



Especial.



UNLEASHING SHOPIFY

How going headless with your
Shopify store helps you gain
freedom and lets you take your
E-Commerce approach next level

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E-Commerce is Evolving

The way people shop, and the way people approach online platforms, has changed.

We've experienced this change over years, and it has been amplified by the pandemic-driven shift of customers making more online purchases than ever. Brands and retailers need to adapt to this change and offer their services in a user-friendly, streamline, and flexible arena. The Shopify Platform helps anyone quickly gain a foot in the E-Commerce market. Yet you may experience growing pains when you are really successful as the platform starts showing signs of a few shortcomings and you may be asking yourself: How can I improve my E-Commerce site in a way that is both creative and practical? The solution to this is by going headless.

Headless essentially means decoupling the back-end of your site with your front-end. The front-end is the part that your all-important customers see and the back-end is your server, the part that stores all your internally relevant information. Businesses can gain flexibility by taking this course of action as it offers the implementation of a unique customer experience, gives marketing teams the tools to get creative, and allows for easy scalability – all whilst being user-friendly and fast to load.

Note: Acronyms in this white paper are written in full the first time they appear and thereafter continue as abbreviations.

About Headless Commerce with Shopify

CHAPTER 1

Why Headless Shopify?

Shopify's reputation speaks for itself. This retail POS (Point of Sale) system is world-renowned multinational E-Commerce platform that you may be using right now. Or at least, thinking about using in the near future. If it is, then allow us to shed some light on this phenomenal platform for you. It all started with a humble quest: two youths with a passion for snowboarding. They wanted to create a site on which they could sell their snowboarding equipment. When they couldn't find one that matched their needs, they simply created their own! (simply is an understatement).

If you are looking for a highly functional and massively useful tool for your online store needs, then you're going to be looking at Shopify. Many looking for an E-Commerce partner, need a platform that is easy to set up, painless to handle and that can be expanded on with pre-coded apps and themes. It's interesting how one simple idea of two avid snowboarders, snowballed into an E-Commerce platform that is now being used by millions of successful companies world wide.

International e-commerce revenue stands at **\$4.28 trillion** in 2020 - a **+24.1%** growth jump from 2019.

- source: digitalcommerce360.com

As the online world grows and becomes more competitive, businesses are needing to do more to stand out. In terms of E-Commerce this means needing faster load speeds, a modern user interface, access to implement customer facing modifications easily, and hopes of increasing SEO (Search Engine Optimization) traffic.

Due to this ever-changing environment, you want to make sure that you have an online shop that can adapt and pivot as your customers' and your own needs change. Whilst Shopify is a glorious platform, it does have a few limitations that can be solved with implementing a headless storefront. If you're reading this, you probably already have a few issues popping up in your mind.

Shopify covers 80% of the needs of online retailers.
Headless comes in, when you go for the last 20%.

You may have noticed that Shopify's platform is limited when it comes to sales in different countries, with different languages and currencies. With a headless approach, you can link a CMS (Content Management System) program that caters to your businesses specific needs and not have to create a new Shopify account for every new market you've managed to get a foothold in.

Or perhaps you have noticed that they have a fixed URL (Uniform Resource Locators) structure, so expanding and building on your SEO visibility can also come with its limitations. A headless approach will give your business flexibility here.

If you have a lot of information to distribute or the hopes of scaling, linking a third-party CMS program through headless is best, as you can choose one with the bandwidth to cater to your unique needs, as Shopify has its restrictions with its CMS and PIM (Product Information Management).

It can feel like a burden, having a lot of apps running messily on your store, the above-mentioned limitations with the URL Structure, slower loading speeds and those CMS/PIM restrictions. You may have run into one, if not all, of these issues before, and you probably want them to be taken care of.

Regardless of the size of your business, making changes to your existing E-Commerce site can be time-consuming and daunting – well, if you have a traditional site that is. With a headless one, it would be easy and dare we say it, almost enjoyable, which is why the following is critical for you to read.

Taking the Layers Apart

Before choosing to go 'Headless', you need to understand what that means.

Simply put, headless is the technical act of decoupling your front-end with your back-end.

The front-end is essentially your interface (the part that your customers/web visitors engage with). The back-end, in this case, is comprised of two things: your user admin (the part where your team manages your store, product orders etc.) and then the actual server (the big machine that runs constantly, storing all your internal information e.g., order status, fulfillment progress reports etc.).

As you can imagine, this offers a lot more flexibility than a traditionally built E-Commerce site. In a traditional tech world, the front-end and back-end of your site are merged, whereas with a headless E-Commerce site, each of your ends can run both independently and effectively. In a headless arena, you will benefit from a strong back-end that can run smoothly and unrestrained – with the added benefit of a front-end that is flexible and scalable, and where the user experience, the content, and the design are disjointed from the server.

The way this works is through creating a stand-alone front-end app, which you can tailor to your needs, and which matches your brand's image and brand voice better. Essentially, a completely new site is created for you, to match your expectations, with the data defined in a way that suits you and is linked to your Shopify (Plus) site through an API (Application Programming Interface).

Time to Branch Out

and reach more customers with multiple sales channels powered by a headless platform.

It is also important to know, that you are not limited to one headless sales channel. By using this method, you can build and connect multiple front-ends or different sales channels catered to different devices or target groups.

Maybe you have different product groups that could need their own stores. With headless you can have two stores running on the same back-end in Shopify.

Perhaps you are selling to a B2B target group as well as to consumers. In this case, you can keep your B2C store on Shopify and set up a B2B store with added functionality through headless.

There really are no limitations here, as you can get creative with new sales channels: You can create a display interface for your brick and mortar store, through which your customers can explore and buy your products without the help of a cashier. Or you can create shoppable digital experiences in augmented- or virtual reality (AR & VR).

Headless & B2B E-Commerce

One of the greatest opportunities of Headless Shopify lies in business to business sales relationships.

While more and more companies are starting to sell directly to consumers on the internet, business to business relationships are lagging behind. They still rely heavily on personal sales and are often restricted by manual sales processes. However, things are changing!

More and more businesses want to automate and digitalize their B2B sales through E-Commerce. Driven and inspired by the developments in B2C (business to consumer) E-Commerce, B2B are also looking for capable platforms to build their stores with.

Unfortunately, it's easier said than done. Using B2C stores as a blueprint for B2B E-Commerce experiences isn't feasible in many cases, as these relationships often include highly individual processes and features. These include customer specific pricing and product catalogues, special payment terms and options, reorder features, company accounts with sub users – and the list goes on.

While Shopify Plus has created a separate wholesale channel – allowing wholesale sales to resellers, it isn't yet equipped for complex sales processes that exist in many business to business relationships.

The smartest thing to implement in these more demanding cases is a headless approach. The freedom gained from decoupling the front-end allows the re-design of the E-commerce experience around the existing B2B processes and features, while still using the ever reliable Shopify E-Commerce platform in the background.

10 Benefits of Going Headless with Shopify

If you have the expectation of maximum performance from your E-Commerce set up and have a complex user experience, then going headless is perfect for you. With an independent front-end you can operate your shop's front-end with any shop system, ERP (Enterprise Resource Planning), PIM, CRM (Customer Relationship Management), and CMS. If you decide to replace one of your systems, you can simply connect your headless front-end to it. Let's delve into the benefits of going headless with Shopify:

01 - Faster page load speed

Deliver the speed that your customers are after with a front-end that is no longer dependent on your shop system. Shopify has a 'base loading time' that can't be optimized as it is linked with the server itself. With a surge in online sales, and sales over mobile devices, be sure to capture your target audience by going headless. Aside from an improved User Experience (UX), you will also benefit from better SEO ranking, as your Google Web Vitals improve.

02 - Increased SEO traffic

Make use of a more flexible third-party CMS program where the URL is no longer fixed. Create URLs for all your customer-reach ambitions and gain traction and attention to your site. With headless Shopify, you have full control over your SEO tactics. A high position in the search engine has a major impact on the number of visitors your site receives.

03 - Think globally

Become an international brand with headless Shopify. Have the option of expanding your store to numerous countries with different pricing and have sites in different languages, without needing to create, pay and manage separate Shopify accounts. Also, if you want to cut out the hassle of keeping separate storefronts up to date – then going headless is the correct approach.

04 - Ship features faster

Work can be both fast and effective. Adding something on a headless front-end is much easier than twisting and bending existing shopify functionality to do what you want to achieve. Also, you don't have to wait for Shopify to make features available to you. You can just add them yourself.

05 - Integrate your favorite/customized CMS

Manage your data and content uniformly across all platforms with a headless CMS. Choose the CMS program that best suits your needs and implement it in a way that gives you freedom and peace of mind.

06 - Out of the box PWA functionality (Progressive Web Application)

Create a brilliant experience for mobile users. With a PWA you can gain access to great functionality – like sending push notifications to your customers, allowing them to use your site in offline mode, and adding a bookmark onto their device's homepage. A full native app is also an option with a headless setup. It makes creating a native app that is represented on the Apple and Google Play app stores easy and accessible.

07 - Take your front-end with you!

It's completely normal to have to regularly update your site and its features. With traditional sites this is often where problems arise. Either software becomes outdated or your business's needs have outgrown what a platform can offer. Resulting in your the site needing to be re-done entirely. If you'd like to get away from Shopify, you can take your front-end with you and you don't have to rebuild it. So you don't have to start from scratch, but instead, constantly further develop your site.

08 - Custom shop systems

Your E-Commerce setup should work for you and not the other way around. We will help you choose exactly which software tools would suit you best and incorporate it in a way that makes for an easy-to-manage and user-friendly site.

09 - Modern web technology

Stay on top of the game. It is widely known in the tech world that new best practices change into new must-haves every month in this rapidly evolving industry. By having a headless front-end and incorporating it with the cloud, you can stay on top of this fast-paced field.

10 - Be on the forefront of innovation

With a headless front-end you have the option to adapt new technologies and trends quickly. Give your customers a unique and exciting user-experience through executing a very modern outlook of what your business represents.

Shopify's Native Headless Commerce Opportunities

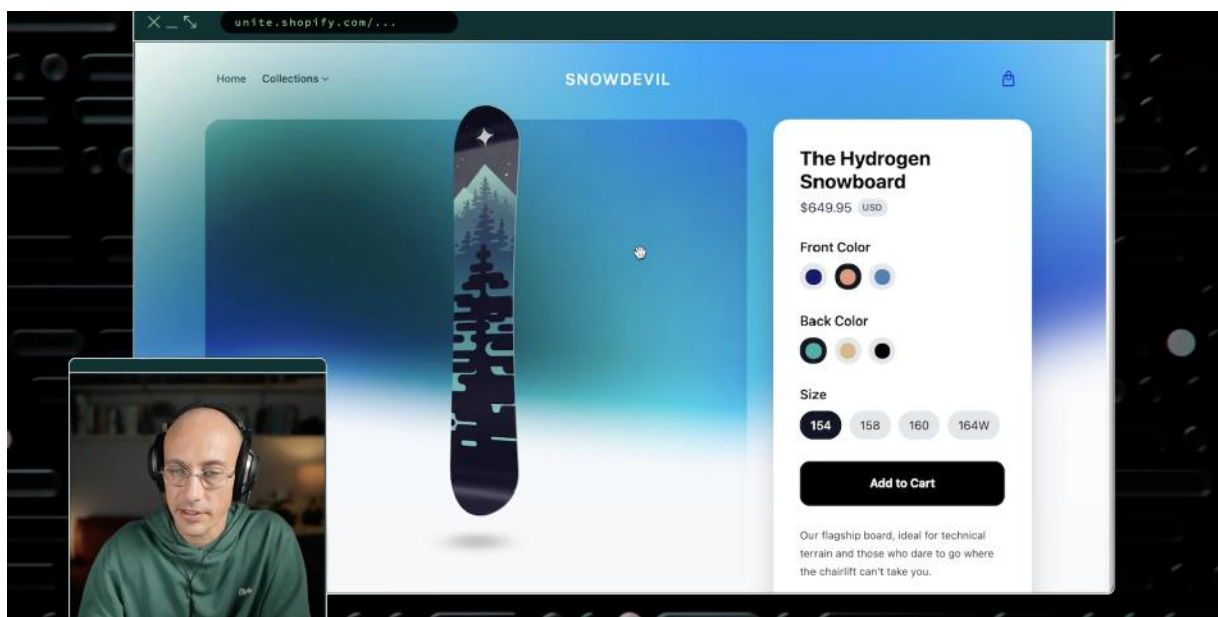
Shopify Hydrogen & Oxygen

To get the most out of your headless commerce project, it's important to use the best tools available for the job. However, while headless commerce has been a commonly used case scenario for Shopify Plus for some years, some voices abandoned the idea to go headless because Shopify doesn't offer an official integration for headless commerce yet. This changed recently.

In mid 2021 Shopify's CEO himself announced two new products that will allow building headless projects using native Shopify tools: Hydrogen & Oxygen. This makes headless commerce a first class citizen in the Shopify ecosystem.

While Hydrogen is a React.js framework for the JavaScript programming language, Oxygen allows you to deploy and host headless commerce projects on Shopify's global IT (Information Technology) infrastructure.

Both Hydrogen & Oxygen are scheduled for a 2022 release so they can already be considered for upcoming projects.



Shopify CEO Tobias Lütke presenting Hydrogen & Oxygen during the UNITE 2021 event

Case Studies & Examples

CHAPTER 2

A Unique Way To Shop Cereals

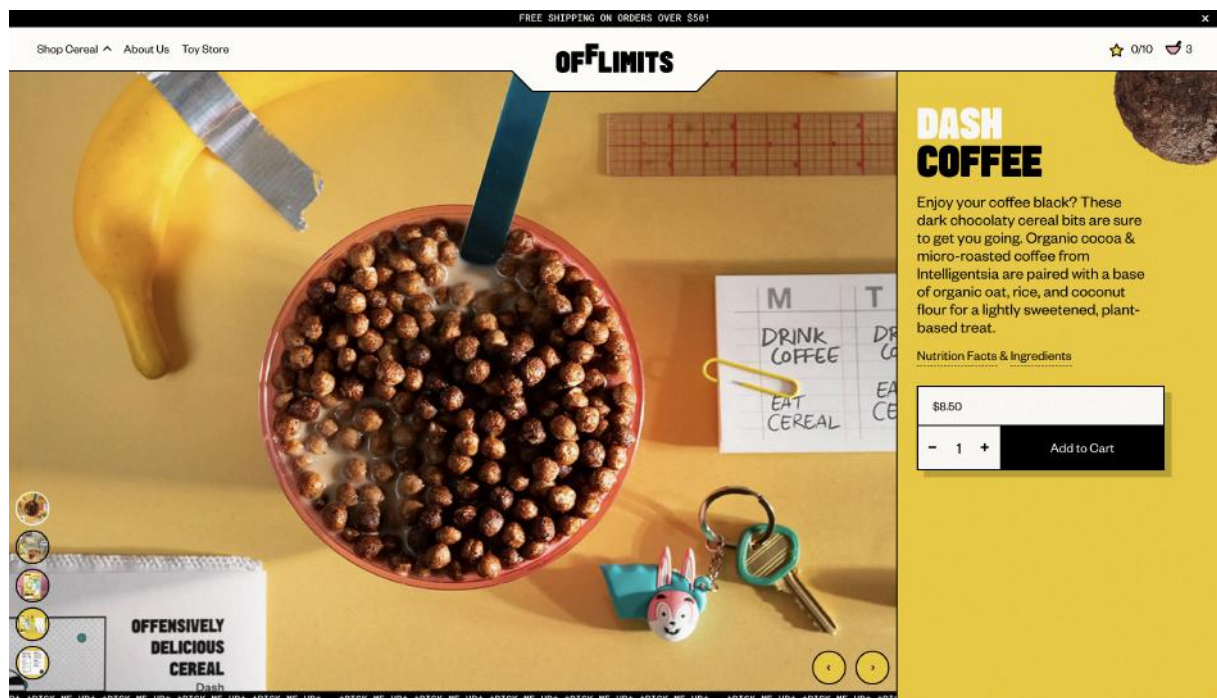
OffLimits

Are you ready for this? It's a mouthful!

A round of applause for the winner of the Shopify Commerce Award 2020 in the category 'Best Custom Storefront - UX & FED'.

OffLimits managed to turn a staple into a stampede. The unassuming whole milk and sugared grain breakfast go-to has become so much more with their stimulating, high-performing and creatively designed online shop.

How did they achieve this? With a great concept, brains and Shopify! OffLimits combined Shopify's native headless Storefront API with modern front-end frameworks like Gatsby.js & React.js to empower a fast and creatively animated shopping experience. Their rich content came into true fruition by using Sanity as their headless CMS. OffLimits was developed by Ctrl+Alt+Del.



<https://www.eatofflimits.com>

Selling Sneakers – Mobile First

Allbirds

Put your best foot forward. Welcome to Sneaker Utopia.

With more than a billion-dollar valuation, Allbirds is one of Shopify's most successful sneaker brands. For their mobile app, Allbirds decided to take the headless route and provide shopisticated, contemporary features like a virtual try powered by augmented reality and a delightful mobile shopping experience.

With an average rating of 4.8/5.0 in the Apple App Store, Allbirds obviously did right by providing a mobile first experience in a separate sales channel.

An Allbirds rep told Retail Brew:

"Shopify continues to be a very important partner, but as a vertical retailer, we understand the importance of providing unique, brand-aligned experiences for our customers"



<https://apps.apple.com/us/app/allbirds/id1495911336>

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B2B2C Commerce

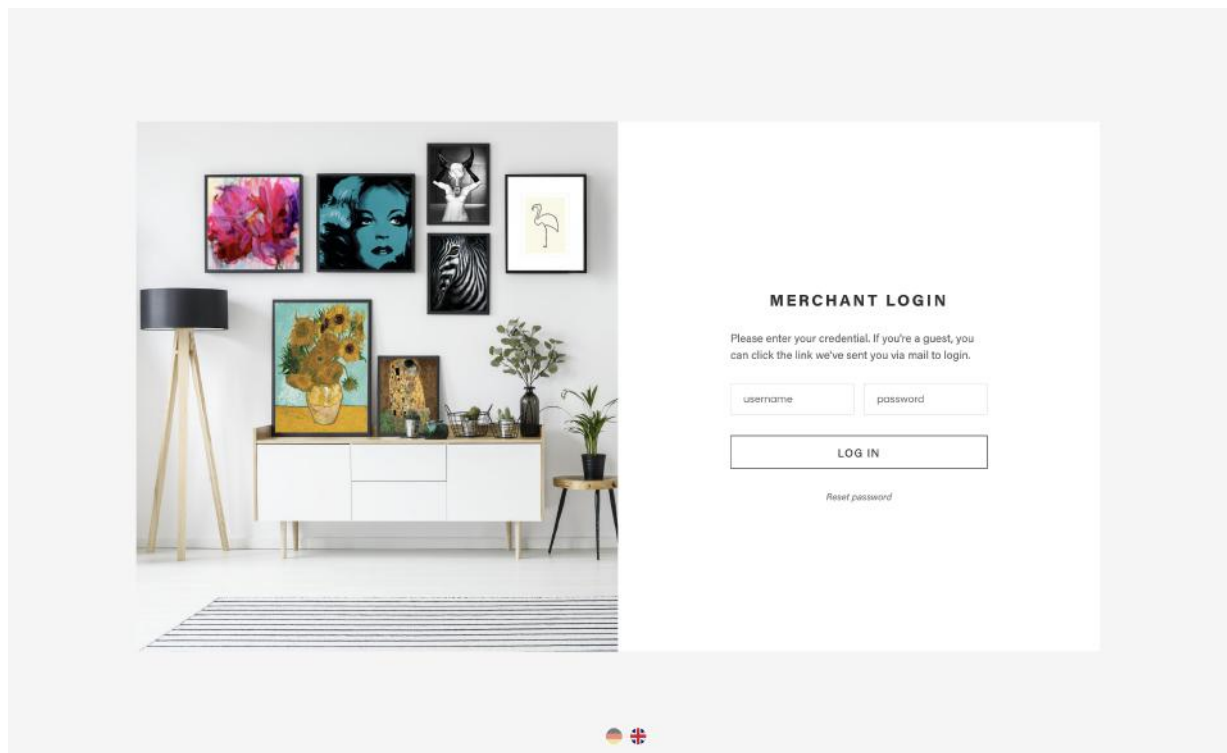
PGM

It started with a blank canvas and turned into a masterpiece.

PGM sells high quality art prints to consumers and a network of retailers, which had vastly different expectations and needs for PGMs E-Commerce platform.

Therefore PGM decided to build their B2C store on Shopify, while servicing their retail partners through a custom built headless front-end. This new front-end included practical features, like a product customizer, individual pricing, multiple wish lists, a special invoicing process, and a white label presentation mode.

The new B2B channel allowed PGM to build deeper business relationships with their retailers, as well as enabled them to sell more by using the new tools. It also set them up to include advanced features, like AR to bring their pictures into the homes of their customers before the sale.



PGM Retailer & White Label Login

Is Going Headless with Shopify Right for You?

CHAPTER 3

Headless is not for everyone, so

Is Headless Right For You?

Headless commerce is not the right choice for everyone. Shopify and the Shopify ecosystem, with its vast supply of apps and themes, does a tremendous job making E-Commerce easy and great for the most common E-Commerce scenarios. Especially if you just want to get your shop up and running quickly and only sell a few, simplistic products with a standard user experience, Shopify will be able to provide you with all you need.

However, there are definitely brands and merchants who can greatly benefit from the added customization opportunities that headless commerce offers. Usually, a real need for headless commerce is rooted in the desire to sell products with the best user experience possible. Here are some of the most common reasons to go headless with Shopify:

Reason 1

You want the best UX possible

Shopifys Theme - and URL structure is catered towards a very standard online store. If you want to stand out with your user experience, headless will offer you the freedom to do so.

Reason 2

You want the best performance possible

With headless you can freely choose your front-end tech stack and continuously improve load times to have the fastest store possible.

Reason 3

You need multiple storefronts

Modern E-Commerce means being available at as many touchpoints as possible. With headless you can set up and manage various different channels through one back-end.

Reason 4

SEO is very important to you

Being found on search engines is crucial for most E-Commerce businesses. Headless allows you to squeeze the last bit out of your onpage SEO.

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Reason 5**You want to heavily utilise content like videos & articles**

Shopify may offer certain CMS capabilities, but you'll quickly run into limitations, if you want to heavily utilise content. With headless, you can implement a more flexible CMS.

Reason 7**You don't want to use dozens of apps & themes**

Shopify stores tend to get crowded with many different apps adding dependencies and costs. With headless you usually do not need as many third party apps.

Reason 9**You want to build innovative or creative sales channels**

Commerce is everywhere today. With headless you can reach your customers everywhere and offer excitingly unique buying experiences rather than the run-off-the-mill online store – like interactive VR or AR shopping trips.

Reason 6**You want to sell very unique products or services**

Selling highly customizable products or services through standard Shopify can quickly get difficult. With headless you have the freedom to sell even the most complex products.

Reason 8**You want your front-end to be independent and future-proof**

Maybe you do not want to rely on Shopify as your go-to E-Commerce platform forever. With headless, you can take your front-end with you when you switch platforms.

Reason 10**You want to be able to integrate your existing team of developers**

Many developers struggle to adapt to working with Shopify themes and apps. With headless you can choose a tech stack your team likes and has experience with, so you do not have to educate your developers on how to work with Shopify.

Reason 11**You need a sophisticated B2B sales channel**

B2B E-Commerce is a growing trend and provides a lot of value, but it's also more complicated than the B2C equivalent. Oftentimes there are complex existing processes and pricing structures that need to be covered by a B2B E-Commerce solution. Headless offers the freedom needed to build B2B stores around the existing requirements, so you do not need to change and simplify your processes to make it work.

Reason 12**You plan to launch your shop with a custom design**

Shopify's themes are not for everyone. If you want to stand out and not look generic, you will want a custom design, which will have to be built from scratch. In this case, you should at least think about going headless, as it might not really be more expensive. In fact, it can even be faster (and therefore cheaper) to build a headless front-end instead of a Shopify theme in certain cases.

Headless is not for everyone, so

Should you Steer Clear?

There are many reasons for large or very creative business owners to go headless, but there are also some strong reasons to avoid headless because the advantages might not be worth the additional complexity in your case.

Here are some common examples why you might avoid headless. Each case is different so you should decide if these examples apply to you.

Reason 1

You want to utilise the Shopify app ecosystem as much as possible

Having hundreds of apps at your fingertips allows you to add and test features on your online store with little cost incurred and almost no technical expertise needed. With a headless approach, you will not be able to use any front-end apps from the Shopify app store anymore.

Reason 2

You have a tight budget and no tech expertise

It is relatively cheap and easy to set up and maintain a simple Shopify store with a theme and apps, and there is almost no IT knowledge needed. If you don't have a budget of at least 5 digits or great tech expertise on your inhouse team, you will not be able to set up a headless front-end and reap the benefits of the freedom you gain from doing so.

Reason 3

You just want to test the waters

If you just want to setup a basic store as fast as possible to see if you can generate sales, it probably makes sense to start out with a standard Shopify store. You can still think about going headless, when you actually see success.

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Reason 4

Your current digital agency has no software engineering capabilities

Many digital marketing agencies and Shopify partners are specialised in supporting no-code or low-code software. That means that they usually provide help around the setup and customization of existing themes and install apps while trying to avoid touching any code. In contrast, headless commerce needs more sophisticated web development and software engineering skills which your current digital agency might not be able to provide.

Reason 5

You are willing to stick to standard processes as much as possible

Shopify and the apps on the Shopify app store will dictate the customer experience and how store owners have to handle certain processes. If you are flexible and willing to adjust your processes to how Shopify and its apps work, you will benefit from the simplicity they provide.

Reason 6

You don't plan to optimise the performance of your sales channels

Shopify's stores and themes offer relatively decent out-of-the-box performance. If you just want to setup a basic store as fast as possible and there is no need or value in greatly improving its performance over time, there is no need for a headless setup.

Reason 7

Your products are super simple and you just want to have a very simple sales funnel to convert your social media or ad traffic

If you have the expertise and skills to direct a lot of traffic, which you want to convert into buyers, setting up a simple Shopify store will give you a sales funnel to do so. That way you can put your effort into improving your marketing approach, instead of thinking about your E-Commerce platform.

Reason 8

You prefer themes from the theme store over custom design

Themes from the Shopify theme store offer certain flexibility and free updates, which are really helpful if you cannot or do not want to spend time and resources on a custom design. They might tend to make your store look somewhat generic, yet they come at little cost and cover all the sections you need to set up a basic online store. If you enjoy these benefits, we recommend you keep using themes instead of going headless.

Reason 9

You're sure that you'll never want to leave the Shopify ecosystem

The Shopify ecosystem consists of a lot of helpful resources, like the theme and app store, a large community of users that help each other, tons of content on how to set up and start selling and an international network of Shopify experts to help you. All these resources can be really helpful to solve many common challenges rather quickly and as with only as much involvement of an actual developer as needed. Most of these will not be able to help you with a headless setup though. If you rely on these resources and enjoy using them, going headless is probably not right for you.

Need a Hand?

CHAPTER 4

Headless is Here to Stay

Especial's Future-Proof Prognosis

You want an E-Commerce site that is scalable and that you can take with you, wherever the wind blows. You need a site that can move and change as quickly as you do, and as quickly as customers' wants/needs change. You want your team to be able to make changes within the site that are easy to implement, make logical sense, and create an avenue for more sales streams.

We offer creative solutions, are technically savvy and have only phenomenal intentions for your business. We take the time to understand your needs, understand your direction, and the intention of implementing these effectively and in a timely manner.

We have a keen eye for detail, a very unique and nifty approach to your issues, and an Especial Dream Team waiting to assist you. The way we work on headless projects is simple and can be summarized in the following the six steps:

STEP 1**E-Commerce concept workshops**

We kick off with an E-Commerce concept workshop, where we develop a mutual understanding of what you are trying to achieve and validate and build upon your E-Commerce idea. The result will be a detailed description of your project.

STEP 2**UX design & architecture planning**

With all the information gathered in Step 1, we can start working on the user experience with wireframes and get ahead with planning the technical infrastructure for the headless project.

STEP 3**Remote E-Commerce design sprints**

In the next step, we expand the UX design to a complete UI design, which includes all components of the

headless front-end. This usually includes a design system to allow for simple changes and expansions.

STEP 4**Prototyping & user validation**

In this optional step, we provide a prototype from the UI designs, so we can test UX & UI without building the actual product. Then we can use remote test laboratories to record feedback of future users and tweak the concept to best suit their needs.

STEP 5**Coding & implementation**

In Step 5, we finally put everything together and build the actual headless front-end, including its integrations with other services.

STEP 6**Time for takeoff!**

After all these steps are completed to your satisfaction, we can start preparing for the launch date and post-launch support.

About Us

Especial Edition

We specialize in delivering high quality and thought-through answers to your technical challenges, and provide the team to hand over brilliant results.

We believe that 'Knowledge is King' and with this in mind, we have spear-headed the quest to find the most creative and technically advanced designs to improve your businesses E-Commerce site. Using a headless approach, we know that we can create a platform that you can use to work on securely, flexibly and creatively. Whilst also easily meeting the demands of your customers and making your E-Commerce site suit you, and not the other way around.

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