

salesforce

Composable Storefronts for Headless Commerce

Learn how to successfully build and manage the head of your headless strategy.



The adoption of headless commerce is skyrocketing. From nascent beginnings, as a term only understood by a few, today, every company has a perspective and a strategy for going headless.

So why are brands choosing a headless path? The answer is simple: the customer.

Headless commerce gives businesses the agility to keep pace with their customers – their always-rising expectations, demand for new channels, and ever-evolving shopping behavior. It unlocks the flexibility to create custom experiences and deliver commerce to any device or application.

There are many components to a headless architecture, and this guide focuses on the web storefront. The “head” of headless is often a secondary consideration to the back end, but as one of the biggest revenue drivers, it should be a key part of any headless strategy. The “head” is the front door to the online store, and customers can’t enjoy any of the headless services without it.



Making sense of the “head” of headless

There's a lot of buzz in the commerce space around headless, and many different approaches to it. Ultimately, headless commerce provides agility and choice in the experience layer. But these benefits are only realized if the “head” on top of the “headless body” is lightweight and scalable long-term. When determining a headless strategy, it's important to look for solutions that are agile, flexible, and deliver value quickly.

Here are some things to watch out for:

- In some cases, the “heads” are less lean and agile than the headless bodies, which doesn't unlock the flexibility needed. An example of this would be using a heavy digital experience platform (DXP) as the head to a headless ecommerce solution.
- In other cases, the head is built from scratch and requires extensive hidden effort and cost for maintenance, resilience, support, and compliance. This means the IT team is required to spend their time on storefront maintenance and operations instead of customer experience (CX) experimentation and innovation – eliminating the flexibility benefits.

In this guide, we'll walk you through what you need to consider to successfully launch a storefront for headless commerce that empowers your team to be agile and drive customer experience innovation.



It takes two: storefront experience and operations

A storefront for headless commerce is completely separate, decoupled, and self-contained, from the ecommerce platform and any other backend applications. Because of this separation, there are two critical considerations:

- 1 The Storefront Experience:**
The UX design and code
- 2 The Storefront Operations:**
Hosting, securing, and scaling the front end



The storefront experience

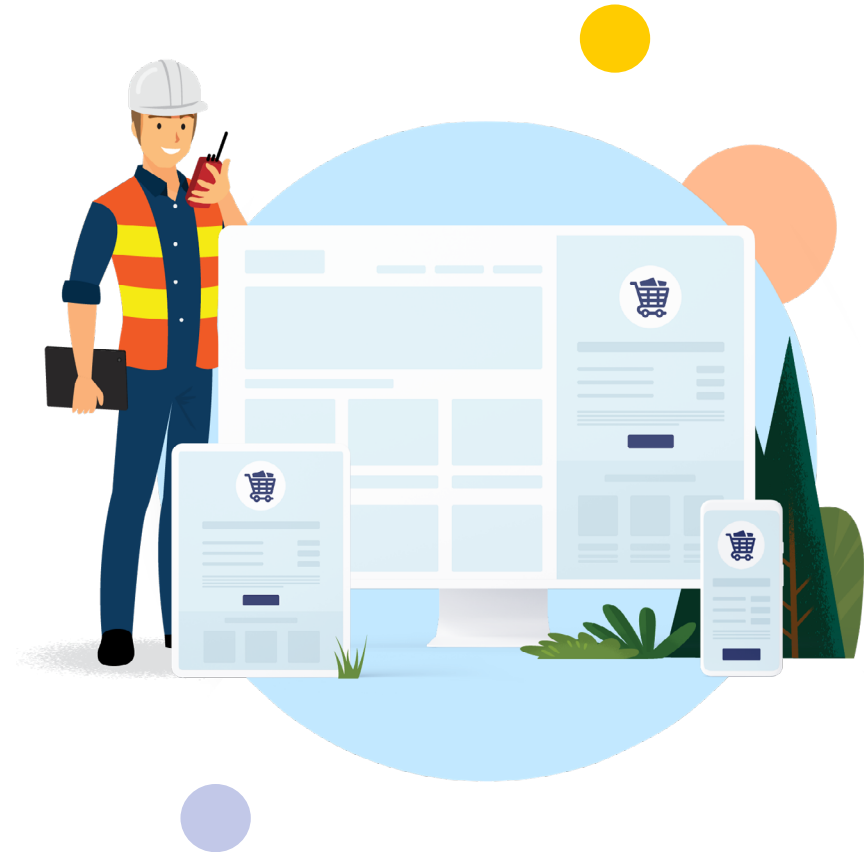
The storefront experience is what the end user interacts with; it's made up of UX design and code.

Expectations for the experience are higher than ever. In fact, [88% of customers](#) say that the experience a company provides is just as important as its products or services. To deliver on these expectations, many brands are turning to the latest web technology, Progressive Web Apps (PWA), for their storefront experience.

PWAs are websites that use modern web capabilities to create fast, app-like experiences that result in higher engagement and conversions.

- **High Engagement:** PWAs work offline and can be installed to your homescreen like a native app.
- **Fast Performance:** PWAs are single page apps that provide instant page transitions and fast page loads.

PWAs originated as a mobile technology but maintaining two different codebases was time-consuming and resource-intensive, so it quickly evolved to become a cross-device technology. Think of a PWA as a responsive website – a single codebase for mobile, tablet, and desktop – but with faster page loads and more engagement features.



* [Salesforce, The State of the Connected Customer Report, 5th Edition, 2022](#)

Storefront operations

A headless approach gives developers and IT teams agility and flexibility because the web storefront is separated from the back end. But this separation also means that IT teams will be responsible for hosting, securing, and scaling the website.

This change has real monetary implications for brands that are generating millions, if not billions of dollars in online revenue every year because any downtime is lost revenue. To optimize performance and uptime, it is important to have the operational infrastructure to effectively host, secure, and scale the storefront for headless commerce.

Composable Storefront

Commerce Cloud's Composable Storefront is a fast and flexible storefront for headless commerce. It's fully customizable so that you can take control of your brand experience and the fast user experience and smooth app-like web browsing helps grow conversions and basket size. Meanwhile, all the storefront operations are managed for you, allowing your team to focus on innovation. Take the risk out of headless commerce with a Composable Storefront that helps you achieve faster time to value and lower total cost of ownership.



Building for success

Contrary to popular belief, when it comes to a storefront for headless commerce, there doesn't have to be a build vs. buy decision. Almost all paths will have some level of building and buying.

If you decide to build from scratch, you still need to buy various foundational pieces for the build. This would include an open-source or commercial framework to build the experience, a public cloud service to host the storefront, a CDN to cache content on the front end, a DevOps infrastructure to handle front-end deployments and rollbacks, and internal or third-party resources to secure the site.

Once you've got all these pieces, you need the right team and skill set to put it all together and maintain it. This is doable if you have capable JavaScript-application engineers in-house and in abundance, and an experienced DevOps function who wants to set up hosting and caching and enjoys talking about routing and SSR strategies.

But even if you are lucky enough to have those resources in-house, they could be better spent on innovation rather than operations. What Commerce Cloud brings to the table is a starting point that isn't a template but does allow you to take advantage of the experience of a platform maker in decision-making and tooling.

This leads to a faster time to value, lower operational costs, and fewer resources focused on operations.

Time to Value

With Composable Storefront, you get an elevated starting point and you can offload a lot of the operational burden to help accelerate time to value. Building from scratch will require more time because you'll need to map out how your storefront operations will work, acquire the foundational pieces, and then build the operational infrastructure before even starting on the experience.



Operational Costs

Commerce Cloud reduces operational costs by including them free of charge with Composable Storefront.

Operational Costs	Build from Scratch	Composable Storefront
Public Cloud Hosting	\$50K-\$250K annually for enterprise-level sites	Included
CDN	\$50K-\$250K annually for enterprise sites	Included
PCI Compliance	\$30K-\$50K annually + security tools costs (\$25K-\$50K) and security team (~3 headcount)	Included
Web Application Firewall	\$10K-\$50K annually	Included



Operational Resources

Headless commerce introduces more complexity, which can translate to more operational burden for IT teams. Here's how Composable Storefront offloads a lot of that burden so that your team can focus on innovation rather than operations.

	Build from Scratch	Composable Storefront
Solutions Architect	A subject matter expert designs the technical solution of the custom front end. This person may already be managing the ecommerce architecture and is familiar with a headless environment. This person will guide development teams in the overall execution of this project.	Includes a dedicated solutions architect from Salesforce who will help map out your new architecture, and a technical architect who will support the implementation and evolution of the storefront. Salesforce's solutions architect will guide the front-end solution, while an internal solutions architect (or via a solution integration partner) will design back end integrations.
Software Developer	Developers will be responsible for building and maintaining any home-grown headless front end and will need to ensure the storefront leverages a CDN, has a highly performant caching mechanism, and can scale with heavy traffic. They will need to understand the intricacies of deploying a framework in a headless environment to create a modern customer experience.	Salesforce has a network of experienced system integrators (SIs) specializing in headless implementations. A development team will work with the chosen SI to build the Composable Storefront, which has a CDN, highly performant caching mechanism, and serverless auto-scaling built right in. Outsourcing dev resources to handle spikes in project demands and leveraging the platform's operational infrastructure means fewer in-house team members are required for ongoing maintenance so they can focus on innovation.
Security Engineer	A security engineer will be needed to secure the front-end presentation layer during the build phase and beyond. You'll need to ensure your storefront is protected from malicious attacks and any security breaches throughout the evolution of your front end.	Salesforce has central security-incident response teams that mitigate attacks and are constantly testing, patching, and upgrading systems. On top of that, there's automated monitoring to mitigate DDoS attacks built into the Composable Storefront and we maintain and update network and OS firewalls and network configurations.

	Build from Scratch	Composable Storefront
Site Reliability Engineer (SRE)	A site reliability engineer will be needed to manage the overall health and performance of the headless stack, and handle the scalability, performance, and disaster response of the site all year round.	Salesforce acts as the SRE by handling operational monitoring, incident management, and 24/7 infrastructure support. We will also work with the software developers for guidance on any custom application code that will be deployed on the storefront.
Quality Assurance (QA) Engineer	A QA team will be needed to check that the in-house front end is functional, performant, and resilient. They define test suites and execute against them.	Salesforce guarantees that the platform works as intended on supported devices, OS, and browsers via our SDKs. We perform ongoing load testing to ensure the platform can service requests in a timely manner to all end users. It is the customer's or SI's responsibility to ensure any deployed applications behave as expected without bugs and are built defensively.
DevOps Engineer	DevOps engineers will be needed to work with the software developers and SRE to get code deployed quickly and reliably. They will develop automated deployment steps, ensure code quality, and use CI/CD principles to support agile development.	The Composable Storefront is updated and maintained on a regular basis. Our deployment infrastructure facilitates modern web app deployment best practices, getting any deployed code up quickly and reliably.

Launch a composable storefront for headless quickly and cost effectively

When it comes to going headless, the “head” is a critical piece of the overall strategy.

To set your organization up for success, leverage an elevated starting point like Commerce Cloud’s Composable Storefront. This helps cut down implementation timelines and operational costs, while also allowing key resources to focus on innovation rather than maintenance.



Want to get set up for headless success?
Visit [here](#) to learn more.

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