THE ULTIMATE GUIDE TO GOING HEADLESS

↗ TL;DR

Increasingly, modern and forward-thinking eCommerce businesses are abandoning monoliths in favor of more agile approaches. A **headless approach** separates the front end from the back end, allowing you to:

- ✓ **Build more efficient, more agile, more customizable systems**
- ✓ **Respond to market changes far more rapidly**
- ✓ **Add new front-end touchpoints as consumer taste shift**

And may we introduce to you the **composable approach**? This subsector of headless commerce is designed for fast-growing companies looking for even more adaptability and scalability. With this approach, providers offer agile businesses out-of-the-box modules to build their commerce platform from – allowing the flexibility to add and remove components freely helps you tailor your digital experiences to consumer demands and cut your time to market drastically.

Let's have an in-depth look at the pros and cons of headless and composable commerce on the following pages to see which approach is the right fit for your business!

Want to know more?

Then read on and learn about how you can benefit from a headless approach and why Composable Commerce is more than a buzzword.

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Go ahead! ↓

Why eCommerce Is Going Headless

What do your eCommerce customers want? A better, smoother experience. According to the Forbes Insights report, 77% of customers say customer experience is equally important to product quality. Furthermore, people expect a seamless shopping experience across channels – which is where the gap is. Gartner Research found that half of all large companies will have failed to unify channels in 2022. This means that interacting with these organizations feels and might even look vastly different across platforms, which harms experience and brand recognition.

The good news: You can use this information to help your eCommerce business thrive.

Where 50% of your competitors fail, agility, omnichannel presence, and continuous adaptation will put you ahead of the curve. But how do you achieve these? The magic word is **Headless Commerce.**

The growth this approach has seen thus far is a testament to the transformative nature of headless design. According to the Global State of Headless Report, 92% of companies that have moved to a headless architecture agree that it improves the consistency of the customer experience. Another 62% say the headless architecture has directly improved their engagement and conversions.

The trend is clear – **eCommerce is going headless,** and you should consider this technology to stay competitive.

But, in a world where headless is the new buzzword, how do you make sense of the transition? This guide is here to help. We will discuss:

- ✓ **What headless is** and how it compares to previous models.
- ✓ **Why you should go headless** and what other options there are.
- ✓ **The advantages and disadvantages** of different architectures.
- ✓ **How to choose the best solution** to match your needs and resources.

What Is Headless?
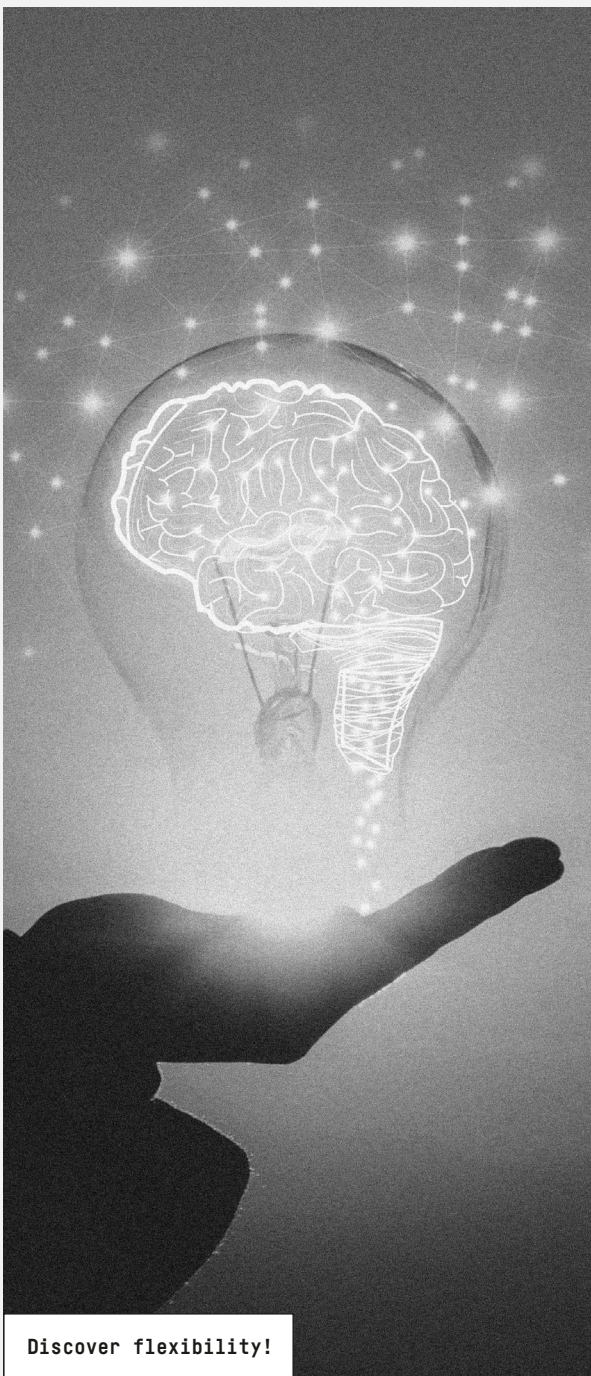
In the past, eCommerce businesses would use complete eCommerce software – which was overwhelmingly designed using the monolithic approach. Traditionally, monolithic eCommerce platforms are bundled in a single software package. These platforms were useful as they provide a "one-size-fits-all" package where online shops could manage their entire business, experience, and features needed from one central system.

In monolithic systems, the front end and back end are tightly interconnected. Changes you make to the functionality or structure of your shop will also affect the back end. The upside to this closely coupled approach is its standardized ecosystem that allows for quick deployment.

However, now that the eCommerce sector has grown to incorporate mobile devices and connected omnichannel experiences, monolithic platforms have found themselves to be too inflexible and unadaptable to keep up with the scale of the industry.

Discover flexibility!

If you want to make changes to your shop, you may have to go through the software provider – or deal with complicated, time-consuming front-end and back-end updates. Monolithic platforms often suffer from slow updates and poor maintenance. Why? If the developer of this platform wanted to make changes in response to user feedback or provide diversified features, this would take a lot of time, and resources – not only to change large parts of the code but also to test the new builds and every other component to make sure everything still runs smoothly and without error. This quickly adds up to be a time-consuming task.

Monolithic platforms are near impossible to scale effectively, as you're unable to separate front-end experiences from the back-end platform. As your business grows, you may outgrow the features of the monolithic platform. That's why the **headless approach** is so pivotal to the digital growth of brands and retailers.

Getting to Know the Headless Architecture

In the simplest terms: Headless architecture involves decoupling the front and back end of an application. In the context of eCommerce, headless architecture refers to a system where the presentation layer (your online shop front ends) – the "head" – is separated from the back-end system – "the body".

The back-end system of an online shop handles all processes that are not visible to your customers, e.g., orders, inventory, pricing, and customer profiles – including all related data.

This allows businesses to use different front-end technologies and modify their front end independently of the shop's back end. This is especially useful when designing experiences for different channels, such as mobile apps, a website, or point-of-sale terminals. In other words, you have one back end, and you can link it to multiple front ends.

If the front end is decoupled from the "body" that handles the orders and pricing information, how can both ends communicate with each other? **APIs** – or Application Programming Interfaces – allow the headless elements to communicate with each other. This makes it possible for a business to have a website, an app, and a point-of-sale terminal, all using the same back-end system.

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Ask yourself:

Do your growth targets align with your tech stack?

What Are APIs?

Application Programming Interfaces (APIs) are a way for different software systems to communicate with each other. They allow different parts of a business to share data and functionality, making it possible to create a headless eCommerce system.

For example, imagine that you want to create a mobile app that interacts with your eCommerce back end. You would need to create an API that allows the two elements to exchange information. This API would act as a connector, translating the requests and responses between the two systems.

When talking about the headless approach,
Robert Merten, Tech Director at ABOUT YOU,
stresses one of its biggest advantages:

"We've been working headless from the very beginning – this approach allows us to work with small, agile teams that focus on different stacks to provide a holistic shopping experience. Not every touchpoint, and indeed, front-end experience, needs the same level of care. The headless approach allows us to scale our resources to develop the features our users are asking for. Headless allows for far more flexible development and speeds up our innovation process."

Robert Merten
Tech Director
at ABOUT YOU
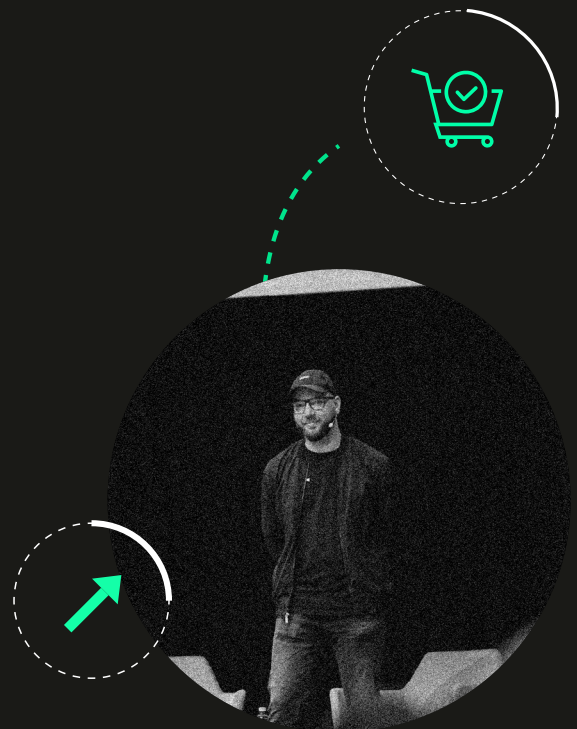
How Do Headless SaaS Providers Operate?

There are two main approaches to providing headless software.

1. Some providers offer a good deal of out-of-the-box functionalities, speeding up your time to market. These providers will work with you to configure your headless project and apply the right front end based on where your customers interact with your store. Additionally, further tools and components can be flexibly added as needed.

2. Other providers take a more complex approach by primarily providing the back-end solution. This approach requires a lot of development work for the brand, as experiences and functionalities will need to be built in before the platform is deployed. The upside to this is greater customization over front-end experiences, but deployment is slow, and in-house development costs are high.

If your business needs a custom experience from day one, the "complex", custom development approach may suit you. Most agile businesses will, however, benefit from the deployment speed of flexible out-of-the-box solutions.

Remember, you can build components on top of a "stock" headless platform. We recommend using out-of-the-box features to get to market and build experiences as required on top of the existing platform.

Has the transition to headless been entirely seamless in practice? Well, some older platforms have been hastily adapted to the headless trend – but are not by core headless. These solutions are not truly headless by design, as their front-end and back-end components are still tightly connected with little flexibility. A true headless application will need to have components that work entirely independently of one another to provide you with the freedom of adapting and scaling single components.

Some of the most popular true headless eCommerce providers include companies such as commercetools or SCAYLE.

You can also apply the headless principle to other systems like:

- Content Management Systems (CMS)
- Product Information Management (PIM)
- Customer Management Software (CRM)

Headless CMS & Front End as a Service (FEaaS)

Let's explore two implementations of the headless approach in the eCommerce world. The first is the growth of the **headless CMS.** The second are providers offering **decoupled front end as a service (FEaaS).**

1: Headless CMS

Every business needs a CMS (Content Management System) to talk to their customers online and distribute content online. In headless CMS, the content repository (where your files live) is separated from the front end. Content is made accessible through APIs to be displayed to users on any device.

Much like headless eCommerce solutions, a headless CMS adds flexibility and speeds up your updates. Here are some examples of popular solutions in this category.

StoryBlok

✓ **Solutions:** A headless CMS that allows publishers to repurpose content for different platforms.

✓ **Features:**
- » A responsive visual editor
- » Lightning-fast publication speeds
- » Ability to build responsive content with nestable blocks
- » Real-time multi-channel distribution

Contentful

✓ **Solutions:** An API-first CMS that focuses on integrating with your existing tools

✓ **Features:**
- » Allows publishers to deliver multichannel experiences with content delivery and management APIs
- » Uses a decoupled microservices architecture to manage your structured content

2: Front end as a Service

FEaaS solutions showcase the quick adaptability of the headless approach extremely well. These services are used to build exciting and immersive front-end experiences for eCommerce sites.

Here is an example of a front-end-as-a-service provider.

Vue Storefront

✓ **Solutions:** An eCommerce-specific open-source front end built with headless concepts in mind.

✓ **Features:**
- » Customizable mobile-first front-end experiences
- » Integration with eCommerce platforms, including SCAYLE, Spryker, and Shopify.

Headless Commerce: Pros and Cons

Brands with high-growth targets wanting to adapt quickly to new market requirements must adopt a far more adaptable headless eCommerce platform architecture – or they risk being left behind in a cut-throat market!

What are the main benefits of Headless Commerce?

Pros of Headless

Headless eCommerce comes with many standout advantages.

✓ Headless systems offer **better agility.** You can quickly add new features, tools, and channels. As the entire application doesn't need to be redeployed for every update, new features can be released more quickly – as only these specific features need to be updated, not the whole system.

✓ Since releasing new features is that easy, you can **respond to market needs faster** – and profit from beating your competitors to the punch.

✓ They're **more scalable.** You can scale different parts of the system independently to make them more efficient as your business grows.

✓ A headless architecture **ensures flexibility** when developing the front end. You are no longer limited to pre-existing platforms but are free to add new channels and touchpoints. With headless, you can also test new touchpoints next to existing channels with ease.

✓ **Third-party systems can be integrated** more easily. Front-end experiences can easily integrate with back-end systems and other third-party apps.

✓ Headless eCommerce is the best way to **provide an omnichannel experience** for your customers. If you're looking for a platform that can quickly and easily adapt to new trends and technologies, headless is the way to go.

Cons of Headless

However, headless is not without downsides you should be mindful of, so make sure you weigh the pros and cons before deciding.

✓ Headless systems can be **expensive to set up.** You'll need to deploy and configure two different systems – both the front-end and back-end applications. The ownership required over your presentation layers may result in considerable development time increases and higher costs.

✓ Some headless eCommerce platforms require lots of configuration – especially if the features you need aren't included out-of-the-box. Headless modules that are too granular might be challenging to get going and will require more tech capacity.

✓ However, there are also headless platforms that come out of the box with these components attached. These solutions are far easier to deploy, but still, allow for other front-end experiences and components to be connected or exchanged on demand.

✓ They can be **difficult to manage,** especially if the platform you're using has a very complex or granular system architecture.

With That in Mind, Who Is Headless for?

Headless eCommerce platforms are well suited for **established, high-growth businesses** who want to quickly adapt to new market requirements and trends. Headless solutions require that you're willing to take ownership of your technical customer touchpoints and presentation layers.

In practice, headless solutions designed for **B2C applications** (e.g., online shops for fashion, furniture, and accessories) are specialized for this kind of use case, which often requires the same functionalities. Although, for B2B headless solutions, this may require some more technical, complex configuration to get off the ground.

Did you know?

Some headless platforms require lots of configurations, some work with ready-to-use capabilities.

Composable Commerce: Best of All Worlds?

If you need a **flexible, adaptable, and convenient** commerce solution, perhaps a **composable eCommerce platform** might be perfect for you.

How does a composable system compare to headless architecture? Many composable systems are headless, but there's more emphasis on interchanging and connecting components to the back end. A composable commerce platform is a system that is built out of smaller, self-contained components. These components can be assembled in different ways to create different ecosystems.

As our expert, Robert explains: "Composable platforms have built-in back-end flexibility and scalability. Even though you get ready-to-use elements, each component works independently, so you can add or remove it as needed. APIs allow components to 'talk' to each other and stay compatible. Therefore, swapping out components doesn't come at the cost of compatibility and stability issues."

Some possible components include:

- ✓ Product Information Management (PIM)
- ✓ Content Management System (CMS)
- ✓ A/B testing
- ✓ Dynamic pricing
- ✓ Promotion managment
- ✓ Personalization
- ✓ Order management
- ✓ Checkout & payment handling
- ✓ BI tools
- ✓ Risk and credit assessment

These types of platforms are brilliant for **large enterprises** that need **high flexibility, and low maintenance solutions.** We find that this architecture suits those businesses that are targeting fast growth, expansion into new marketplaces, internationalization, and high innovation ambitions. A composable eCommerce platform can keep pace and scale with your growth.

Pros of Composable Commerce

In addition to the advantages that headless approach provides, composable commerce scores with serveral additional benefits.

✓ Composable commerce platforms are **quick to deploy** – especially when working with mature, off-the-shelf components.

✓ You can **release new features faster** and with less risk of bugs. Scalability and flexibility are incomparable to what you'd get with a monolithic solution.

✓ Different components work and are maintained **separately,** meaning you get headless flexibility but the convenience of monolithic structures.

✓ Component-based solutions are **significantly less complex** than highly individualized systems, making troubleshooting and updates much more straightforward.

✓ By using off-the-shelf, pre-integrated modules for core business software like PIM or CMS solutions, businesses can **refocus their resources** on growing the business, instead of developing digital infrastructure.

✓ You can **combine third-party tools** or build your own functions to create a unique platform that perfectly suits your needs.

✓ Our main takeaway: The composable approach essentially combines the convenience of traditional out-of-the-box monolithic software with the flexibility of headless platforms. It brings the agility without the complexity!

Cons of Composable Commerce

✓ **System maintenance can be pricey** – if it is not included in the price. Therefore, clarify in advance: Are costs for maintenance, hosting, and updates already part of the deal, or are these hidden costs that will come on top of it?

✓ If you want to stand out, you might want to develop your own modules (e.g., personalization modules). This **can be a lot of work** and might require specific coding knowledge. If you are unable to do this in-house, partner agencies can assist with the development of specialist components. However, many composable adopters will stick to pre-developed components, as these can be easily configured and maintained for their desired function.

With That in Mind, Who Is Composable For?

Composable solutions are brilliant for fast-growth enterprise brands that need **components to be scaled independently.**

Given the agility of composable solutions, it's easy to test out new trends and features by enabling and disabling components as you please.

Composable commerce does not necessarily require sprawling in-house development teams. Some solutions make use of microservices, which add up complexities really fast. So you need to make sure which components are ready-to-use, who will take care of the maintenance, and which complexities you really need in your tech stack in order not to over-engineer a standard use case. Most B2C brands and retailers will need the same kind of components, so it will be sufficient to extend a lean platform with the features differentiating their business. However, in many B2B cases, it's often advisable to invest in granular individualizations a microservice platform might offer, as use cases might not have a common standard to extend from.

Composable Commerce

Composable business relies on four key principles – **discovery, modularity, orchestration**, and **autonomy.** Composable Commerce is made from interchangeable building blocks that can be discovered and assembled into new configurations as needed. As external and internal factors shift, you can adapt your composable business structure as needed.

Conclusion: Headless in a Nutshell
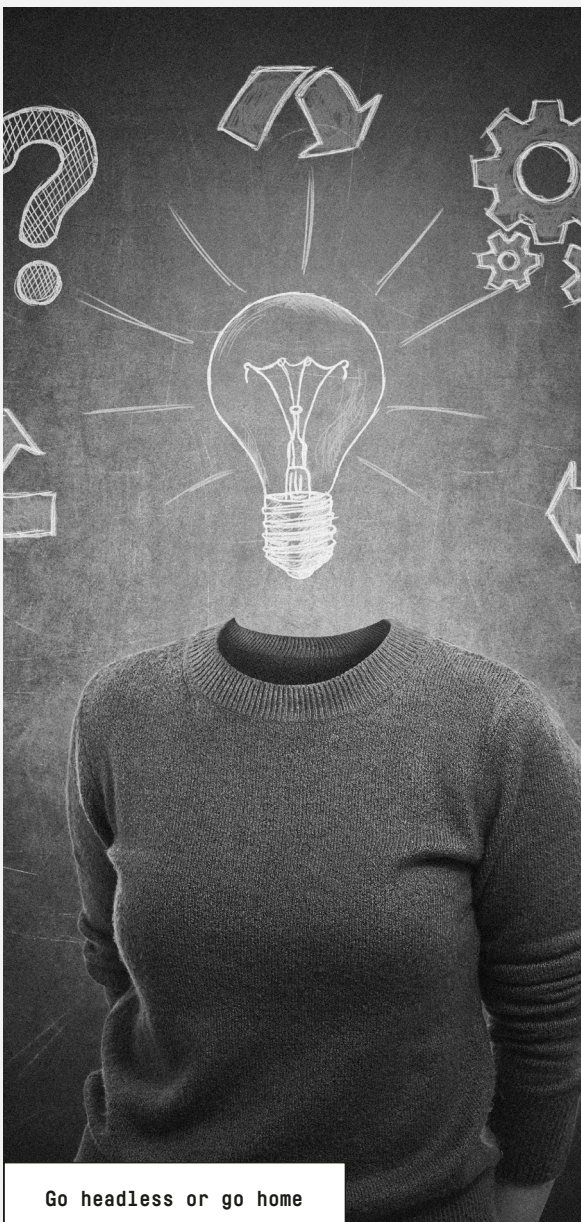
Go headless or go home

eCommerce success depends on how quickly and efficiently you adapt to market changes. The ability to identify and respond to new opportunities and threats can make or break your growth. Headless eCommerce architecture can help you stay ahead of the curve by allowing you to quickly deploy new features and products.

In a traditional eCommerce platform, the front end and back end are tightly integrated, making it difficult to make changes to the front end without affecting the back end. With a headless eCommerce platform, the front-end and back-end are separate, providing you with unprecedented flexibility. And while headless might be pricey for smaller businesses, it is now the standard for consumer brands who want to grow sustainably.

To stay competitive, larger companies will need ways to be agile and fast. Headless architecture empowers you to precisely do that. It allows you to easily create new customer experiences and interfaces without affecting your back-end systems. In the long run, monolithic architecture

puts you at a disadvantage since it becomes increasingly difficult and expensive to make changes.

A composable approach with few complexities is the best approach for large brands and retailers that want to quickly adapt their eCommerce platform to suit new trends, ideas, and business needs. Lean composable commerce solutions offer ready-to-use components for both the front end and back end – simplifying the implantation of a composable commerce platform.

When it comes to eCommerce, change is the only constant. So, begin future-proofing your business now with a headless or modular eCommerce platform now.

Go headless. Go SCAYLE.

Provide your customers with a compelling customer experience across all channels and touchpoints – always flexible, agile, and on the cutting edge. Get started immediately by going headless and benefit from our vast number of ready-to-use components, that accelerate your time to market and set you up for even faster innovations.

Grow into your target architecture with our components:

↗ Product Management (PIM)
↗ Shop Management
↗ Order Management (OMS)
↗ Checkout
↗ Headless Front End

You decide what you need – we support you with our flexible, composable system.

DEPOT SCAYLED

> 10%
increase
conversion rate

> 50%
revenue
increase YoY

Read the Case Study

Contact

SCAYLE is a flexible B2C SaaS enterprise shop system built on a headless and API-first architecture. An extensive feature set, including PIM, Shop Management, Checkout, and OMS, is combined with an intuitive UI. Brands and retailers use SCAYLE to stay on track with fast-changing market developments and to drive differentiation in commerce.

SCAYLE GmbH is a member of the ABOUT YOU Group and unites modern technology with a unique retail DNA. Leading brands like Deichmann, s.Oliver, Fielmann, FC Bayern, Marc O'Polo, and DEPOT choose SCAYLE's Commerce Engine. Managing directors are Christopher Metz, René Dalock, Sergio Sola, and Tobias Ring.

Rico Adler
Head of Solution Consulting
SCAYLE – Commerce Engine
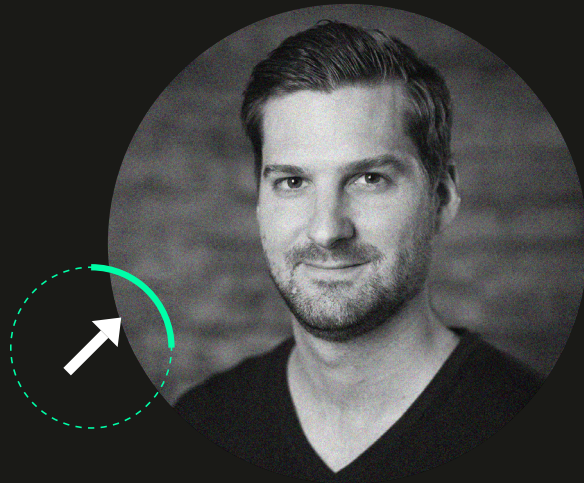
Tobias Ring
Managing Director Commercials
SCAYLE – Commerce Engine

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Checklist for Going Headless

How do you move toward true headless eCommerce?

1. Analyze the status quo

Take a closer look at where you are right now and what resources you already have:

☑ Consider the size of your business and the type of product.

☑ Evaluate your current systems and processes.

☑ Calculate what you're spending on in-house and external system help right now.

☑ Assess your team's capabilities and resources.

☑ Consider your system-improvement budget.

2. Define your business goals and create a roadmap

Be clear about what you want to accomplish with this transition and what you will need to get there:

☑ Envision your company in five years – do you plan to scale or go international?

☑ Imagine your ideal customer journey. What features do you need to achieve it?

☑ Where do you meet your customers? How many channels or touchpoints do you envision?

☑ What are your in-house resources?

☑ Will you need to outsource any of the processes to a trusted partner?

☑ What's your budget for this project?

3. Decide on the architecture

All truly headless platforms can offer flexibility. You don't have to take the plunge and go headless all at once. When deciding on which architecture solution to opt for, it's important to consider what characteristics you're looking for.

☑ Resources and budget: How much can you afford to spend on this project upfront and ongoing? What kind of technical expertise and manpower do you have on staff? Do you want to maintain everything in-house or would you rather hand over the task?

☑ Scalability: How will your eCommerce platform grow with your business?

☑ Customizability and individualization: How much freedom do you need right off the bat? Do you need a high degree of individualization or does an out-of-the-box solution tick most of your boxes?

☑ Channel potential: What channels do you want to sell through? How important is it that they are all supported?

4. Plan the migration and launch

This is the step where you devise an action plan and make it happen. Decide on when you want to move which data. For instance, you can launch by:

☑ Brand

☑ Region

☑ Shop

☑ Component

Need to explore how to migrate to a headless eCommerce platform? Read our migration whitepaper **here.**

Once you have a timeline and game plan, it's time to start building your new eCommerce platform. Create the services you need – or find third-party partners that offer them. Make sure you test everything before the rollout – and that you keep an eye on the changes for potential bugs, too.