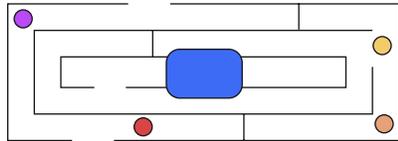ADAPT

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How to determine if headless commerce is right for your business
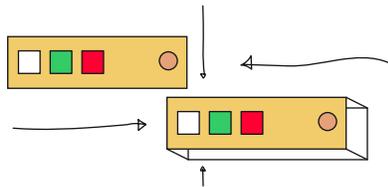
Klaus Jepersen-Colding
Ecommerce Director // **Adapt**
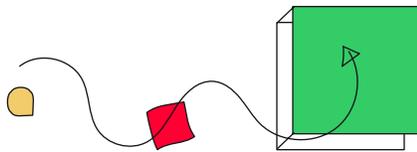
What you'll learn

The challenges monolithic platforms present in a fast-paced digital world

Just what are microservices, and why the biggest tech companies have been using them for years

Why digital maturity should be the guiding light in your plans for digital development

What are the steps you should consider before pursuing headless ecommerce

The need for speed

Speed, agility, and flexibility are often characterized as winning ecommerce attributes. And for good reason, as customer demand and the number of available channels to reach them have risen dramatically.

This trajectory requires that you react, optimize, and deploy highly relevant customer experiences—from blazing-fast mobile speed to the ability to purchase via voice or visual search. It's all easier said than done. To succeed, you must have both the organizational and technical structure to enable these critical ecommerce hallmarks.

Today, many ecommerce businesses still rely on a centralized structure, with staff organized around technology tiers. A backend developer might work on checkout one week and on product filters the next—all within the same full-stack ecommerce setup. This jack-of-all-trades approach often gives way to mediocrity. A project that dictates the involvement of experts across several technology tiers can result in unmanageable communication overhead. Outcomes like these serve as the catalysts for companies to rethink both their team structure and ecommerce architecture as they flex to respond rapidly to ever-evolving market needs.

Monolithic bottlenecks

During the last five years, the focus on mobile commerce, social commerce, data analytics, and marketing tech stacks has exploded. Companies now acknowledge that traditional, monolithic ecommerce platforms lag in the flexibility and UI innovation to meet customer and business requirements.

Without these capabilities, ecommerce businesses lack the ability to scale and expand, as both frontend, backend, and business logic are tied up in the same monolithic platform.
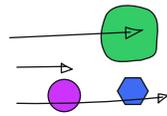
What kinds of business challenges have our agency observed as a consequence of centralized, monolithic ecommerce software?
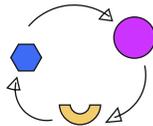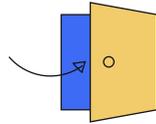
Adapting to emerging digital commerce trends, such as guides, product configurators, or visual search
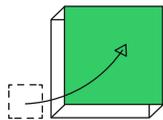
Scaling for growing SKUs, traffic, and conversions

Enabling multichannel content delivery across smart-phones, wearables, in-store solutions, and IoT devices

Entering new markets

Enabling a well-designed user experience, with a shared data foundation across channels

Modular, decoupled, headless, API-first, or microservice?

So, how do you move forward, when you can no longer bet on one large block of centralized software to run your entire ecommerce business? Where can you look for inspiration?

Companies like Amazon, eBay, Google, and Netflix have relied on an architectural principle called *microservices* for quite some time. This approach enables companies to break down capabilities into individual, autonomous services (i.e., microservices or *decoupled* services) that are individually developed, deployed, and managed, and that communicate via APIs.

The decoupled approach allows teams to work interdependently on different functionality—without having to understand the entire systems' logic. Imagine one team is working on a new commerce app while another is working on improving filters on a category page. Because the teams are leveraging modern APIs, they can

simultaneously work on both projects, without the risk of jeopardizing the ecommerce platform.
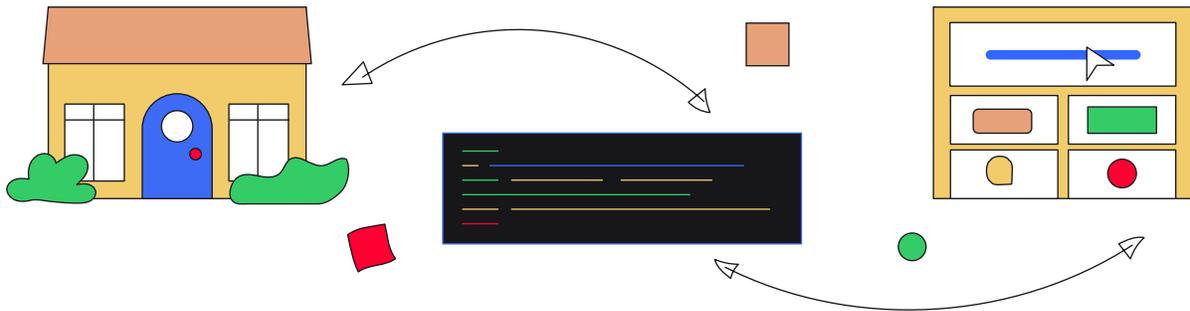
With an API-first approach, a lot of code can be reused on different projects. Here's an example: a development team wants to build an in-store ecommerce experience on top of a typical web ecommerce storefront. In this scenario, the team wouldn't have to start from scratch. Instead, they can reuse the foundation for checkout, managing orders, product data, and so on.
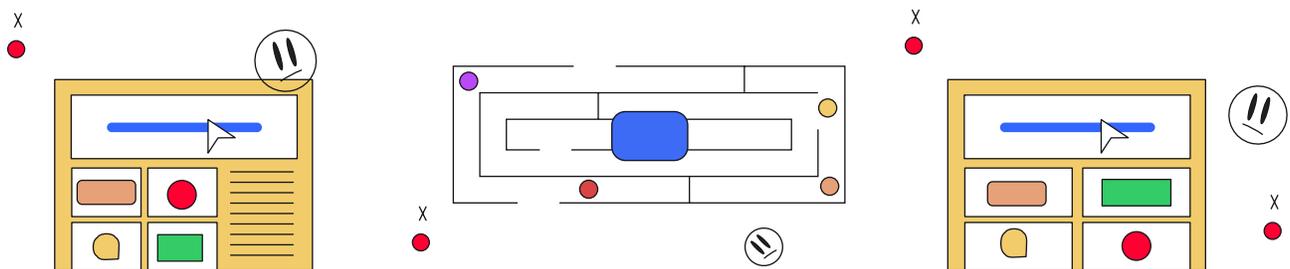
In stark contrast? One monolithic application that contains all business logic, while also responsible for presenting the frontend. This scenario creates significant restrictions and challenges when the team wants to present engaging customer experiences through customized design and UX on different devices or sales channels.

Digital maturity determines your next steps

There are many levels of how you can decouple your commerce setup, and there isn't a one-size-fits-all solution. Some refer to this process as *modular* or *headless*; others call it microservice-based or decoupled.

From our agency's point of view, the most important element within this movement is leveraging well-designed APIs that optimize the speed and liberty of deployment. Doing so decouples the presentation layer from the transaction and business logic, minimizing the effort, time, and cost that needs to be invested in full commerce platforms.

Before you go all in on headless, though, it's important to evaluate your organization's digital maturity. All to say, this approach isn't for everyone. In fact, many ecommerce organizations don't know where to begin when they look at their own current architectures.

Forrester's 2020 B2C and B2B *Now Tech* reports tracked more than 30 commerce vendors. The research revealed "that more than one-fourth of them offer solutions only fit for digitally advanced

clients. But 84 percent of clients are at a beginner or intermediate level of digital maturity."* That makes the greater percentage of organizations the norm, and while there's incredible potential for advancement, the research firm recommends companies buy only what they can use—or they could find themselves under water.

The implication: smaller companies—and those earlier in their ecommerce journeys—might benefit most from adopting a classic ecommerce suite, i.e., one that solves most needs in a single solution. Think of options like WordPress or WooCommerce. Intermediate-level companies can pursue platforms that enable more freedom and headless options. Considerations might be platforms like BigCommerce, where there are options to use headless commerce, and there's access to a more traditional, suite-based feature pack. This approach can get organizations up and running quickly while retaining flexibility to adapt commerce needs as they evolve.

If an organization has unique business models and requirements, a fully decoupled microservice architecture—comprised of best-of-breed components—might be a very strong contender. An example: going for commerce engines like commercetools, coupled with a React frontend and a broad array of world-class services. The options and vendors within this field are numerous, but the most important element is getting the strategy right, then finding the ecommerce solution that helps you move most swifty toward achieving your business objectives.
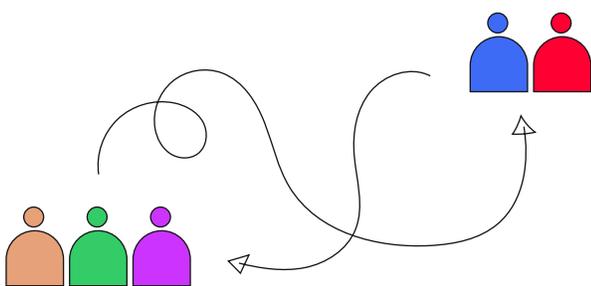
Here are just some of the questions that can help to determine how your ecommerce replatforming should be evaluated and implemented.
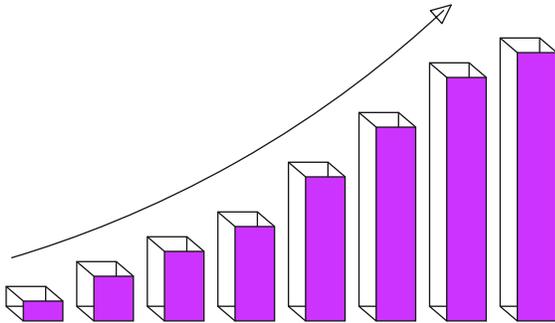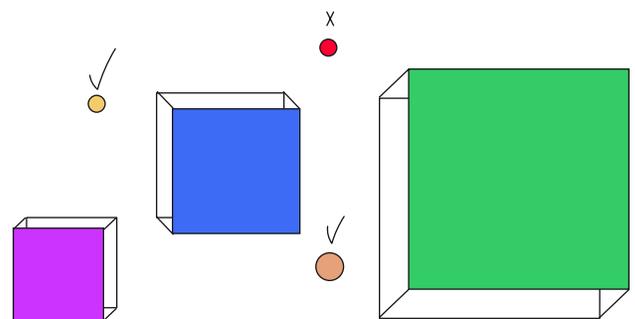

How will a new setup increase business value?
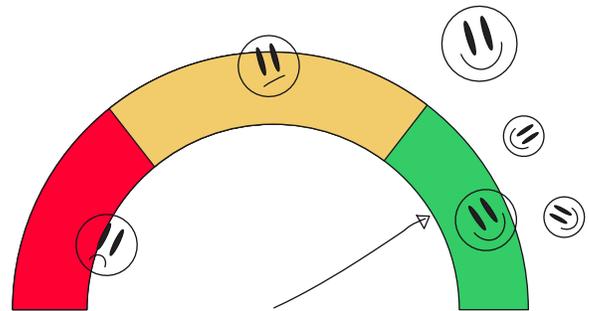
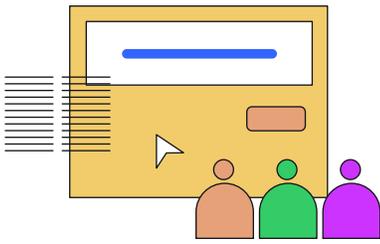How will more frontend freedom create better customer experiences?

How will you collaborate with a partner? What role will your team play?
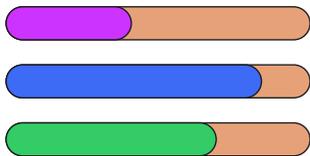

What scaling/operational needs will you have over the next 3 years?

A few key points to help analyze your needs

UX // Is your monolithic platform prohibiting you from implementing the UX/design changes you need, making it complex to innovate through user experience, and restricting your ability to expand to newer touchpoints?

Technical skills // What's your current technical skill level? Assessing this helps determine whether you—or your digital partner—can handle API implementation, management, and technical UI customization.
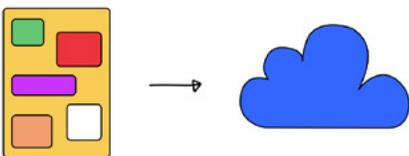
Commerce capabilities // Is your team or digital partner capable of handling the commerce services or customer engine components to ensure risk-free interaction with frontend and backend architectures of the complete system?

Apply best practices, minimize risk

We've seen some intense cases dealing with legacy ecommerce customizations that failed miserably. Thinking about your new platform as a *lift* and *shift* from legacy customizations to a new, more modern platform is a sure way to fail. Instead, get a fresh start, evaluating what features will create customer value. Don't carry all the dead-weight of code from your previous project with you into your next platform *unless it's absolutely necessary*. In 90 percent of the cases we see, it isn't.

Many of the businesses that have already tried to do a complete lift and shift from their legacy provider's latest-and-greatest version ended up canceling the project and selecting a different vendor altogether. Probably not something you'd want to report to your board of directors, right? Forrester shared, "Companies we interviewed found success with iterative approaches to migrating off their old commerce solution. They minimized technical risk, and got up and running faster"* by applying some best practices.
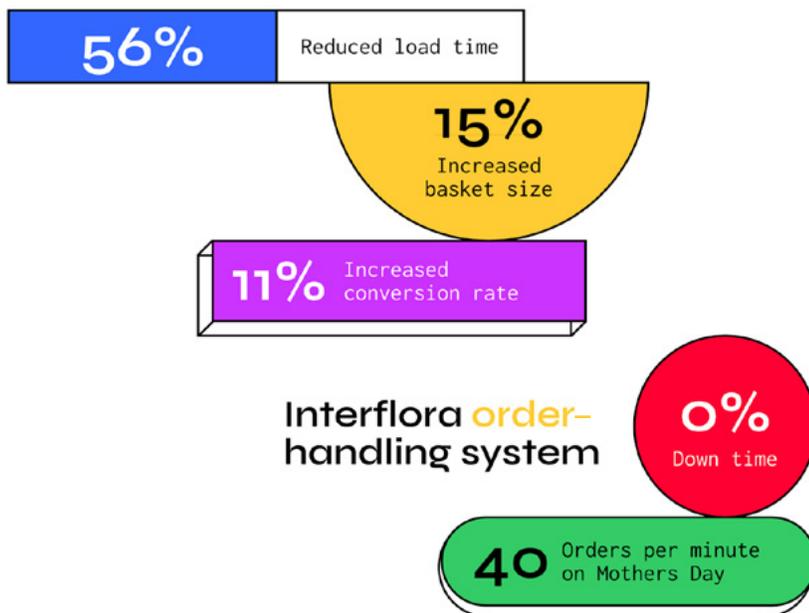
Begin one brand at a time

One company told Forrester, "They're starting with brands where they can show the most revenue growth, brand rejuvenation, and protect the consumer."*

Determine the most vital flows for your business, start there

Interflora—Denmark's leading floral delivery service—had worked on decoupling its ecommerce architecture and chose to rollout a new headless checkout flow that optimized the mobile experience. Our agency A-B tested the new flow on Interflora's new platform until it performed better than its legacy predecessor, then gradually ramped up traffic to 100 percent. Our collaboration with Interflora, where we constructed a modular, API-first digital setup, carried by carefully chosen, best-of-breed microservices, showed some staggeringly positive results. (I say this with all humility.)


56% Reduced load time

15% Increased basket size

11% Increased conversion rate

Interflora order–handling system

0% Down time

40 Orders per minute on Mothers Day

Find out more about the Interflora solution

Break up your legacy monolith

Forrester reports that some companies are "breaking up their legacy monolith by isolating discrete applications and moving them to the cloud."* *Caveat: your experience layer must be headless before you apply this approach.*

So, where do you go from here?
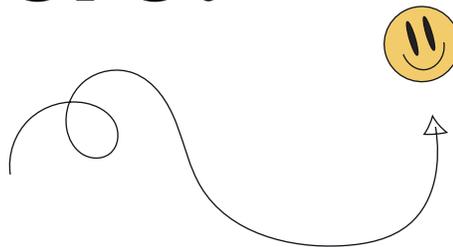
Innovate faster, engage customers more deeply

By now, we hope it's apparent that headless commerce architecture isn't for everyone. You need digital maturity across your ecommerce ecosystem. Headless isn't a plug-and-play solution, so the value should be clear before your organization dives into headless commerce approaches.

The companies that master headless commerce will be able to innovate faster and launch far more superior customer experiences than their counterparts locked into monolithic ecommerce software. That's why we see the next years' digital winners betting big on headless ecommerce architecture.

Contact us for a no-charge ecommerce consultation, where you can learn more about how we can collaborate to put your ecommerce strategy in motion—wherever you fall on the digital maturity spectrum.

*Forrester. How to De-risk Your Commerce Replatform. 06 February 2020.

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