HOW HEADLESS COMMERCE IS TRANSFORMING ECOMMERCE
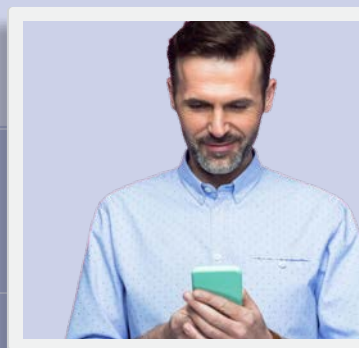
Exploring the Benefits and Challenges of Headless Architecture in the eCommerce Space

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How Headless Commerce is Transforming eCommerce

Exploring the Benefits and Challenges of Headless Architecture in the eCommerce Space

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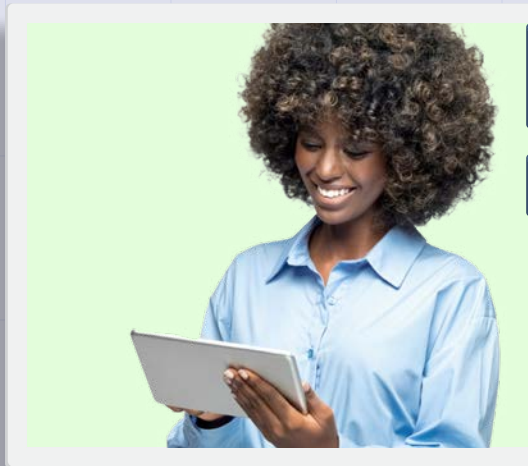Content Director, rand&rand

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EXECUTIVE SUMMARY

Headless commerce has drastically changed eCommerce by allowing businesses to create an online presence without having to rely on a traditional web-based storefront. Instead, websites and applications can be powered by APIs that enable data like product information and prices to be distributed across channels like mobile apps, voice assistants, and conversational chatbots.

This makes it much easier for businesses to launch new products and services quickly and optimize their marketing strategies based on real-time customer feedback.

Nonetheless, not every organization is leveraging headless commerce to its full potential.

This report will explore how eCommerce retailers are currently using headless commerce and what challenges they face in optimizing their font-end digital strategy.
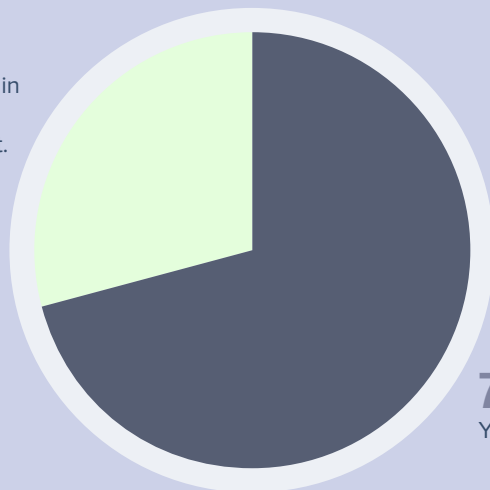
ABOUT THE RESPONDENTS

The WBR Insights research team surveyed 100 retail and brand leaders from across the U.S. and Canada to generate the results featured in this report.

Does your organization currently use headless commerce as part of its eCommerce strategy?

29%
No, but we are in the process of implementing it.

71%
Yes.

The respondents' organizations are already using headless commerce as part of their eCommerce strategies (71%), or they are in the process of implementing it (29%).

What is your seniority?

C-Suite
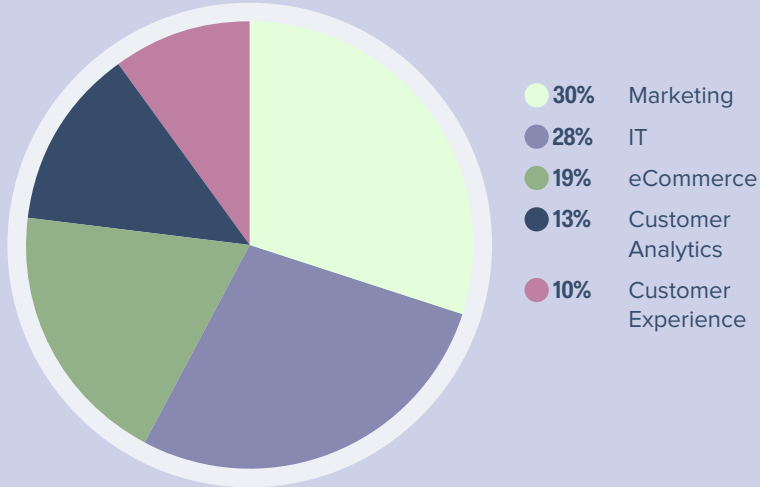**20%**

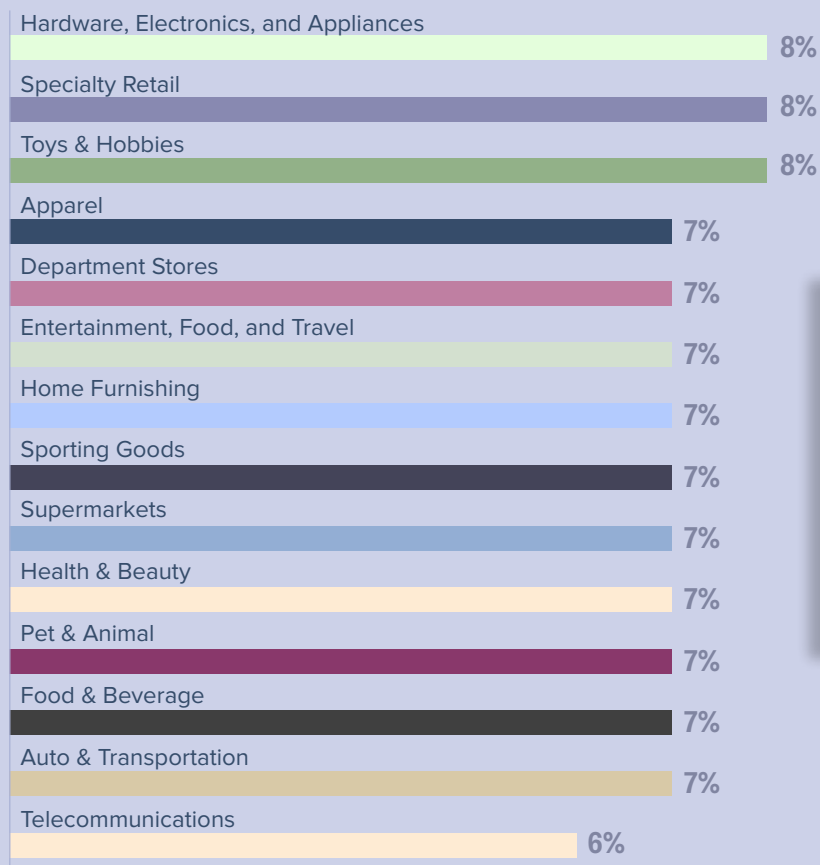Vice President
26%

Department Head
25%

Director
29%

The respondents are C-suite executives (20%), vice presidents (26%), department heads (25%), and directors (29%).

What is your role?

- **30%** Marketing
- **28%** IT
- **19%** eCommerce
- **13%** Customer Analytics
- **10%** Customer Experience

The respondents occupy roles in marketing (30%), IT (28%), eCommerce (19%), customer analytics (13%), and customer experience (10%).

What type of retailer do you represent?

Retailer Type	%
Hardware, Electronics, and Appliances	8%
Specialty Retail	8%
Toys & Hobbies	8%
Apparel	7%
Department Stores	7%
Entertainment, Food, and Travel	7%
Home Furnishing	7%
Sporting Goods	7%
Supermarkets	7%
Health & Beauty	7%
Pet & Animal	7%
Food & Beverage	7%
Auto & Transportation	7%
Telecommunications	6%

The respondents represent a variety of retailer types, including hardware, electronics, and appliances (8%), specialty retail (8%), toys and hobbies (8%), apparel (7%), and department stores (7%), among others.

What is your annual revenue?

- **19%** $100 million to $250 million
- **20%** $250 million to $500 million
- **20%** $500 million to $1 billion
- **20%** $1 billion to $10 billion
- **21%** More than $10 billion

The companies represented in the study vary in size, as measured by annual revenue. More than one-fifth of the respondents (21%) represent companies that make more than $10 billion in annual revenue.

KEY INSIGHTS
Among the respondents:

54% adopted headless commerce to integrate with other platforms more easily and scale their eCommerce function to handle more traffic.

The two most significant challenges they've faced in implementing headless commerce are:

High development costs	Integration issues
44%	44%

The two most significant benefits they've experienced from implementing headless commerce are:

| Better performance	Improved scalability
45%	42%

71% have witnessed an improvement in the customer experience since transitioning to a headless commerce infrastructure.

62% do not currently have plans to integrate new technologies with their headless commerce approach.

64% currently utilize a product information management (PIM) tool as part of their headless commerce stack.

Among those that don't, **61% have thought about bringing on a PIM tool.**

56% have explored mixing and matching components from microservices, APIs, and cloud-native SaaS as part of their headless commerce strategy.
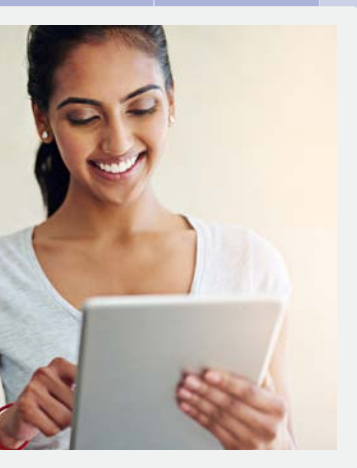
pimberly

SaaS PIM/DAM Solution

HEADLESS ECOMMERCE
THROUGH AUTOMATION AND AI

Unlock data management capabilities to optimize retailers' product information and sales processes

With artificial intelligence, Pimberly creates rich product catalogs complete with detailed specs, images, and more. Use AI-generated product descriptions, attribution, and image recognition to showcase products rapidly to potential B2B and B2C buyers in any marketplace.

Don't take our word for it

"With Pimberly, we've been able to easily create product data for our different marketplaces, customers, and locales. Overall, we're getting our products to market quicker than ever before. Pimberly is really key in enabling us to be at the top of our game."

Group eCommerce & Digital Marketing Manager
ATA Group

Our Services

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Tailor offerings to specific client needs and preferences

Intuitive Interface & Integration

Enhance operational efficiency, reduce human error, and accelerate time-to-market.

Streamline Workflows

Customize product descriptions for multiple channels, automate product attribution, and automatically pull product data from images

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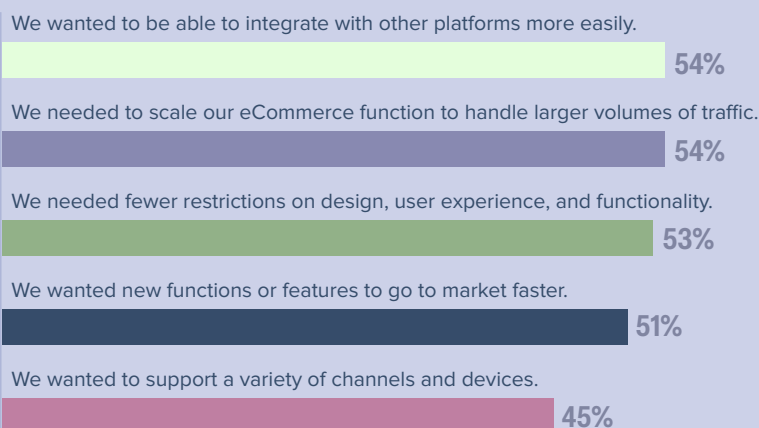+1(516) 551-0830
+1(332) 239-4999

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HEADLESS COMMERCE DELIVERS PERFORMANCE, SCALABILITY, AND UX BENEFITS

Headless commerce is a new approach to e-commerce that enables businesses to bypass traditional methods of integrating web stores with their digital infrastructure. It allows them to directly connect retail systems, such as payment processors and order management systems, to their websites or mobile applications without the need for a specific platform or storefront.

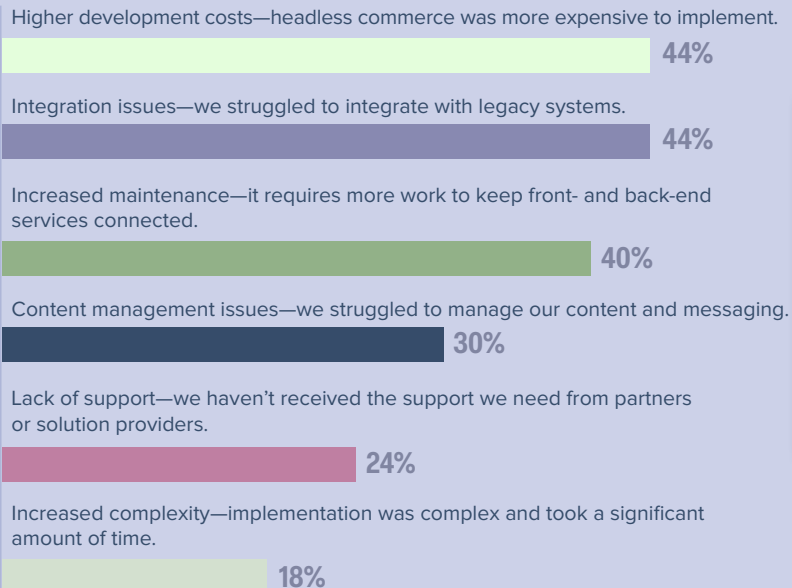**What led you to adopt a headless commerce approach to eCommerce?**

We wanted to be able to integrate with other platforms more easily.
54%

We needed to scale our eCommerce function to handle larger volumes of traffic.
54%

We needed fewer restrictions on design, user experience, and functionality.
53%

We wanted new functions or features to go to market faster.
51%

We wanted to support a variety of channels and devices.
45%

Retailers and eCommerce organizations may adopt a headless commerce infrastructure for their eCommerce websites for a variety of reasons.

Most of the respondents to the study say they adopted headless commerce because they wanted to be able to integrate with other platforms (54%) and scale their eCommerce functions to handle larger volumes of traffic (54%). Most respondents also say they wanted to obtain fewer restrictions on design, user experience (UX), and functionality (53%).

Headless commerce offers businesses greater flexibility when it comes to design and customization. Without relying on a traditional e-commerce platform, businesses can create a unique look and feel for their online store. And because the content is decoupled from the system that runs it, businesses can make changes quickly without having to worry about compatibility issues or coding requirements.

What are the two most significant challenges you expect to face or have faced in implementing and using headless commerce?

Higher development costs—headless commerce was more expensive to implement.

44%

Integration issues—we struggled to integrate with legacy systems.

44%

Increased maintenance—it requires more work to keep front- and back-end services connected.

40%

Content management issues—we struggled to manage our content and messaging.

30%

Lack of support—we haven't received the support we need from partners or solution providers.

24%

Increased complexity—implementation was complex and took a significant amount of time.

18%

Although the benefits of headless commerce are clear, some retailers and eCommerce companies are still in the process of adopting the infrastructure, while others are working to overcome challenges.

The two most common challenges cited by the respondents include high development costs (44%) and integration issues (44%). Implementing headless commerce requires upfront costs, which will require buy-in from key decision-makers. Companies that are dependent on legacy systems for eCommerce may also struggle to integrate headless commerce functionality into their websites.

Other respondents say increased maintenance (40%) is one of the most significant challenges they've faced or expect to face while implementing and using headless commerce.

Headless commerce requires maintenance and upkeep to ensure optimal performance. This includes updating the platform, managing back-end data, administering security controls, and content management.

Nonetheless, many of these requirements can be outsourced to headless commerce specialists. The maintenance requirements of headless commerce are also relatively low compared to other types of digital transformations, and there are plenty of turnkey solutions available that enable companies to enjoy the benefits of headless commerce without having to develop a system internally.

What are the two most significant benefits you expect to realize or have realized after implementing and using headless commerce?

Better performance—we have optimized site performance and reduced load times.

45%
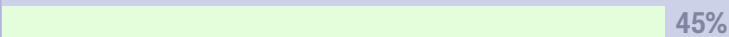
Improved scalability—we can support large volumes of traffic and expansions into new markets.

42%

Greater flexibility—we can respond more quickly to changing market conditions.

32%

Multi-channel support—we can reach customers on the channels they prefer.

30%

Increased conversion rates—we've attracted and retained more customers since implementation.

30%

Enhanced customer experience—we can deliver a more responsive and personalized customer experience.

21%

Indeed, the respondents say they have enjoyed some significant benefits thanks to their implementations of headless commerce.

The most-cited benefits include optimized site performance and reduced load times (45%), as well as improved scalability (42%). Many of the respondents have been able to support larger volumes of traffic on their eCommerce sites and have expanded into new markets.

Other notable benefits include greater flexibility (32%), multi-channel support (30%), and increased conversion rates (30%).

Since beginning or completing your transition from a traditional storefront to a headless commerce infrastructure, have you witnessed an improvement in the customer experience?
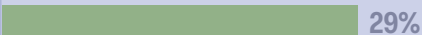
Yes, we've witnessed a very significant improvement in the customer experience.

19%
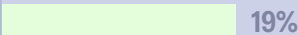
Yes, we've witnessed a somewhat significant improvement in the customer experience.

52%

No, we haven't witnessed an improvement in the customer experience.

29%

A significant majority of the respondents (71%) also say they've witnessed an improvement in the customer experience since implementing or beginning to implement headless commerce.

Specifically, 19% have witnessed a "very significant" improvement in the customer experience, while 52% have witnessed a "somewhat significant" improvement.

Headless commerce can improve the customer experience by allowing customers to purchase goods and services in a seamless, efficient manner. This is achieved by eliminating the need for customers to interact with websites or applications to make purchases.

Instead, they can simply use an API or mobile app to access their desired items and complete the checkout process without ever leaving the platform or channel of their choice. This removes potential friction from the checkout process, which can reduce cart abandonment or reluctance to purchase due to common roadblocks like navigation difficulties, website load times, and too many steps in the checkout process.

Since you said, "Yes," please identify the CX improvements you've witnessed.

More customers—we've received more site visits and new customers.
65%

Improved site performance—our website or websites load faster.
57%

More channels—customers are engaging us across more channels, or new channels.
56%

Increased engagement—customers stay on our site for longer.
47%

Greater loyalty—we've seen higher retention rates and increased lifetime value.
39%

Better personalization—customers are receiving a much more contextualized shopping experience.
32%

Most of the respondents who've witnessed an improvement in the customer experience have also witnessed improved site performance (57%) and customer engagement across additional channels (56%).

The respondents who have seen CX improvements since implementing headless commerce reiterate these benefits. For example, 65% say they've received more site visits and new customers since implementation. This is likely because more customers can engage with the site via APIs on their preferred channel or platform instead of having to visit the eCommerce site directly.

Headless commerce can improve channel engagement by allowing brands to break away from traditional commerce models and flexibly customize their digital presence. This helps them reach out to customers across multiple channels and provides a more unified shopping experience for the customer, regardless of how they engage with the platform.

Furthermore, headless commerce allows businesses to make their digital assets accessible in a faster, more efficient manner. This enables them to quickly adjust their marketing strategies and campaigns to fit the changing needs of customers.

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Image & Video Platform

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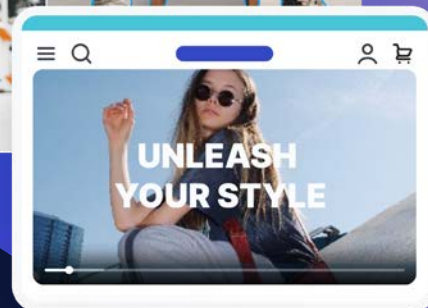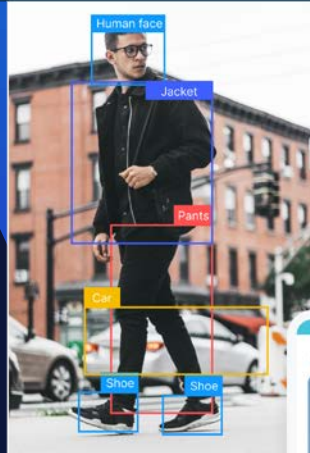
Five Common Image & Video Pain Points Solved By Cloudinary

The quality of your visual assets impacts commerce success. Cloudinary is a scalable, high-performance, AI-powered solution that automates image and video workflows from creation to delivery.

Pain Point		Cloudinary Solution
Trying to achieve scale manually.	→	AI-powered image and video optimization and automation.
Avoiding the use of video due to expense, complexity and lack of tools.	→	Upload, store, search, manage, transform, resize, optimize, and deliver video on-demand.
Creating multiple asset versions.	→	Background and object removal, cropping, drop shadows, and more.
Static commerce experiences.	→	Product galleries with images, video, 360° spin sets, and 3D.
Lack of integration across tech stack.	→	Prebuilt integrations and APIs to support modern composable commerce stacks.

About Cloudinary

Cloudinary is the foundational technology for all image and video on the internet. More than 1.5 million users, 10,000 customers, and the world's most engaging brands use Cloudinary to deliver transformative visual experiences at global scale.

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MOST COMPANIES WILL LEVERAGE A PIM TOOL AS PART OF THEIR HEADLESS COMMERCE PLATFORM

Headless commerce platforms can be integrated with other technologies, such as artificial intelligence (AI), machine learning, product personalization engines, and predictive analytics solutions. They can also be integrated with marketing solutions like customer relationship management (CRM) systems and marketing automation platforms.

These types of integrations allow businesses to understand their customers better, personalize the shopping experience, and provide more personalized marketing offers. Additionally, headless commerce platforms can be used to quickly launch new sites or applications, enabling businesses to deliver a powerful and engaging customer experience without having to develop a new platform from scratch.

Do you have plans to integrate new technologies with your headless commerce approach?

62%
No

38%
Yes.

Nonetheless, most of the respondents (62%) say they have no current plans to integrate new technologies with their headless commerce approach.

Retailers and eCommerce companies may not be ready to integrate new technologies with their headless commerce approach because of the complexity that may result. These complexities can be related to managing a variety of APIs, data models, and rules for different systems. Additionally, there may be challenges with identifying the right technology and creating a unified customer experience across different channels.

Still, over one-third of the respondents (38%) plan to integrate new technologies with their headless commerce systems.

In conversations with researchers, these respondents say they plan to integrate a variety of consumer-facing technologies to improve the customer experience. These include technologies like augmented reality (AR) and virtual reality (VR).

Other respondents who plan to integrate new technologies are more focused on back-end solutions that could improve the customer experience. Several say they plan to use AI for a variety of purposes, such as content generation and customer profiling.

Altogether, these respondents demonstrate that headless commerce can be combined with a variety of technologies to improve marketing efficiency, improve the customer experience, and help companies gain a better understanding of their customers.

Do you currently utilize a product information management (PIM) tool as part of your headless commerce tech stack?

36%
No

64%
Yes.

One technology that most of the respondents (64%) currently use as part of their headless commerce technology stacks is a product information management (PIM) tool.

A product information management (PIM) tool helps to manage, store, and share information about products quickly and effectively across all channels. PIM tools enable businesses to quickly update and publish product information, including images, videos, documents, pricing, and other related data, onto different ecommerce platforms and APIs.

For example, a customer accessing an eCommerce platform with headless architecture will need to see the same product information as a customer using a website. A PIM tool can help to ensure that this data is consistent across all platforms, regardless of the architecture.

Additionally, PIM tools help to centralize product information in one location, streamlining the process of managing and sharing data across multiple channels.

Since you said, "No," have you thought about bringing on a product information management (PIM) tool as part of your journey into headless commerce?

39%
No

61%
Yes.

Among those respondents who aren't currently using a PIM tool as part of their headless commerce strategy, most (61%) say they have thought about bringing one on as part of their transformation.

This suggests that the use of PIM tools will become a standardized part of retailers' headless eCommerce strategy in the future. For many companies, these solutions will be critical to maintaining consistency across channels as they scale their eCommerce operations.

Aside from embracing headless commerce, has your team explored mixing and matching components from microservices, APIs, cloud native SaaS?
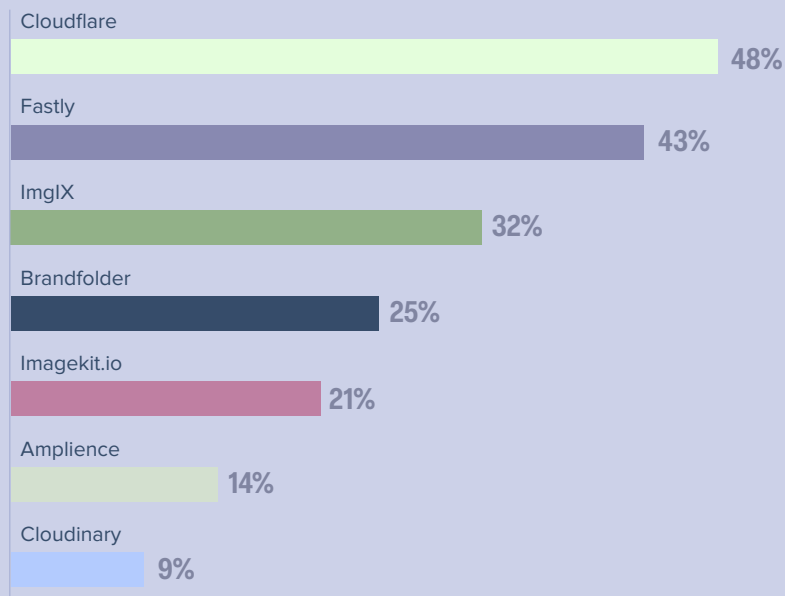
44%
No

56%
Yes.

Finally, most of the respondents (56%) say they have at least explored mixing and matching components from microservices, APIs, and cloud-native SaaS products as part of their headless commerce strategies.

Headless commerce is connected to a media-rich, digital, mobile, and eCommerce environment. This means that a company can deliver a holistic shopping experience using a variety of technologies. Companies can therefore create an online presence that is truly unique and tailored to fit their customers' needs—if they have the right capabilities to facilitate their strategy.

Since you said, "Yes," please indicate what you have integrated now or intend to integrate in the future.

Cloudflare
48%

Fastly
43%

ImgIX
32%

Brandfolder
25%

Imagekit.io
21%

Amplience
14%

Cloudinary
9%

Cloudflare provides content delivery, cybersecurity, and domain registration services.

Among those respondents who say they have explored adding other components and microservices to their headless commerce strategy, almost half (48%) say they have integrated or intend to integrate Cloudflare. Cloudflare provides content delivery, cybersecurity, and domain registration services.

Meanwhile, 43% say they've integrated or plan to integrate Fastly, an edge cloud platform that enables developers to expand their cloud infrastructures closer to users. This technology will be critical for companies that want to maintain fast load times while expanding into new markets, including markets that are separated geographically from their core computing infrastructure.

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RETAILERS ARE EXPLORING FUTURE ECOMMERCE EXPERIENCES WITH HEADLESS COMMERCE

In their final line of questioning, researchers asked the respondents to describe what improvements they'd like to make to their eCommerce experiences and how headless commerce will support them.

Based on the responses, retailers are mostly looking to to better serve customers, and many are considering how best to integrate headless commerce as part of the process. Other companies are focusing largely on omnichannel development. For example, many of the respondents say there has been a significant amount of discussion around making eCommerce more interactive and agile through content relevance.

> "Analyzing customer journeys through eCommerce platforms and supporting personalization through headless commerce will be valuable," says a customer analytics department head from an entertainment, food, and travel retailer.

Some retailers have suggested adding customized loyalty programs or more digital tools could provide a better eCommerce experience with headless commerce support. Furthermore, third-party software integrations will be easier with headless commerce solutions, as they will make the purchase process faster and more connected.

Finally, merchants plan to use headless commerce strategies to deliver personalized experiences based on customer profiles. They believe a headless architecture could help with product discovery across channels, as each channel can be informed by a centralized recommendation engine.

Though there is potential for headless commerce use in these areas, many retailers are still developing their future strategies for the technology. Nonetheless, retailers understand the value that headless commerce delivers, and they view it as a core component of their eCommerce futures.

KEY SUGGESTIONS

Integrate a product information management (PIM) tool into your headless commerce technology stack. PIM tools can help you quickly update and publish product information, ensuring data is consistent across all platforms, regardless of the architecture. Additionally, PIM tools help to centralize product information in one location, streamlining the process of managing and sharing data across multiple channels.

Consider adding other components and microservices to your headless commerce strategy so you can create a holistic shopping experience that is tailored to fit your customers' needs. This could include integrating content delivery, cybersecurity, and edge cloud platforms that enable developers to expand their cloud infrastructures closer to users.

Focus on improving eCommerce experiences by making them more interactive and agile. This could include adding customized loyalty programs, digital tools, or personalization based on customer profiles to improve product discovery. Artificial intelligence can also be employed for content generation and data analysis.

ABOUT THE AUTHORS

INSIGHTS
Worldwide Business Research

WBR Insights is the custom research division of Worldwide Business Research (WBR), the world leader in industry-driven thought-leadership conferences. Our mission is to help inform and educate key stakeholders with research-based whitepapers, webinars, digital summits, and other thought-leadership assets while achieving our clients' strategic goals.

For more information, please visit www.wbrinsights.com.

eTail™

We launched eTail in 1999 and have been dedicated to supporting the growth of the retail industry ever since. What started off as 100 people in a room discussing where this sector is headed has led to 2,000 senior-level eCommerce executives being inspired whilst learning and developing their company as well as their careers.

For more information, please visit www.etailwest.wbresearch.com.
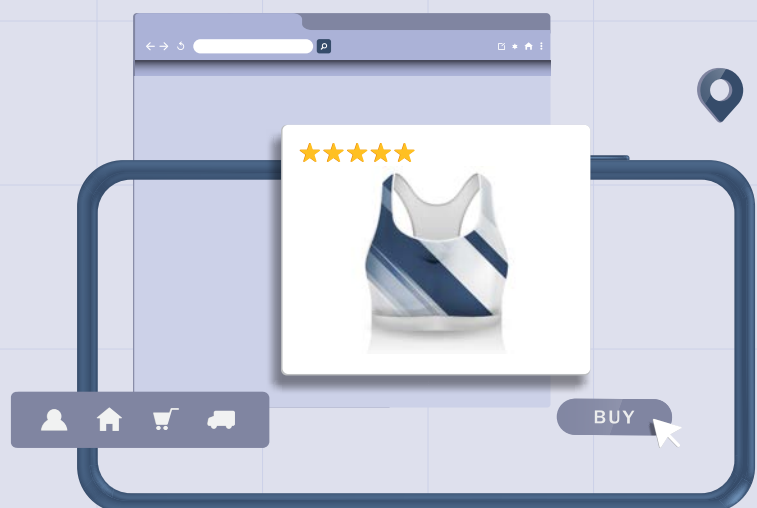
ABOUT THE SPONSORS

Cloudinary is the image and video technology platform that enables the world's most engaging brands to deliver transformative visual experiences at global scale. More than 1.5 million users and 10,000 customers, including Apartment Therapy, Bleacher Report, Bombas, Grubhub, Hinge, NBC, Mediavine, Minted, Paul Smith and Peloton, rely on Cloudinary to bring their campaigns, apps and sites to life. With the world's most powerful image and video APIs backed by industry-leading artificial intelligence and patented technology, Cloudinary offers a single source of truth for brands to manage, transform, optimize, and deliver visual experiences at scale. As a result, the most engaging brands across all industries are seeing up to a 203% ROI using Cloudinary with benefits including faster time to market, higher user satisfaction and increased engagement and conversions.

For more information, please visit www.cloudinary.com.

Pimberly is an innovative, cloud-based SaaS PIM (Product Information Management), DAM (Digital Asset Management), and Workflow platform for all your product data and digital assets. It's designed to handle unlimited numbers of SKUs, data feeds, and channels for leading brands and businesses. A centralized hub enables you to create a vital golden record for all product information. Gather, store, enrich, and distribute everything to unlimited sales channels from one place. At Pimberly, product data is our passion, and the scalability of the platform means there are no barriers to growth.

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