



Headless Commerce Explained: 5 Benefits Retailers Gain By Going Headless



Today's retailers need agility and flexibility to remain competitive and adapt to our changing world. That's why you see more and more heritage brands, CPG brands, direct-to-consumer brands, and B2B players saying goodbye to their traditional monolithic architecture and hello to headless commerce.

E-commerce industry experts predict that by 2025, 25% of all B2C transactions will be via headless commerce platforms.

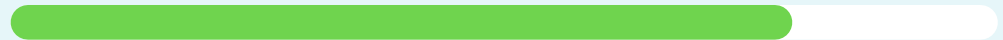
So, what is headless commerce? What is driving this rapid adoption? And how can brands and retailers ensure they're getting maximum value (and return) from their headless commerce investments? This E-book will explore all of this—and provide valuable insights executives need to know to shape their strategies. Read on to learn:

- What headless commerce really is (and what it isn't);
- Five key benefits of headless commerce and why retailers are making the move; and
- How to support a seamless transition for your business.

Making the Case for Headless Commerce

Today's consumers expect fast, easy, and rich online shopping experiences. However, retailers usually face constraints in their commerce infrastructure to perform changes and updates on the fly. Currently, most brands and retailers' online footprint is based on outdated systems that prevent them from adapting to customer needs as they come. These sites are usually bulky and lag in performance, and therefore ill-suited to meet customers' needs:

79% of consumers that are "dissatisfied" with a site's performance are less likely to buy from them again.¹



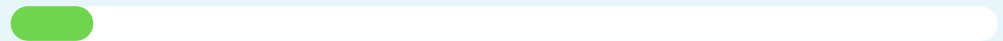
91% of consumers are more likely to shop with brands that provide offers and recommendations that are relevant to them.²



73% of consumers expect companies to understand their unique needs and expectations, and 62% expect companies to anticipate their needs.³



9% of abandoned carts are due to insufficient payment methods.⁴



¹Data compiled by 12 case studies by Skilled

²Accenture

³Salesforce

⁴Baymard

The Headless Commerce Basics

Since the term was coined in 2013, headless commerce has become the go-to technology brands and retailers are turning to in search for flexibility, scalability, and agility, so if you're not yet familiar with headless commerce, here's what you need to know:

What exactly is headless commerce?

First, let's start with a bit of context. In the early days of e-commerce, software vendors created offerings for desktop-only shopping. Known as "monoliths," these solutions provided out-of-the-box, template-like functionality for brands to create their e-commerce shops, bundling the data and logic layer (the e-commerce back-end) with the customer-facing layer (the front-end, like your site). These tightly bundled layers are very inflexible because they are an indivisible block of standardized software, meaning you need to retest and redeploy the entire software every time a change, customization, or update is queued. In short, if you want to change something on the front-end, it affects the back-end, and vice versa.

In contrast, headless commerce is the separation of a website's front-end from its back-end e-commerce functionality. It allows retailers to take a looser, more flexible approach to quickly and efficiently implement new services and experiences that align with evolving consumer needs and expectations.

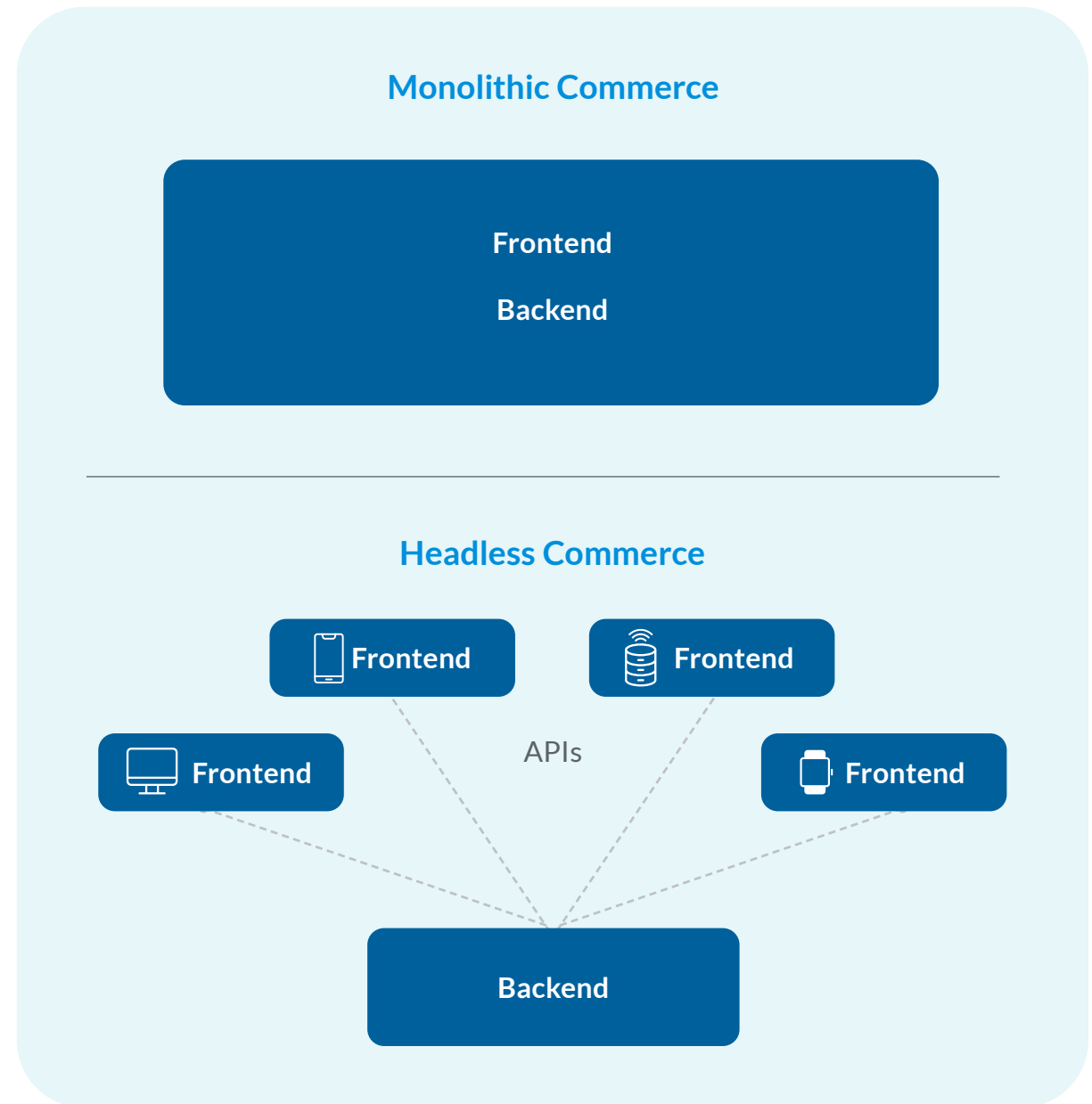
Because the front-end of the experience (the head) is separated from the back-end infrastructure, retailers have "the freedom to pursue a best-of-breed approach," said Chris Holley, Global Director of ISV Partnerships at **commercetools**. This means having the flexibility to bring in seemingly endless combinations of solutions, such as checkout, payments, and search—and having the power to switch out solutions and providers should they not serve the business optimally.



How does headless commerce work “under the hood?”

Some industry players use headless commerce and MACH architecture synonymously. However, it's worth noting that headless is just one of four parts that make up MACH and largely represents the agility and flexibility of the environment. MACH stands for:

- **Microservices:** Applications are treated as individual building blocks that come together to provide a comprehensive experience.
- **API-first:** An API format supports easy connecting and disconnecting of applications.
- **Cloud-native:** Software-as-a-Service solutions leverage the cloud beyond storage and hosting, including elastic scaling and automatic updating.
- **Headless:** The decoupling of the front-end user experience and back-end logic allows for easy implementation of new solutions and experiences.



Because headless commerce is an integral part of MACH as well as API-driven, technology solutions can integrate quickly with these headless commerce platforms. This microservices orientation allows brands and retailers to pull together and integrate a multitude of solutions and then easily push them into the “presentation layer” of the experience.

“Retailers are not handcuffed into a subset of certain providers, like for their ERP systems, for their tax management, or anything else,” Holley explained. “This API and microservices orientation allows several pieces to come together and move together. That way, if you move off an e-commerce platform, you can simply move those solutions over with you. Or, if you’re using a martech product with a custom-built integration to a traditional monolith, when you want to move to a headless option, that marketing software company has an API plugin that will move with you. There is a lot of complexity on the back-end, but headless works to simplify it so you can lasso all of the horses in the corral and line them up exactly how you need them to.”



Breaking Down the Benefits

For some organizations, transitioning to a headless commerce platform may seem daunting, especially for IT teams who are used to controlling all implementations. There are numerous quantitative and qualitative benefits that paint a strong (and much broader) business case for the category. Holley, along with Nicole Silberstein, E-commerce Editor for *Retail TouchPoints*, and Kelly Goetsch, Chief Strategy Officer, **commercetools**, explain.

Benefit 1: Support agility and fast-track innovation

Although many retailers understand what their customers want and expect, they largely don't have the processes and the technological infrastructure to adapt and evolve. A retailer with a traditional monolithic architecture is out of luck if a vendor doesn't offer support for new features and lines of business. With headless commerce they have more flexibility, so teams can not only mix and match, but also quickly bolt on additional components that support new features, lines of business, and customer experiences.

For example, cutting-edge tax solutions lift the burden of having to manually remain up to date with tax laws, rates, and regulations in every jurisdiction a merchant does business with. This helps improve tax accuracy and reduces audit risk. It also helps to provide a seamless

customer experience since there are no unexpected surprises or delays at check-out. Being able to plug and play those functions without hassle enables retailers to choose the best solution that suits their needs, instead of being stuck with a subpar solution provided by an all-in-one platform.

"It makes much more sense and it's much easier to go out and get tools from different vendors and then connect them up together to offer the absolute best-of-breed approach," said Goetsch. "You just couldn't do that in the past, without headless, without cloud. It didn't exist conceptually 10 years ago."

"Headless commerce allows for a modularization of the website where you can pick and choose the different technologies, services, and offerings that you want to use to create that unique experience for your brand," added Silberstein. "That would be such a heavy lift on these older systems."

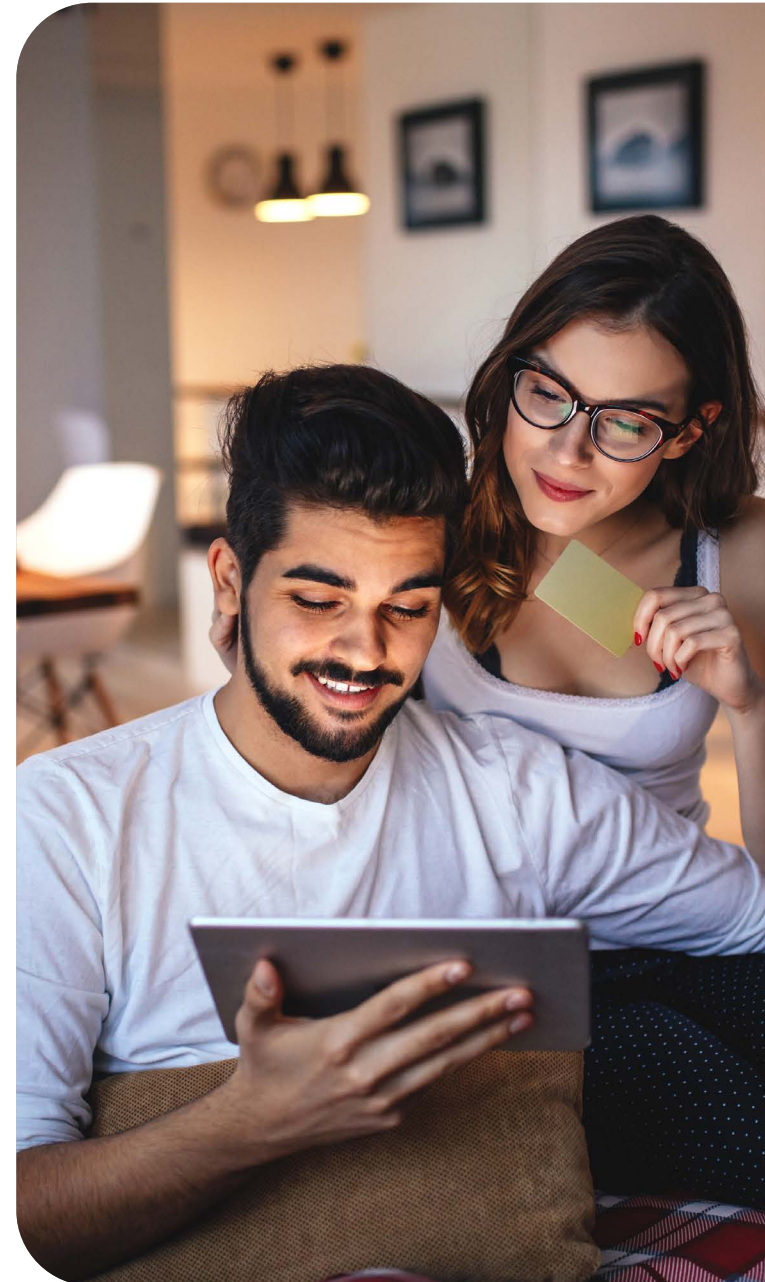
Silberstein shared an anecdote in which an executive compared headless commerce capabilities to a mannequin. "If you put the wrong outfit on a mannequin and the assortment doesn't resonate, you switch it out," she explained. "The only difference online is that we do it a lot faster. With headless commerce, if something isn't working, you change it. If it is working, you can scale it. That flexibility and agility is just priceless right now."

Benefit 2: Create more personalized (and engaging) customer experiences

Today's customers expect a seamless experience across all channels and touch points. At the same time, customer behaviors and expectations are continually being reshaped by digital innovations—from social commerce to AR (augmented reality) and virtual try-on, omni-channel fulfillment, circular commerce (buybacks, pre-owned, repair, rental), subscriptions/memberships, and highly individualized, behavior-based marketing and advertising. Merchants need to keep up with new consumer expectations by embracing these technologies and delivering long-term value across all channels.

Holley noted that all brands have unique value drivers they can tap into to innovate and differentiate. Once they fully realize the experience they want to create—seamless, consultative, or community-driven—a headless commerce platform gives them the freedom to implement the best solutions to meet their needs, and the flexibility to do so quickly. As a result, brands and retailers can create:

- A more seamless, personalized experience that allows them to stand out from the competition.
- A fast and easy order process that provides an intuitive checkout experience that includes accurate tax rates and rules, even as consumers venture across branded e-commerce sites, marketplaces, and beyond.
- Unified branding, content, merchandising, and offers across all channels, which brings the omni-channel promises to life and creates consistency for consumers as they venture across channels and touch points.



“When you look on a site like Amazon, you have the horizontal rows of products,” Holley said. “But if you go on other sites, there are more images, videos, and supporting content. That’s the competitive edge and unique client experience brands should aim to provide.”

Headless commerce also empowers brands and retailers to implement new experiences and sell through new channels at scale. That means in addition to their own e-commerce presence, they should be selling on global marketplaces and quickly adding international buying and shipping capabilities that manage tax complexities, ensure accurate rates, and reduce the risk of expensive audits. As customer behaviors and business needs change, retail organizations need a system that will help them evolve too, which is why it is important to consider integrating specialized tools like payment processing, subscription management, tax compliance, or marketing automation.



Benefit 3: Accelerate speed to market for new features

With greater agility comes faster speed to market. Headless commerce empowers digital teams to stand up new experiences quickly and easily.

“Amazon is the best example of this, and they have pioneered this modular, microservices form of infrastructure,” Silberstein explained. “An Amazon executive once told me that if they wanted to, Amazon could make updates to their website every second of the day. That is a completely different world than the retailers with older monolithic systems and processes where you can only make two to three site updates per year. The ability to move at the speed of the consumer is not only appealing, it’s necessary.”

Beyond implementing new apps and plug-ins, brands also can quickly push brand, product, and marketing information to the platform, which allows them to capitalize on new trends and customer insights. Rapid experimentation enables greater customer understanding and, in turn, improved marketing and experience ROI.

With a headless architecture, brands can roll out new features and offers, test different promotions and discounts, tweak and A/B test different layouts, and even integrate rich media such as social content and interactive videos. Because the front-end is separated from the back-end of the site infrastructure, these incremental changes can all be made without the fear of breaking the platform or disconnecting key functionalities, such as shopping cart, tax, and logistics widgets.



Benefit 4: Minimize technical complexity

Headless is flexible and familiar to developers—and they have complete ownership over site architecture. As a result, they can seamlessly implement tools, solutions, and processes (like tax) that improve user experiences. This flexibility also makes it easier for organizations to implement the best solutions on the market without any “baggage” from key legacy vendors.

But in this era of constant disruption, it’s not just about being flexible, it’s about moving quickly. Headless commerce capabilities allow retailers to completely change the way new features are tested, implemented, and optimized. All team members are empowered to implement new features and functionality—without relying on IT. They do not need to rip out and replace the entire platform when they want to make improvements, and if something doesn’t work, there are not larger impacts to the back-end infrastructure.

“Imagine a company in the repair parts business for industrial machinery,” Holley says. “You can introduce 3D image graphics, but with headless, you can create an AR experience where your technician in the field puts the headset on and gets a visualization. If it doesn’t work, you unplug it, and you go back to what you had. No harm, no foul.”

Benefit 5: Boost operational (and technological) ROI

Making the move to headless may seem like a big up-front investment, both in terms of time and money, but there are significant long-term benefits from having an agile headless platform. It enables businesses to frequently customize their site to respond to customer trends and implement new technology advances without the need for additional resources or personnel. They can also quickly implement new solutions and processes, such as tax automation, which can help cut down costs.

When your team is empowered to test, learn, and optimize shopper experiences, they can drive tangible business benefits, such as increased revenue and improved customer loyalty. At the same time, your business can reduce overall technology costs thanks to streamlined maintenance and updates and more flexible agreements with vendors.

Holley noted that this heightened operational excellence is the top driver of ROI. “It’s so much more than cost cutting,” he said. “There are thousands of sites today that are using the old monolithic, maintenance-heavy, and expensive systems. With the benefit of the cloud, you get all of the cost cutting, but you also don’t have to worry about maintenance. You also have flexibility of cost and the power to switch vendors if you don’t like what you have, or you’ve grown out of what you have. It’s this freedom to evolve on your terms, not on the terms of your platform or monolithic vendor.”

How to Get Ahead with Headless Commerce

The benefits of headless commerce are clear. It offers more flexibility for retailers to test, learn, and iterate upon new features and provides the agility required to innovate and adapt to an ever-changing landscape.

But with this freedom comes great responsibility.

“The one big thing to remember about headless commerce is that you need a strategy,” Holley advised. “If you want to differentiate yourself through the customer experience, you need to take ownership of what you actually bring to the marketplace.”

With that underlying point, Holley offered tips and best practices to help executives make the move to headless commerce successfully:

- **Rally around common definitions and the benefits:** Make sure all key stakeholders know what headless commerce is, how it works, and what the expected benefits are. Use resources from headless commerce platforms and industry analysts to get everyone aligned on the core facts and address any looming questions or concerns.



- **Align internally around goals and objectives:** What organizational challenges are you eager to address? What goals do you hope to accomplish? What is your long-term vision for your customer experience? Answering these and other questions can get the broader organization aligned on goals and the vision for how headless commerce will serve the business.
- **Educate the team using resources from key providers:** Harness the expertise of the tech community to understand the steps you need to take to find the right headless commerce partner and set a foundation for success.
- **Develop a process for testing, learning, and optimizing experiences:** Headless architecture opens a whole new realm of opportunity for retail teams. IT is no longer burdened by a slew of demands from the broader business, and different teams have the power to implement the features and capabilities they believe will differentiate the brand experience. However, all teams must be aligned on processes to ensure they don't fall victim to internal conflict and confusion. Make sure there is a clear and scalable standard operating procedure for identifying, implementing, and updating solutions. This should be the North Star of your daily actions.

- **Build an ecosystem of solutions that best meet your needs:** As Holley noted, the API-driven architecture of headless allows retailers to curate and combine a multitude of solutions that meet their goals. Rather than being confined to vendor partners and solution providers that meet complex IT requirements, different stakeholders from marketing, finance/tax, customer service, logistics, and operations can have a hand in selecting and mapping solutions.

Ready to get started? Headless vendors like [commercetools](#) can help retailers tackle the mounting challenges e-commerce businesses face, from global industry disruptions to ever-changing customer behaviors and expectations. They support experience innovation by allowing companies to employ best-of-breed solutions, like [tax automation and compliance solutions from Vertex](#), to improve customer experiences and optimize the value of technology investments.

[Together, commercetools and Vertex](#) provide omnichannel retailers with a better customer experience by providing a seamless, more personalized shopping experience for their customers—all while reducing tax complexity and enabling business growth.

Learn More

About Vertex

Vertex Inc., is a leading global provider of indirect tax software and solutions. The company's mission is to deliver the most trusted tax technology enabling global businesses to transact, comply, and grow with confidence. Vertex provides solutions that can be tailored to specific industries for major lines of indirect tax, including sales and consumer use, value added, and payroll. Headquartered in North America, and with offices in South America and Europe, Vertex employs over 1,300 professionals and serves companies across the globe.



About Commercetools

commercetools is the world's leading platform for next-generation B2C and B2B commerce. To break the market out of being restrained by legacy suites, commercetools invented a headless, API-first, multi-tenant SaaS commerce platform that is cloud-native and uses flexible microservices. Using modern development building blocks in a true cloud platform provided by commercetools, customers can deliver the best commerce experiences across every touchpoint on a large scale. commercetools has offices across the US, Europe, and Asia Pacific, with headquarters in Germany. Since its founding in 2006, commercetools software has been implemented by Fortune 500 companies across industries, from retail to manufacturing and from telecommunications to fashion.



About Retail TouchPoints

Retail TouchPoints and *design:retail* give all members of the retail world access to a vibrant community that combines insights, inspiration and opportunities to interact with their peers. We sit at the intersection of the art and science of retail strategy, providing granular data, high-value commentary, and aspirational success stories to help readers optimize customer experiences across all channels. Touching all facets of the retail ecosystem, including store experience and design, workforce management, digital marketing and engagement, and omnichannel optimization, our editorial content, multi-media resources and events take timely news and trends and transform them into tactical takeaways that meet the unique needs and priorities of our executive readers.



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