



FRONT·COMMERCE

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JARGON-FREE  
MODERN COMMERCE

E-BOOK GUIDE

## COMPOSABLE COMMERCE: YOUR QUESTIONS ANSWERED

Everything you need to know about modern e-commerce architectures.

[www.front-commerce.com](https://www.front-commerce.com)



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## INTRODUCTION

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The concept of modularity has gained traction in many fields such as design, our lifestyles and commerce.

For commerce, modularity is no longer just an interesting consideration. Technological advancements, market trends, and the specific needs and preferences of businesses and consumers have pushed modularity to become the dominant paradigm.

And it has many benefits: such as flexibility, adaptability, and the ability to tailor solutions to specific needs. But it also has its challenges and limitations.

Modular systems can be more complex and harder to understand than monolithic systems, which may make them seem more difficult to use and manage, and complicated to put in place. All of which clearly makes us doubt the efficiency of a such system in terms of cost, development and the all important ROI.

**95% of e-commerce practitioners believe composable commerce is the best approach.\***

## The future is modular. Are you ready?

This report gathers real questions from our partners, clients and prospects surrounding composable commerce, with clear, jargon-free, answers to help you understand everything you need to know about modern commerce architectures. Let's go!

\*State of Composable Commerce Report 2021 - Elastic Path



## WHAT IS COMPOSABLE COMMERCE?

Composable commerce is a flexible, modular e-commerce architecture tailored to a retailer's specific needs. A 'Best-of-Breed' approach is used when selecting components, or micro-services, that are then stacked, or combined, to build a custom platform. Each micro-service is loosely connected via APIs, and their data is then shared & communicated via these APIs. All put together this approach creates a complete, business ready solution that is more easily maintained, evolutive, optimized and high performing.



## WHAT IS THE DIFFERENCE BETWEEN HEADLESS AND COMPOSABLE COMMERCE?

Headless commerce is an e-commerce architecture that separates the front-end of a website from the back-end systems that manage the commerce functionality. This allows businesses to use any front-end technology they want, (mobile app, desktop, voice etc.) to interact with the back-end systems and make purchases.

Composable commerce, on the other hand, is a concept that emphasizes the flexibility and modularity of e-commerce systems. In a composable commerce system, businesses can choose from a range of different components, or "microservices," to build the e-commerce solution that best fits their needs.

In short, headless commerce is focused on the separation of the front end and back end, while composable commerce is focused on the modularity and flexibility of the system. Both approaches have the goal of making it easier for businesses to build and manage their e-commerce systems, and both approaches can be combined.



### HEADLESS COMMERCE IN A NUTSHELL

The front-end and back-end of an e-commerce system are decoupled so they can be developed independently and using different technologies.



## HEADLESS COMMERCE BEFORE COMPOSABLE COMMERCE?

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### Do I need to adopt headless commerce before composable?

While headless commerce and composable commerce are often discussed together, they remain two distinct concepts with different goals and implications for an e-commerce architecture.

You do not need to adopt a headless architecture before composable architecture but it can be a useful approach. It is not unusual for a merchant to move to a headless architecture first. This allows for better control over risks, costs and isolating performance results to specific areas of the business. But ultimately, the best approach will depend on your specific needs and goals.

### What would be the advantage of going headless as well as composable?

A front-end agnostic from the back-end has many advantages. Being able to use any front-end technology you want is beneficial to a composable system. It allows a brand to create a more customized and user-friendly experience for their customers, and it can also make it easier to integrate new sales channels and features.

**The speed of new feature deployment is key to growth.**

Gartner predicts that organizations that have adopted a composable approach will outpace competition by 80%.\*

**Migrate progressively to a composable architecture**

[Learn how →](#)

\*[What Is Composable Commerce? Why Does It Matter? - Bloomreach](#)



## HOW DO I ADOPT A COMPOSABLE ARCHITECTURE FOR MY E-COMMERCE?

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Standardized best practices for implementing composable commerce are constantly evolving. This can make it challenging for businesses to know how to get started. If you're interested in adopting a composable commerce architecture for your business, there are a few key steps you can take:

1. Identify your business's specific needs and preferences. This will help you determine which microservices you need to include in your composable commerce system.

2. Research and compare different platforms and services. There are many different options available, so it's important to choose the ones that best fit your needs and budget.

3. Assemble your system by choosing and integrating the individual components you need. This will typically involve working with your engineering team or a digital agency to ensure that the components are properly integrated and working together.

4. Test and optimize your system to ensure that it is functioning properly and providing a good experience for your customers. This may involve making adjustments to individual components or the overall system to improve performance and user experience.

### Steps to adopting a composable architecture:

**Identify your specific needs & preferences**

**Research & compare platforms & services**

**Assemble your system: integrate your components**

**Test & optimize your system**

Looking to go headless or composable? Get our Important steps to Migration Chart [here](#)



## DO I NEED TO CHANGE MY BACK-END SYSTEM TO ADOPT COMPOSABLE COMMERCE?

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It depends on your current back-end system and your specific e-commerce goals. In some cases, you may be able to use your existing back-end system with a composable commerce architecture.

However, you may need to make changes to your back-end system in order to fully benefit from a composable architecture. For example, if your current back-end system is not compatible with APIs.

It may be worth consulting with an expert to determine the best course of action.

[Contact us](#) to find out if your backend is compatible.

## WHAT ARE THE MAIN COMPONENTS OF A COMPOSABLE COMMERCE PLATFORM?

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The following components are typically included, and are then customized to your specific needs:

- A backend that provides the core functionality & features needed to manage and execute e-commerce transactions.
- A set of microservices that can be combined & arranged to create different e-commerce functions. These may include, but are not limited to, components for managing products, inventory, orders, payments.
- Tools and interfaces for assembling and managing the system, including the ability to add, remove and configure individual micro-services as needed.
- Integration with other systems and technologies, such as customer relationship management (CRM) systems, payment gateways, and shipping and fulfillment systems.
- Support for different front-end technologies, such as web, mobile, and voice-powered interfaces, to allow customers to interact with the e-commerce system using their preferred devices and channels.

The components listed above can provide the core functionality and flexibility needed to create and manage a composable e-commerce system.



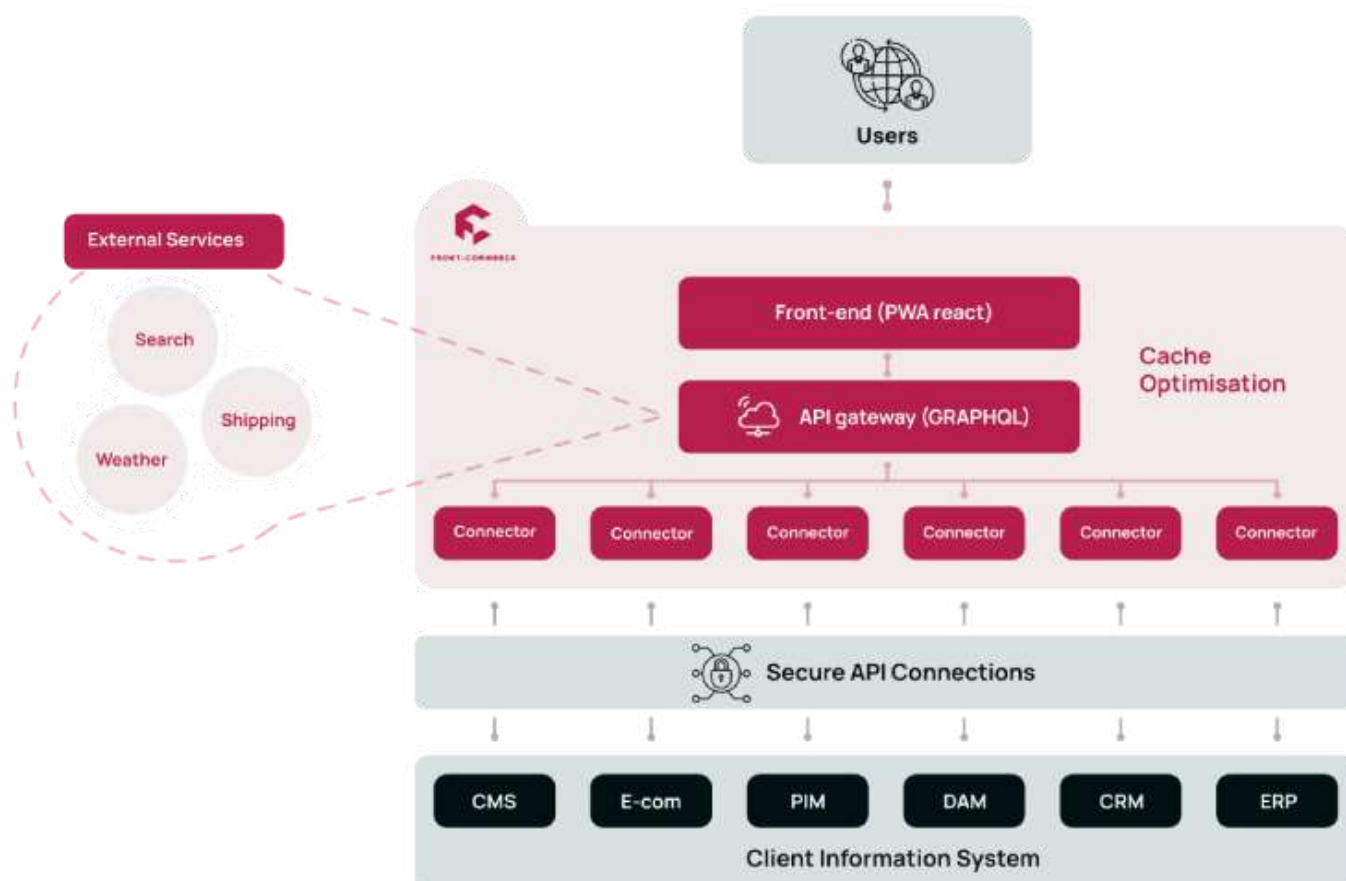
## HOW LONG DOES IT TAKE TO CHANGE MY E-COMMERCE ARCHITECTURE TO A COMPOSABLE ARCHITECTURE?

The amount of time needed will depend on the scope of the changes you are making. And some experimentation and learning may be required to find the right approach for your business.

Maximise ROI with a Best-of-Breed technical stack.

In general, however, the process of transitioning to a composable commerce architecture lasts several weeks or a few months. The process involves researching and comparing different platforms and solutions, assembling and testing the system, and training your employees on how to use and manage the new system.

### A COMPOSABLE ARCHITECTURE AT A GLANCE





## DO THE BENEFITS OUTWEIGH THE IMPLEMENTATION COSTS?

The cost of moving to composable commerce will depend on a variety of factors, including the complexity of your current e-commerce system, the specific components and technologies you choose to use, and any customization or integration work that may be required.

In general, however, composable commerce can provide a number of benefits that may outweigh the costs of implementing it, making it a worthwhile investment.

## CAN YOU EXPLAIN THE BENEFITS OF COMPOSABLE ?

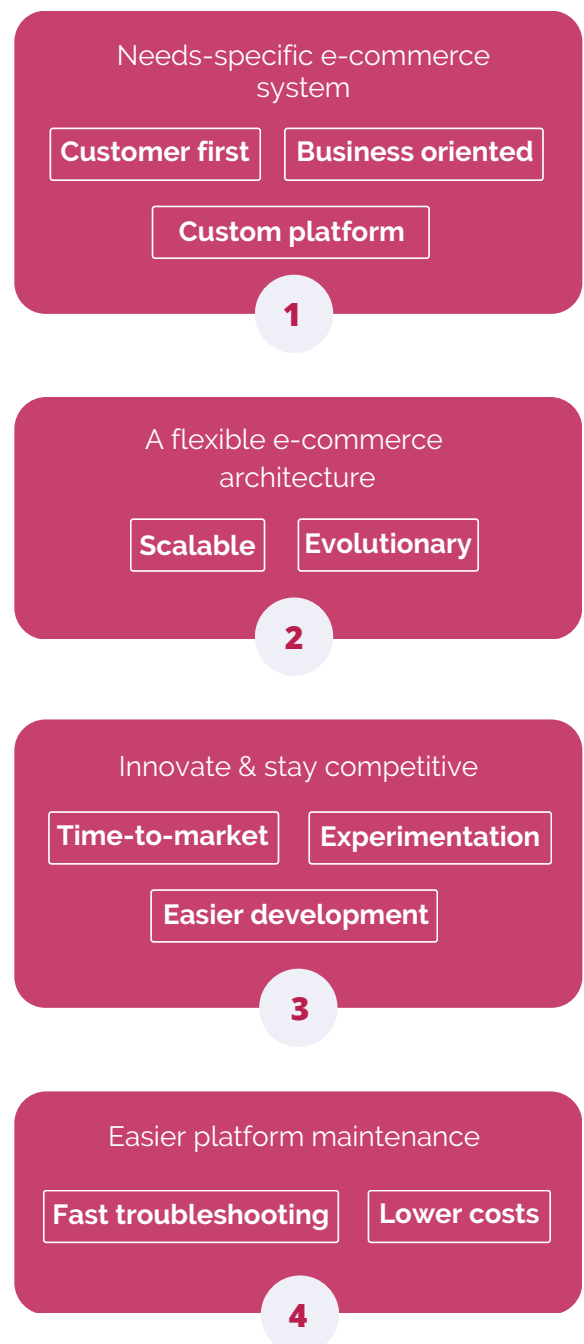
Some of the main benefits:

- an e-commerce can tailor its system to specific needs and preferences, rather than having to use a pre-packaged system that may not provide everything needed.
- Businesses can easily add or remove components and evolve their architecture without disrupting the system.
- New features can be added and experiments with different technologies can be carried out easily making it simpler for businesses to innovate & respond

quickly to changing market conditions.

- It can be easier to troubleshoot and fix problems when they arise and it can be easier and more cost-effective to upgrade to new technologies as they become available.

### MAIN BENEFITS OF A COMPOSABLE ARCHITECTURE



## CAN A COMPOSABLE ARCHITECTURE IMPROVE WEB PERFORMANCE?

Yes, a composable commerce architecture can potentially improve web performance! The modularity of the system makes it easy to add or remove, or even switch out, components, without disrupting the overall functionality of the system. This means that businesses can optimize their e-commerce to improve performance and user experience, without having to make sweeping changes that could negatively impact performance.

Not to mention, because composable commerce systems are built using micro-services, each component can be chosen, or optimized, individually for performance. For example, implementing a PWA front-end can dramatically improve page load times, which in turn will drive conversions rates.

## WHAT ARE THE BENEFITS OF COMPOSABLE COMMERCE FOR THE DEVELOPMENT TEAM?

There are several benefits of composable commerce for the development team, including:

- Increased flexibility and modularity. The development team can build, update, and maintain the e-commerce



- system more easily by adding, removing or modifying components individually.
- Easier integration with other systems and technologies such as CRM systems, payment gateways, and shipping and fulfillment systems. This can make it easier to ensure that all the different components are working together seamlessly.
- Improved performance and scalability. The development team can optimize the performance of individual components to ensure the system as a whole is running efficiently and effectively. Additionally, the system can be scaled up or down as needed to support changing business needs and customer demand.
- Faster time to market. New features or technologies can quickly and easily be added, without an entire overhaul.



These benefits can make it easier and more efficient for the team to build, update, and maintain the e-commerce system, and can help the business stay competitive and responsive to changing market conditions.

## WHAT ARE THE BENEFITS OF COMPOSABLE COMMERCE FOR THE MARKETING TEAM?

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There are also several benefits of composable commerce for the marketing team, including:

- Increased flexibility and control.
- Easier integration with new marketing channels & technologies
- Better data flow
- Build personalized experiences
- Faster time to market.

The marketing team can easily add or remove content or new marketing channels and technologies without developer intervention giving the team greater control over campaigns, workflows & ultimately creating a more seamless and personalized customer experience across different channels and touchpoints.

## WHAT ARE THE BENEFITS OF COMPOSABLE COMMERCE FOR THE CUSTOMER?

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As your composable e-commerce platform will be largely based around your customers' needs, the benefits will vary according to the different components that you've chosen. But they could include:

- Improved user experience
- Faster & smoother navigation
- Frictionless payment
- Personalized journey
- Easy product returns
- An omnichannel experience

**Composable commerce improves user experience for:**

customers

developers

business teams

## WHAT ARE THE DOWNSIDES OF COMPOSABLE COMMERCE?

While composable commerce has many benefits, it also has some potential downsides that businesses should be aware of:

**Complexity & learning curve:** Because composable commerce involves using a collection of microservices, APIs, and other technologies, it can be a challenging architecture to understand and implement, particularly for retailers without experience in e-commerce, to get started.

**Compatibility & integration challenges:** Composable commerce relies on the ability to easily combine and integrate different components and technologies. However, not all components and technologies are compatible with each other, and some may require significant customization or integration work to be used together. This can add complexity and it can also introduce potential vulnerabilities.

**Performance and scalability concerns:** Systems built using many different components can be challenging to ensure efficient running. Additionally, because the system can be scaled up or down, there may be concerns about performance under different workloads or customer demand scenarios.



**"Adopting composable commerce is important now because it pushes organizations to be resilient & ready to overcome any business disruption."** - Chris Germann, Spryker

## WHAT TECHNOLOGIES ARE COMPOSABLE ARCHITECTURES BASED ON?

Composable commerce can be implemented using a variety of different technologies and platforms. Some merchants use a traditional e-commerce platform that offers composable features and functionality, while others build a custom platform using a mix of different technologies.

The modularity allows individual components to be designed, implemented, and used independently of one another. Some of the key technologies used include object-oriented programming, micro-services, and service-oriented architectures.



## Is composable commerce cloud native?

While composable architecture is not necessarily tied to a cloud service, it can certainly be used in conjunction with cloud computing technologies to create a scalable, flexible, and resilient system.

Cloud-Native  
is about  
speed, agility  
and  
scalability.

## Does composable commerce employ APIs?

APIs (application programming interfaces) are often used in conjunction with composable architecture. APIs allow different components or modules within a system to communicate and interact with one another, and this is essential for

achieving the modularity and encapsulation that are key characteristics of composable architecture.

An API is a  
method of  
communication  
among  
applications  
within an  
eCommerce  
platform.

For example, an API can define the interfaces or contracts that a module must implement in order to be composed with other modules within the system, and it can provide a standard way for modules to access the data or services provided by other modules. This allows modules to be developed and used independently, and then composed together to create a larger, more

complex system without requiring tight coupling or dependencies between the modules.

## WILL COMPOSABLE COMMERCE IMPACT CONVERSION RATES?

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Composable architecture can provide several benefits that could potentially lead to increased conversions, such as greater flexibility and adaptability to changing customer needs, faster deployment & iteration of new features, and better system performance and reliability.

However, the relationship between composable architecture and online conversion rates is not straightforward, and it would ultimately depend on how you implement and use the architecture, as well as other factors such as the quality and relevance of your products or services, the effectiveness of your marketing and sales strategies, and the overall user experience of your website or application.

## WHAT DOES MACH HAVE TO DO WITH COMPOSABLE COMMERCE?

MACH is a term that is often used in relation to composable commerce as both concepts share many of the same principles and goals. MACH stands for "microservices, APIs, cloud, and headless," and it refers to a different type of e-commerce architecture that combines these four technologies and principles.

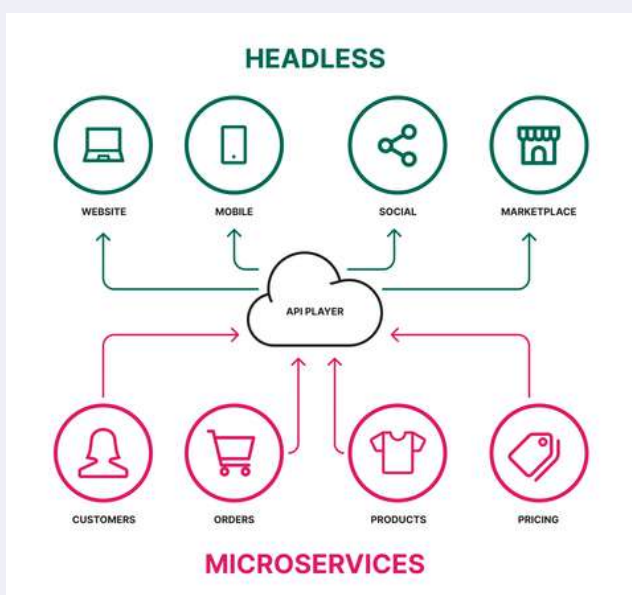
### **A composable commerce can be built with a MACH approach.**

In a MACH architecture, an application is built as a collection of small, independent services that can be easily combined and rearranged to create different functionality.

APIs are used to enable communication and integration between the different microservices, as well as between the e-commerce system and other systems and technologies.

The cloud is used to host and manage the e-commerce system, providing scalability, reliability, and security. Cloud-native setups are not required for composable commerce.

And headless architecture is used to separate the front-end of the website from the back-end e-commerce functionality, allowing businesses to use any front-end technology they want to interact with the e-commerce system. As we previously saw, a headless architecture is not a pre-requisite for composable commerce.



## MACH ARCHITECTURE AT A GLANCE

Source: SQLI



## IS COMPOSABLE COMMERCE A GOOD IDEA FOR B2B?

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Composable architecture can be a good idea for B2B merchants, as it can provide many of the same benefits for B2B commerce as it does for other types of commerce.

B2B merchants often have complex and evolving requirements, such as the need to support multiple customer accounts, pricing tiers, and product catalogs, as well as integration with other business systems such as accounting, inventory management, and CRM.

A composable architecture can help to manage this complexity by allowing the B2B commerce system to be built from independent components that can be composed together to create a customized solution for each B2B customer. This can provide greater flexibility, scalability, and adaptability to changing business needs, as well as easier maintenance and evolution of the system over time.

## IS COMPOSABLE COMMERCE A GOOD IDEA FOR MARKETPLACES?

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A marketplace is a type of e-commerce platform that allows multiple sellers to offer their products or services to a shared customer base. A marketplace's large and diverse range of products and sellers, as well as various pricing, fulfillment, and payment models also create complex, and even dynamic, requirements.

**Composable architectures  
can benefit all types  
of e-commerce:**

**B2C**

**B2B**

**C2C**

**C2B**

**D2C**

A composable architecture can facilitate collaboration and innovation among the different stakeholders in the marketplace, such as the sellers, buyers, and platform operators, allowing them to contribute to the development and evolution of the marketplace in a modular and decoupled manner.



## CAN A COMPOSABLE ARCHITECTURE BE USEFUL FOR MY MOBILE COMMERCE STRATEGY?

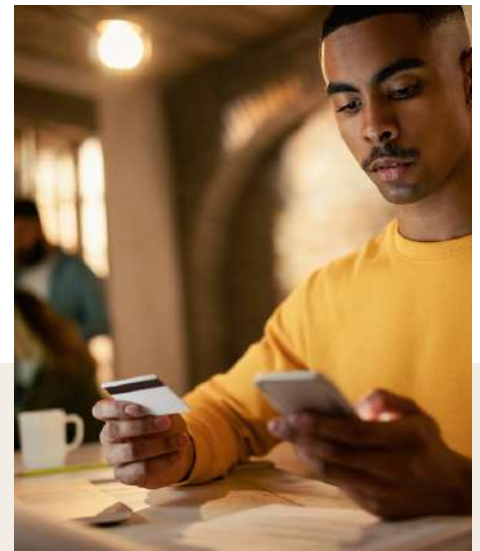
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In recent years, mobile commerce has grown rapidly, and it is now an important channel for many businesses. A composable architecture can help to support a successful mobile commerce strategy in several ways.

Firstly, it can provide flexibility and adaptability to changing customer needs and preferences, allowing you to quickly and easily add or modify features and functions to support different mobile devices and platforms.

Secondly, it can enable scalability and performance, allowing your mobile commerce system to handle a large number of users and transactions without sacrificing speed or reliability.

Thirdly, it can facilitate collaboration and innovation, allowing different teams and stakeholders to work together and contribute to the development of the m-commerce system in a modular and decoupled manner.



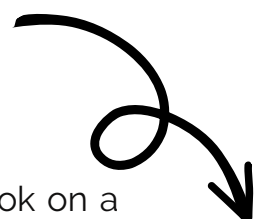
**Is M-Commerce on  
your list of priorities?**

**Get White Paper →**

## CAN YOU GIVE ME AN EXAMPLE OF A RETAILER USING COMPOSABLE COMMERCE?

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Yes! Scroll to the next page to see how two different brands took on a composable architecture for their e-commerce business.



## CASE STUDY #1

**Harry Rosen collaborated with digital agency Orium to move to a composable, best-of-breed, architecture.** They launched their replatform in just 5 months using Ampliance for their CMS & commercetools as an e-commerce solution. They kept their existing PIM and ERP systems, adapting them to improve efficiency.

The flexibility of the composable architecture put in place allows Harry Rosen to easily & quickly test new integrations, ultimately enabling them to experiment new ways of keeping their customers engaged, via AI and search, for example.



**x2.5**

increase in  
digital sales, YOY

**150%**

increase in  
conversion rate

**x3**

increase in black  
friday sales, YOY

### THE RESULTS

Full case study [here](#).

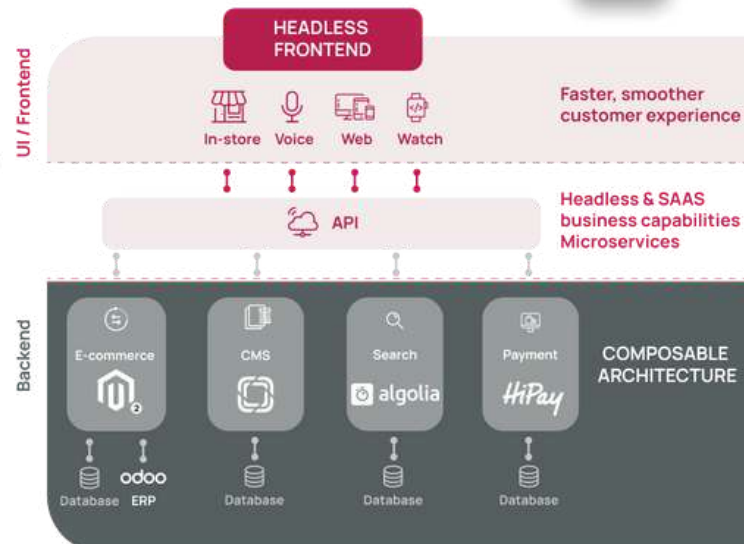
## CASE STUDY #2

### Bonne Gueule leverage the benefits of composable commerce

Bonne Gueule switched to a composable architecture in 2022. The challenge: merging a e-commerce activity with & a fashion media site into a unique omni-channel experience.

With digital agency, Antadis, they took the existing Magento 2 system composable with the addition of a Prismic CMS and headless front-end solution, Front-Commerce. Not forgetting, Algolia as a search solution: the glue between the media and store products.

More use cases →





## TO CONCLUDE, WOULD YOU RECOMMEND A COMPOSABLE ARCHITECTURE TO AN E-COMMERCE?

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“You need to get to the future, ahead of your customers, and be ready to greet them when they arrive.” — Marc Benioff

E-commerce is a fast-paced and rapidly evolving industry, and it is important for businesses to have systems that can adapt and scale to changing customer needs and preferences. A composable architecture can provide many benefits for e-commerce, such as greater flexibility and adaptability, faster

deployment and iteration of new features, and better performance and reliability. Additionally, a composable architecture can facilitate collaboration and innovation among different teams and stakeholders, allowing them to work together and contribute to the development and evolution of the business.

Overall, a composable architecture can help an e-commerce remain competitive and successful in an increasingly crowded and dynamic market. It may take some time and effort to research and assemble the right system for your needs, but the benefits of a modular and flexible e-commerce solution can make it worth the effort!

**Put your customer at the forefront of your business. Empower your teams to deliver an authentic brand experience in a digital context with the tools they need.**





## THE BIT WHERE WE TOOT OUR OWN HORN

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Front-Commerce is the only digital storefront that improves the customer, merchant & developer experience, at the same time.

An ultra-fast front-end based on PWA & MACH standards, we help brands evolve their current e-commerce platform to a headless commerce approach by integrating the back-end of their choice with Front-Commerce's best of breed technical stack based on React, NodeJS & GraphQL.

Front-Commerce does the decoupling of the frontend and backend for its clients to provide a state of the art front-end experience and a headless commerce architecture. Our solution is compatible with most backends, allowing us to integrate easily into your systems. You can stay in touch with your customers and we keep all technical considerations up to date.

[Get the fact sheet](#)

**Contact Front-Commerce**

[contact@front-commerce.com](mailto:contact@front-commerce.com)

 [click here!](#)

## Some of the brands powered by Front-Commerce

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JEROME DREYFUSS

DEVIALET

collégien  
Depuis 1947

KAPORAL

 **autobernard.com**

**luli**  
— SUR LA TOILE —

**Terräng**  
EQUIPEMENT POUR AVENTURE

BONNE GUEULE

**CENTRAKOR**

 **LILINAPPY**  
LA TOISU RESPONSABLE

 **ROBERTET**  
ARRETS

 **CHAÎNE THERMALE DU SOLEIL**

 **PetDistrib**

