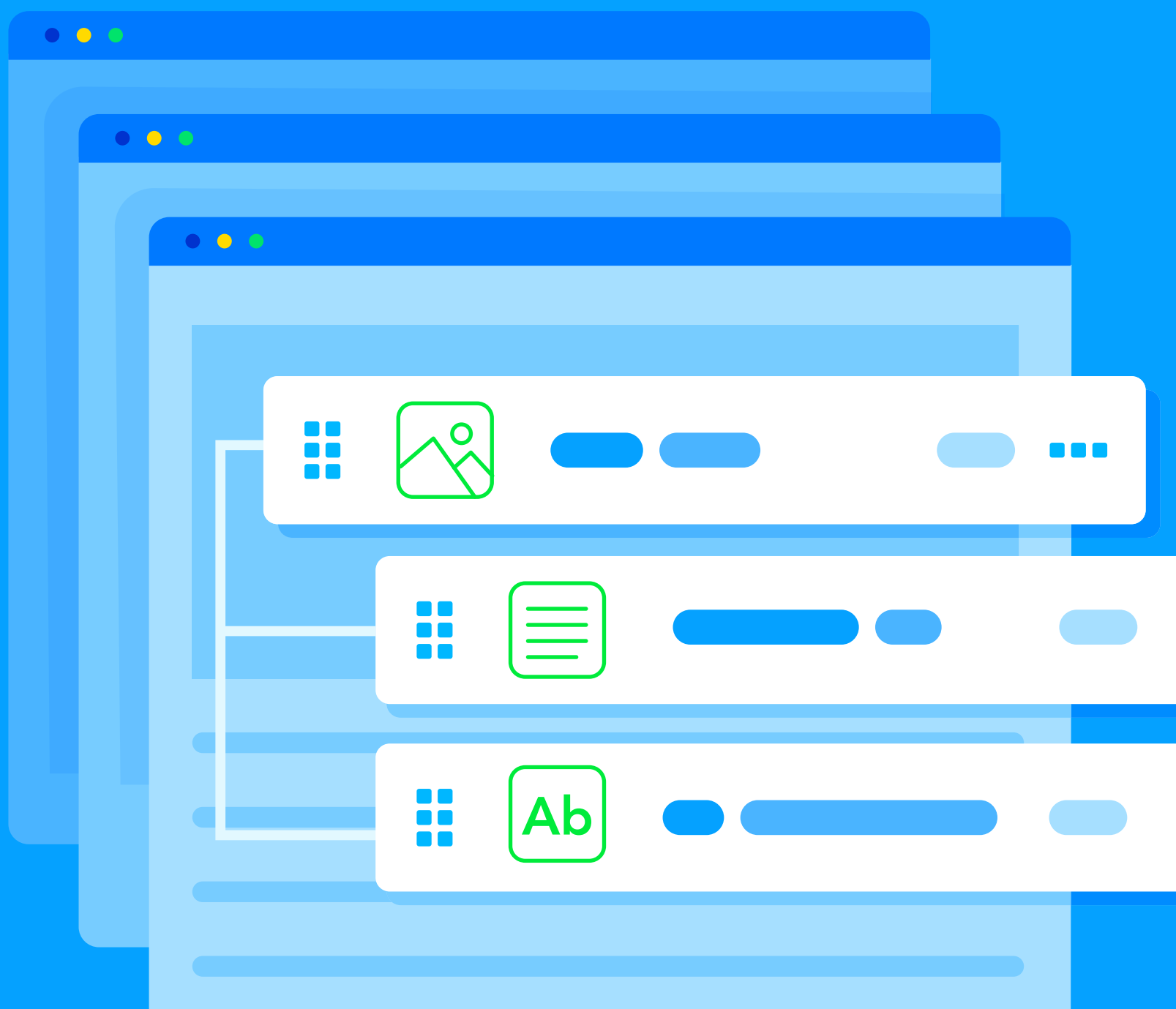




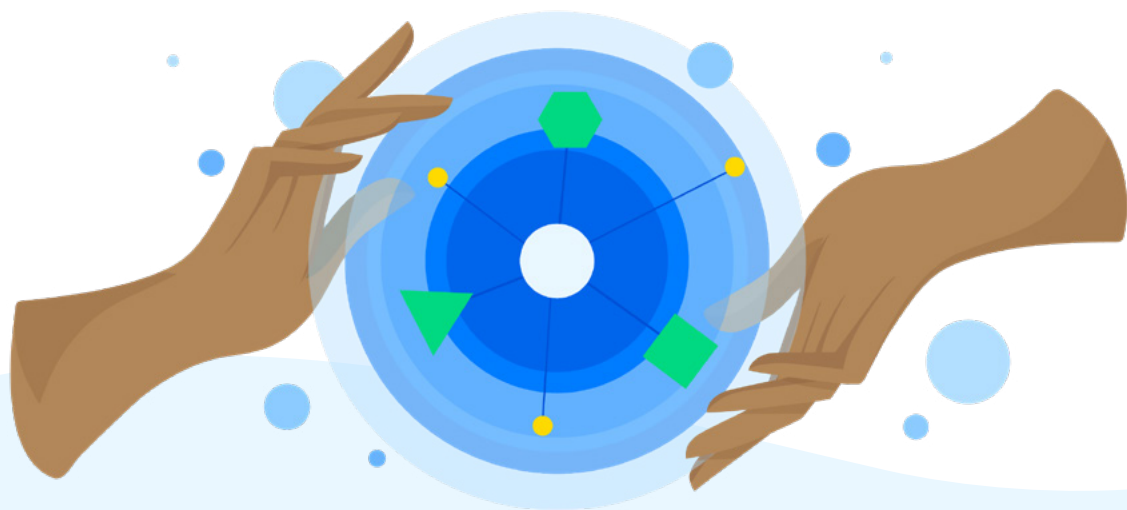
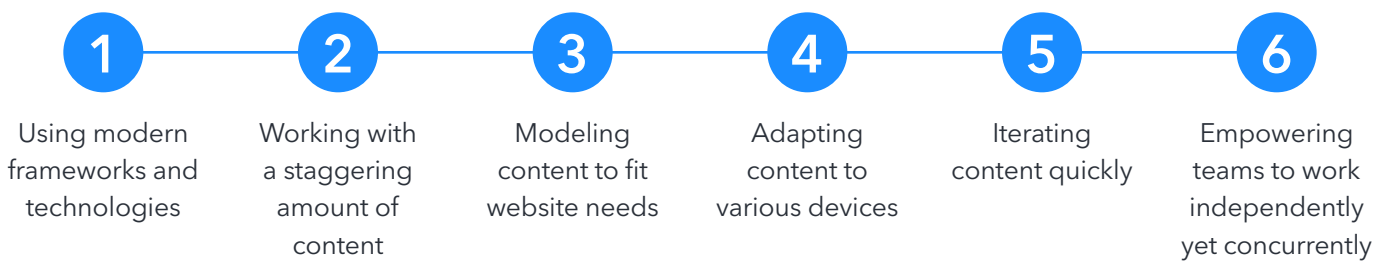
Content modeling 101

A developer's guide to mastering
a modern content platform



Decoupling code and content to enhance digital experiences

The movement towards digital products and digital experiences is making product managers and developers rethink how they make websites. Delivering these digital experiences in new, agile ways requires:



Traditional, monolithic content management systems can't always meet these heightened expectations, especially in terms of scalability and flexibility. Digital leaders are increasingly adopting a new platform to solve their needs: a content platform.

Contentful is an API-first, modular approach to managing content that integrates a fully editable backend content repository with a flexible, customizable front end. Contentful helps manage and deliver content effectively on any digital platform, including websites, apps, wearables, signage and conversational interfaces.

Enterprises are migrating from traditional, monolithic CMSes to flexible, agile content platforms because of the versatility of the platform and its ability to go serverless. Traditional CMSes were designed to send content to web pages. They couple content tightly with the presentation layer which means that content is tangled up in code and necessitates developer assistance for most workflows.

Setting up your content platform

How do developers work with APIs and which stack will they use? How can your content teams manage their assets within the platform?

Let's break that big picture down into smaller chunks and go through how effortlessly intuitive it is to get your content platform up and running.

You'll be surprised how easy it is to slide into using Contentful, as [highlighted in this guide](#).

The first step to starting a project is to not worry about what stack to use or which packages to install. Instead, take the time to [familiarize yourself with content modeling](#), which serves as the basis of your digital project by providing structure and organization through content types.

A content type is exactly what it sounds like: the type of data in each entry, from a piece's headline to its content to individual images. Content types establish a form of order and logic to how your content will be stored and enable the time-saving reuse of existing content – for instance, you can reuse the company summary on the about page anywhere else you see fit.

Then you'll learn how to create your first Contentful space, which serves as a repository of content for a given project. Each space has its own content model, content base and user permissions. From there, you can connect your web project and call for content via [our intuitive APIs](#).

This surprisingly soothing exercise that helps you connect the dots, with immediate feedback that allows you to experiment and see the results of any changes in real time. From the content modeling tutorial, you'll get an idea of how well a content platform performs – whether it's plugging into frameworks like React, working with GraphQL or powering static site generators such as Gatsby.



Developing your content model

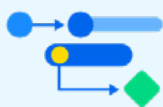
Spending the time to develop a proper content model is essential for the consistency and scalability of your web project. It's one of three essential elements of successful web projects (the other two being skilled development resources and a powerful content platform). Unfortunately, a comprehensive understanding of content modeling is often overlooked. Look at it like building a livable, world-class city – it's essential not just to have aesthetic architecture and functioning infrastructure, but a solid plan on how those link together.

The appearance of content is increasingly unpredictable, making content modeling all the more essential. The content that you create for display on computers and mobile devices today might be used on a billboard in Times Square or made available for virtual reality headsets tomorrow.

A content platform enables you to reuse content, increasing efficiency and the impact of your content. This is achieved through creating a standardized set of content building blocks, each used in a plug-and-play manner, instead of requiring you to copy content across pages or sites in a hack-and-adapt way. That's the power of content modeling.

By the end of our very useful content modeling guide, written by developers based on feedback from both designers and editors, you will understand how to share and reuse content models, analyze and visualize them, and evolve and iterate your content.

Extend your content platform's capabilities even further with [these tools](#)



Export and migration CLI tools:
Simplify migrations and script fine content model changes



Webhooks:
Send notifications when data in Contentful is changed



Environments:
Create and maintain multiple versions and make changes in isolation



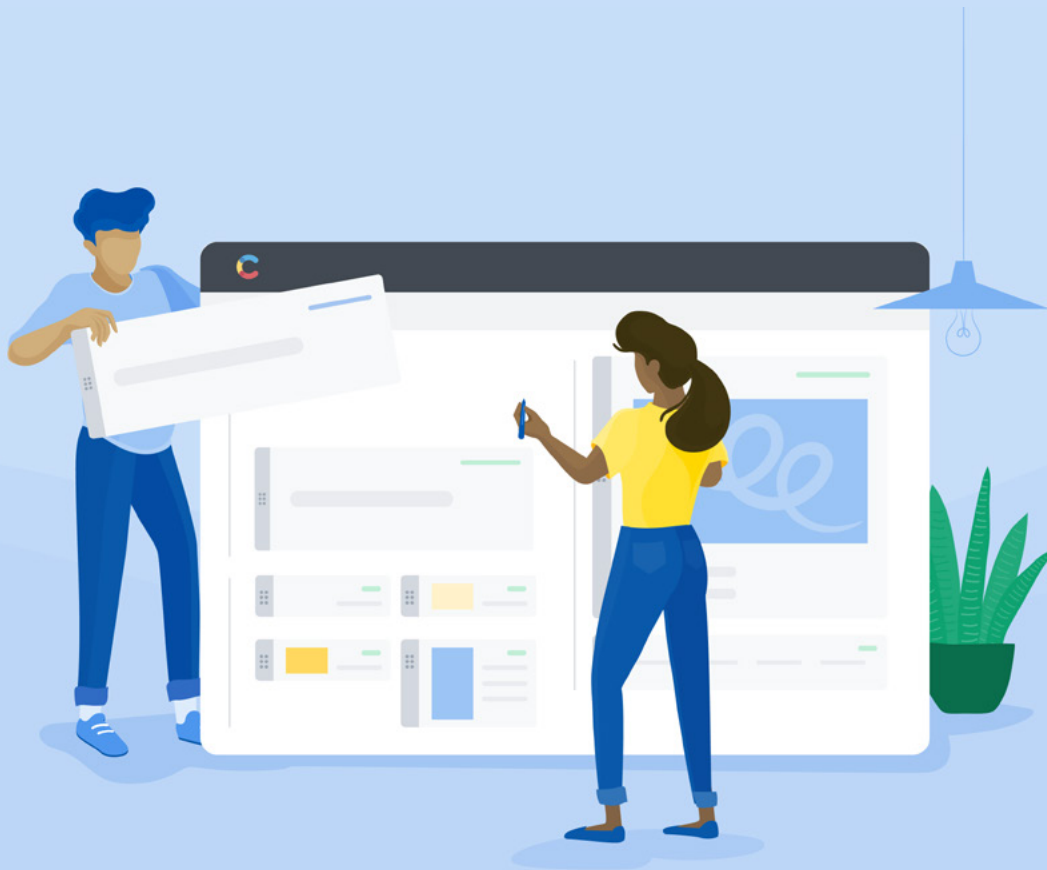
Locales:
Define localizations of content to tailor it to regions and languages



Validations:
Prevent the storing of invalid data and alert users if that occurs



Integrations:
Work with third-party apps



Creating your first static site with Contentful

If you've got the basics down, why not start [creating your first web project with Contentful](#)? A portfolio site is the perfect place to start – everybody needs one, so it's a practical use of your time.

By the end of this exercise, you'll have a fast, secure and maintainable portfolio static site that you could easily deploy to the web. For the tutorial above, your site will be powered with Contentful as your cloud-native content platform. Gatsby will show data via a hosting service which has continuous deployment, such as Netlify.

The use of Contentful to power your static site enables you to easily scale it into something much bigger. For example, say you suddenly find your one-person operation turning into a full-blown agency or company. If your platform can scale to meet this growth in content, customers and team members, you'll be able to save yourself time and resources. You'll also stand to benefit from enhanced security, lower hosting costs, and faster loading of your website when compared to old-school CMSes.

Establishing roles and workflows

A content platform enables development teams and content creators to work seamlessly together. The next step in creating a functional workflow is to determine which users are in charge of which content and track changes by [establishing a content approval workflow](#). This is beneficial for collaboration and version control. It also avoids the issue of too many editors – since the flip side of reusable content is that it's easy to make changes to one page that might affect another.



Using Contentful to power your static site enables you to easily scale it into something much bigger.

A content platform lets you do this comprehensively through user roles, which are defined in the content model and describe the workflow status of a piece of content. The “saved views” function allows you to pick and choose content to review based on its state and which users who have written or reviewed each piece.

Establishing a content approval workflow leads to increased flexibility and accessibility, Contentful’s APIs and web app for non-developers helps with this too. This is just the tip of the iceberg in terms of what you can do by leveraging features and tools within Contentful.

Extending your content platform

On the topic of users and managing content, security is a major concern for enterprises and there are many ways to enhance protection from any potential user error.

Contentful is much safer than other vendors because content delivery and content management depend on separate APIs. It's not the end of the world if someone misplaces content delivery tokens since those are sandboxed as read-only APIs and do not allow manipulation of content to begin with. Traditional CMSs do not have such separation and therefore have many more security holes, so enforcing security is a painful task that isn't bulletproof.

Once you have security on lockdown, you can return to thinking about ways to improve your team's productivity. Work doesn't end with the completion of content creation because, more often than not, content editors have other quality assurance tasks during the publishing process. Smaller tasks such as checking for broken links may not seem like monumental chores by themselves, but a checklist of such items during the publishing process may bog down productivity – that's where the App Framework comes in.

Contentful's [App Framework](#) gives you the tools to build apps that can customize Contentful to fit your user and business needs. With it, teams can easily integrate market-leading third-party services with the Contentful platform or build integrations tailored to your business.

Through apps, a huge variety of enhancements to the Contentful web app are possible. From small field editor improvements to deeply integrated full-page applications, the App Framework makes customizing the web app effortless.

Here are some common use cases for the Contentful App Framework:



Adding custom field editors to improve the editor experience



Managing content versions for running A/B tests with personalization tools



Triggering actions such as CI builds in third-party systems



Tailoring the default entry editor to suit your specific needs

Maximizing your content workflow efficiency

A content platform gives your team the speed and productivity boost needed to complete their digital transformation and stay ahead of the market curve. The way everything is set up ensures that your content revolves around your workflow, saving time and preventing the headache of having to adapt your workflows to the demands of a traditional CMS.

One of the biggest time sinks in managing content is the reviewing and organizing existing content – be it for approving pieces for publishing or simply referring to a past item that could be linked to other pieces of content in the works. Contentful allows you to work smarter – built from the ground up for modern ways of working, including [the ability to search and filter](#) content by keywords, content type, workflow state, and many more factors you are able to specify and customize.

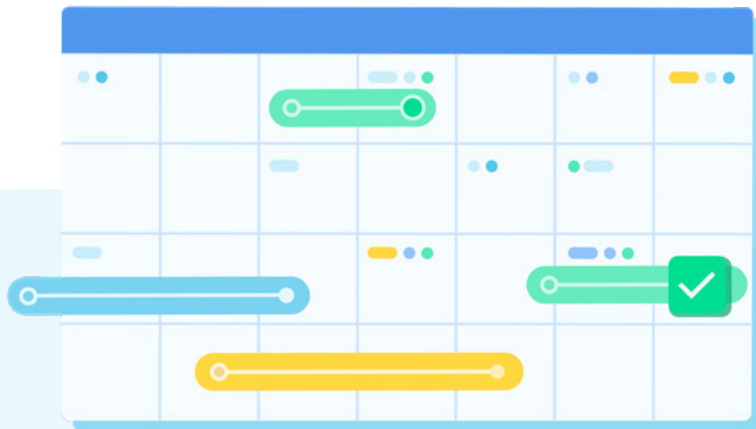
Another way to save time is by taking advantage of the ability to automate processes, that in the past, would have been tediously performed by a human or team. One way to automate your workflow with Contentful is with the [CLI tool that frees up the schedules and minds](#) of your team members by automating certain tasks, such as the creation of new spaces and access token management. It's a powerful tool in the hands of more advanced users and we're constantly evolving it to broaden the scope of usefulness.



Scaling faster with reduced overhead

Rapid deployment and scaling, without the need to manage hardware, operating systems and runtimes, are the primary reasons for going serverless. To further enable serverless development teams Contentful has many neat tips, tricks and tutorials that cater to a variety of scenarios, languages and environments. You can keep up with evolving reading material [on our blog](#).

To ensure the optimizations translate for the end user consuming them, our developers came up with solutions to minimize the bottlenecks on the user side, such as slow internet speeds and resource-intensive browser plugins. Contentful's Images API empowers your creative team to get the most out of your images – and keeps your technical team happy with fine-grained control over image formats, compression and high-performance delivery.



Larger pieces of content such as images take time to load, resulting in blank spaces and shifts in page structure as they load, the perception of slow loading time, and ultimately, user loss. Placeholders and underrated lazy-loading solve this issue and increase the perceived performance of the site. To learn more about how Contentful handles images, [check out this blog post](#).

Such optimizations are made more flexible and scalable with a content platform, so they are easier to develop and implement, unlike the cumbersome nature of hacking together equivalent solutions for your average CMS.

Next steps

With a flexible content platform, there is a world of possibilities to improve multi-user workflows, security and quality of life, all of which would otherwise be impossible to do with a traditional CMS. The flexibility offered by the modular nature of a content platform combined with an API-first approach that allows full customization on both front and back ends is the way to go when it comes to offering full-fledged, impressive digital experiences.

Contentful originated from developers trying to address issues with their workflows to make content delivery more effective, supporting both the backend teams that develop the publishing interface and content creation teams who write, edit and hit the publish button. Contentful helps you develop a system that serves your business goals, as opposed to a monolith CMS that forces you to adapt to an existing system.

Check out Contentful for yourself with our [free Community plan](#) that includes everything you need to launch a successful first project, which you can scale to any size, on any digital platform. We're certain you'll soon be able to wow your audience and make your organization's digital products a success.

Want to know more about Contentful? Curious how other developers are using it?

[Explore the Contentful Developer Portal](#)

