

BLOG | COMMERCE

What to consider when migrating to a headless ecommerce platform

JOANNA SUAU
February 6th, 2020



Even though you are well aware of the pitfalls of your current ecommerce platform – be it rigidity, technical debt or the inability to innovate quickly; the thought of replatforming can be a scary one. It can be costly and time-consuming, and as a result of these factors, the question of whether it's all worth it, creeps in.

There are also many factors to think about when looking for a new solution – do you move to a **headless commerce** platform, or to an out-of-the-box solution? Or do you stick with the platform you've got and attempt an upgrade instead? What data should you move? Should you change your hosting provider? Should you think about redoing your storefront?

Monolithic, legacy platforms versus modular, flexible commerce

If you're looking to migrate to a headless commerce platform from a traditional, all-in-one system (aka monolith), you're already well acquainted with the pain points of this rigid architecture, the time it takes to make changes, the risk introduced with modifying or extending code and the costs associated with keeping your technology current. And not to mention how difficult it is to get commerce services out of the monolith and in to new, exciting touchpoints.

To execute commerce and innovation with more agility, migrating away from your legacy platform to embrace headless commerce and **microservices** makes sense. But with so many headless options on the market, how do you choose the digital commerce solution that's right for your organization?

Picking the right headless commerce platform

Choosing the right headless commerce or microservices platform is important as **not all ecommerce APIs are created equal**.

Not all ecommerce APIs truly support omnichannel customer journeys and new business models.

Look for:

- **Extensibility and backwards compatibility.** Backwards compatibility means every update you make to a new touchpoint updates across touchpoints, rather than requiring developers to update each, and, every, device and experience. Many APIs require manual updates to each touchpoint which is inefficient and easily creates opportunities for experiences to break when things fall through the crack (not to mention slows delivery-to-market!)
- **Discoverability.** Developers working with the API should be able to use the API with only its root endpoint. Otherwise, there is far too much painful complexity and back-and-forth through documentation -- especially when your headless commerce environment connects to multiple systems, microservices and applications with their own APIs.
- **Full API exposure.** Ideally, 100% (or close to) of your commerce functionality can be exposed via APIs to extend to any touchpoint or be re-composed for new applications.
- **Orchestration and choreography.** To ensure execution of your business logic and proper sequencing of API and data calls, your platform should support orchestration and choreography with simplicity.

Should you consider a microservices commerce platform?

There's headless commerce, and then there's *headless commerce*.

While headless architecture 1.0 decouples the front end from the back end commerce platform, microservices architecture decouples back end services into smaller "building blocks," each with their own well-defined APIs and data stores.

This means you can leverage the benefits of headless commerce -- on steroids.

Individual pieces of your commerce system can independently be deployed, scaled and updated without impacting monolithic code. This enables rapid agility and flexibility within your organization.

For those who are after speed, flexibility, and custom data management, solutions like **Elastic Path Commerce Cloud** will be more suitable.

Elastic Path Commerce Cloud allows organizations to create a best-of-breed solution by selecting the best components to address their unique business needs on a microservices-based headless commerce platform.

The platform you are currently on will also play a vital role in your decision, as all the data you need to migrate will have to play nice with the new solution. And so, if your solution is heavily customized, it will be so much more difficult to move to a monolith solution that is not as flexible as headless and can easily break if not handled properly.

What to consider before migrating to a microservices-based ecommerce platform

Are the platform's microservices too micro?

The more microservices you have, the more complex their management and maintenance. Rather than a microservice for individual features or capabilities, analysts like Gartner recommend a smaller suite of "packaged business capabilities" (or "larger" microservices) organized around core commerce functionality (such as Catalog, Pricing, Payments, Promotions, Cart and Checkout and Accounts).

Are microservice APIs well designed?

When APIs are too granular or fragmented across the platform, implementation, monitoring, maintenance, troubleshooting and upgrades becomes a pain. Time-to-market also suffers when implementations take longer due to complexity, and when documentation lives all over the place. *Tip: review documentation during the evaluation process!*

Are microservice APIs easy to administer?

How user-friendly are the APIs' UIs? When dashboards are incomplete or fragmented (due to fragmentation of the microservices and APIs themselves!) they become a pain to navigate through and administer, working *against* the speed and agility IT expects from modular platforms.

It's important to not dive in headfirst when picking a new ecommerce solution. After all, this decision is one that (should) last you a long time, and no doubt will have some financial burden on your business during the move. You want to make sure you've made the right choice for the long term.

Try it out yourself

Don't just read up on different ecommerce solutions. Try them out. Make a checklist of what you require from the platform of choice, then get stakeholders in the project to try each one of them. Evaluate features and functionalities, monitor the response times, look at their integrations functionality and ability to customize data.

Before you migrate to a headless or microservices platform

Have you defined your project scope?

Knowing what you want out of your new platform is crucial for success. This is not just for now, but for the future, too.

- Do you require flexibility to add additional ecommerce channels further down the line?
- Do you need personalization and customization?
- Do you want to localize your content?
- Do you have a complex business tech stack with lots of third-party tools and systems that your solution of choice needs to fit into?

Map out your technology stack and architecture

Before you move, make sure you have your technology stack mapped out. This way you can make sure you know exactly how all of your systems will integrate with each other, how your new ecommerce solution will fit into this, and how easy it is to integrate into your existing architecture. You should even be able to lean on your solutions implementation teams to ensure what work is required to ensure you get the processes in place to enable the technology architecture you desire.

Think of data migration

Have a plan for being able to migrate data from your current platform, so that you are sure you can do it with ease; and with limited impact on your project and store.

What parts of an ecommerce platform are typically migrated?

Product catalog

As the actual content of your store and your source of income, this is the most important data to migrate over. Make sure that you migrate over to a solution that is able to recreate your catalog structure without too much hassle. Otherwise, this may significantly impact development time. Likewise, make sure your inventory management system works well with the new solution.

Customers and orders

Migrating customers and orders, especially those still unfulfilled or not processed is also crucial for a smooth migration effort. At this point, it is important to mention security. Make sure that your customers' credentials are updated post-migration by either sending each customer a password reset link or an email informing them about the migration and a need to change their password.

Custom data

If your platform is heavily customized, it's probably best to look for a solution that will easily adapt any data with any data type to its own specific rules. Look for a platform that specializes in custom data, otherwise, you can end up spending a lot of effort and resources on rewriting your custom data schema to match the chosen platform.

Reporting, shipping, taxes

Whether it's custom-built or outsourced to a third-party, make sure you don't forget about the cornerstones of what makes your store tick. There are many great third-party services dedicated to these areas, so creating a custom solution is a bit like kicking at an open door. Even if your solution served you well for years, take a look at what best-of-breed third-party tools have to offer, and consider plugging a third-party service that will save you a lot of development time and resources and will be able to grow together with your business.

Third-parties' integrations

If your solution has some third-party integrations, it should be an easy switch. Some ecommerce platforms don't support all integrations out of the box, so make sure you've consulted the list of supported tools of your chosen solution. Typically, it is so much easier to plug an integration into a headless solution than a monolith that may need a separate extension or a plug-in to support your integration. If you want to take a deeper dive into headless commerce, check out our **Headless Commerce FAQ**.

Share on



Joanna Suau

Like what you're reading?
Check out some of our other great content here

BLOG

B2B Mobile Commerce Apps are Hot: Here's Why

BLOG

The truth about Apple Pay for ecommerce

BLOG

How to choose an ecommerce chatbot (14 solutions reviewed)

PRODUCT	SOLUTIONS	PARTNERS	SUPPORT	RESOURCES	COMPANY
Overview	Automotive	Become a Partner	Customer Support	Customer Case Studies	About Us
Developer Docs	Consumer Products	Solutions Partners	Community Forum	Ecommerce Blog	Careers
Request Free Trial	Manufacturing	Technology Partners	Training	Resource Library	Contact Us
	Healthcare	Tech Blog		Developer Docs	News
	Wholesale			Tech Blog	Privacy Policy
	Ecommerce APIs				Terms of Use
	Headless Commerce				
	Microservices				