

Best-of-Breed Search in a Headless Commerce Environment



Introduction

Customer Experience has become the holy grail for eCommerce companies in the digital era, and the bar is reset by customers' latest delight with an online retailer. Consumers have little patience for a clunky shopping experience that works differently on every device, or those that force them through a labyrinth of links to seemingly unrelated pages. A disconnected or unfamiliar customer experience will always cause abandonment.

On the same note, the business demand is to have an almost telepathic understanding of customer needs, and an ability to deliver experiences that are fresh and innovative, 24/7. Consumers want an experience that feels naturally intuitive; they shouldn't have to read a manual to use your interface. You should be able to experiment with new microservices, measure their effectiveness, make swift and prudent financial decisions, and get on to the next iteration with the speed of light. A tall order, right?

You might - or likely already have - called on your IT team to bring your platform into the 21st century. However, you've probably encountered a major obstacle migrating the cumbersome legacy system that powers many companies. Traditional eCommerce systems are referred to as "monolithic" - literally, "from

a single block of stone" (OED). Does this sound like your platform: Immovable? A uniform and powerful software suite, to which it is intractably difficult to make changes? Do requests for improvements take months or years, as opposed to days/weeks? Does each change require a different team of programmers, experts in different languages, so your applications can work on multiple devices?

The idea of an ecommerce platform that can do everything, or a Digital Experience Platform that tightly couples search and CMS was appealing in the early 2000s, but you now know lack of best-in-breed components makes it difficult to keep up with competitors on these one-size-fits all solutions, and their monolithic nature makes it difficult to make improvements and keep up.

Headless commerce offers a solution - the key to greater agility and customization. Realizing that a decision to "go headless" requires rigorous analysis for any enterprise, in this paper we highlight the key steps in planning a platform migration, as well as new ways to imagine search and product discovery that will likely make this your #1 priority in modernizing your commerce functions.

The Changing Commerce Paradigm

→ Let's start with some definitions.

The frontend of a commerce platform controls customer experience, while the backend contains business processes. In traditional eCommerce systems the front and backend are tightly coupled. This coupling means every new capability and optimization requires increasingly complex hacks and workarounds, adding obstacles, reducing performance and making the system more unwieldy. By contrast, **headless systems** decouple the back- and frontends and rely on open APIs. The end result is greater flexibility and speed to deliver cutting edge experiences across channels.

The term “headless” may not initially inspire confidence; who wants a solution in their organization to be described as ‘headless?’ But rather than connoting a lack of direction, headless is actually a metaphor in eCommerce experiences for the proliferation of ways we communicate with our customers: websites, mobile applications, voice assistants, to name a few. Customers want to experience our products and services through many touchpoints. Software development must be responsive to the reality that there is no longer a “head” or primary channel. Simply speaking, the distinguishing feature of headless - the decoupling of the front and back ends of the system, which increases flexibility - enables marketers and their developers to more easily develop new channels and additional customer touchpoints. Endless opportunities to create unique customer experiences result from the use of the “right” combination of microservices.

Microservices are small self-contained applications which allow companies to experiment, test, design, and rapidly implement new services. More on these later.

Raising awareness for modern enterprise tech

Legacy software does not work anymore with modern day business needs, but large enterprises tend to be slow in understanding the benefits of new technology and adopting it.

The MACH Alliance, a newly created non-profit, offers a fresh and comprehensive approach to educating businesses on modern enterprise technology. At the [MACH Alliance](#) launch in June 2020, the four founding companies and 14 inaugural members [began their mission](#) to future-proof enterprise technology by prescribing a best-of-breed