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INTRODUCTION: THE STATE OF ECOMMERCE

Online commerce as we know it has evolved. What was already a growing slice of the retail market rapidly became the biggest piece of the pie as in-person activity stopped and brick-and-mortar establishments were forced to shut down for an undetermined amount of time at the onset of the pandemic. Online activity increased, consumption patterns shifted and cashless transactions became the norm. While some businesses became a victim of these new circumstances, many adapted their business models and were able to persevere.

All signs point to the eCommerce acceleration lasting well into the future.

- eMarketer projects that US eCommerce will continue to grow by double digits and eCommerce penetration will more than double from 11% in 2019 to 23.6% in 2025.
- A recent report from **Deloitte** on the post-pandemic behavior of consumers found that 48% expected to use online delivery services more frequently, with 47% responding similarly regarding online pickup services.
- A Consumers Unmasked study by EPAM shows that ordering food via delivery apps continues to be the preferred option for 37% of US consumers. It also found that, despite the increasing confidence in returning to shop in person, 60% of participants said their online shopping had increased.

540 of consumers believe new behaviors will continue post-pandemic

Yet, companies that were locked into a legacy eCommerce solution found themselves hard-pressed to keep up with the new demands of customers and changing expectations of online shopping. These monolithic platforms made it nearly impossible for marketers and retailers to pivot their eCommerce strategies on the fly.

So how can a business, whether B2C or B2B, keep up with the changing behaviors of its customers?

Moving from a legacy, all-in-one eCommerce platform to a composable commerce architecture will give enterprises the agility to keep pace with customer demands. In this new approach, companies can leverage various best-of-breed vendors – from CMS and PIM to order management, payments and fulfillment – to build the optimal eCommerce solution. Because each best-of-breed tool provides robust functionality and flexibility for the one thing it does, companies can shift away from relying on an all-in-one vendor that produces standard, or subpar, functionality for everything.

This eBook examines why traditional eCommerce approaches are no longer enough, the benefits of moving to a composable architecture and how shifting to a composable commerce strategy can help businesses stay competitive in today's climate.

TRADITIONAL ECOMMERCE PLATFORMS ARE LIMITING

Many business leaders were caught off-guard during the initial months of the pandemic; their legacy eCommerce platforms were not optimized for the rapid shift to cloud infrastructure and online selling that took place. These all-inone solutions were developed in the 1990s for buyers and sellers using desktop computers and can't meet the needs of today's businesses or consumers. Designed as a single, integrated application – often referred to as a monolith – these platforms are inherently complex and rigid, with the following limitations:

Difficult to segment, personalize and expand: It is challenging to personalize and deliver content to the right audience at the right time as effective global or localized experiences. Furthermore, disparate digital experiences and content are

often siloed across different brands, ultimately becoming either redundant or irrelevant.

Lack of technology integration: Every time an organization adds a new technology on top of its monolithic eCommerce platform, they risk creating a far bigger problem than the individual solutions were trying to solve. The different technologies often don't speak to one another and require extra resources to manage.

Expensive and inefficient: Creating content and experiences on monolithic platforms is costly and takes a lot of resources. And once the content has been created, it often takes a long time to get it to market. This is a very inefficient process – companies need to be able to respond, act and evolve quickly to maintain a competitive edge.

Lack of visibility: Legacy tools do not provide the needed visibility when it comes to customer data, ROI and engagement metrics. Without access to this data and reporting, brands cannot measure the effectiveness of their efforts or modify for better results.

Stifled innovation: With an all-in-one platform that is managed by IT, marketers are required to submit tickets for every change. This process slows down innovation and can limit experimentation. It's nearly impossible to make changes on the fly in response to consumer demands.

The pandemic was a catalyst for businesses to reevaluate their eCommerce strategies and technologies. Companies learned that to thrive in today's world, they need technologies in place that allow them to adapt quickly. The environment has shifted from patchwork upgrades that were instituted during the pandemic out of sheer necessity to more thoughtful and strategic eCommerce tooling that can evolve over the long term.

Today's multichannel user experience and constantly changing buyer behaviors demand a more flexible approach: one that puts the marketing team in charge of the brand and customer experience while enabling the IT team to rapidly meet the demands of the business.

Issues With Traditional eCommerce Solutions:

- Lackluster segmentation capabilities
- Poor personalization and localization
- Integration headaches
- Costly to implement and drains resources
- Lack of visibility into data
- Inhibits innovation

Companies need an eCommerce solution that can be deployed quickly — one that integrates easily with other technology, updates and customizes customer experiences on demand and gathers insights along the way. A modern, flexible, composable commerce approach is the key to business agility.



THE KEY TO BUSINESS AGILITY IS COMPOSABLE

For companies to iterate at the speed their business requires and support new or unique commerce initiatives (think curbside pickups or contactless delivery), they need to step away from the monolithic model and shift to a composable architecture.

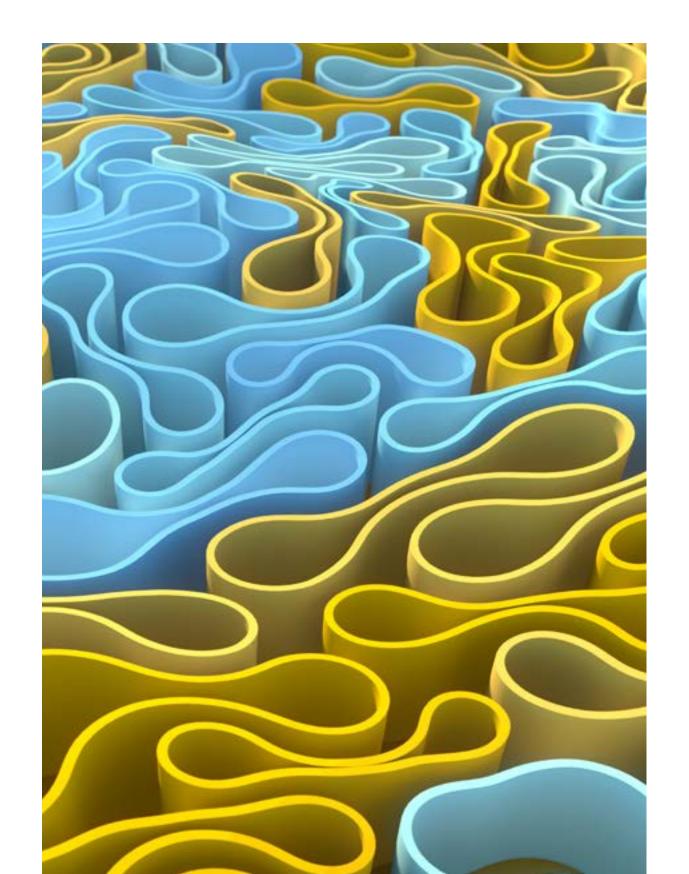
Marketers and merchants want the ability to quickly iterate and optimize the shopping experience. Some even want to experiment daily, with the goal of delivering the best shopping experience possible. Being able to pick and choose the best technology components for a specific industry or profile of shopper can make the experience more personal and relevant. This is the essence of a composable commerce architecture.

The composable movement isn't new. Drupal creator and Acquia founder and CTO Dries Buytaert wrote about "**the assembled web,**" the concept underlying composability, in 2013. Over the subsequent decade, composability has matured significantly to become a best-of-breed approach to site-building.

In a composable model, packaged business capabilities (PBCs) serve as the fundamental application building blocks for the entire enterprise and extend from the application layer all the way through to the experience layer. Brands can leverage composable content, composable data, composable design and composable journeys to fuel engagement.



With a composable approach, users can pick and choose the best solutions from different vendors and snap them together like LEGO bricks."



Before the composable movement, marketers were locked in using the whole commerce suite from top to bottom. For example, if a company wanted to reach its customers online, it used the content management system (CMS) that came with the commerce platform. But there's a big problem with this approach: Not one vendor has the best of everything.

Modern companies are breaking free of the rigidity of a single platform and moving to a composable architecture. The flexibility of this approach allows them to build an ecosystem of different solutions found in traditional eCommerce platforms – like a DXP, PIM, CMS, order management, payment and fulfillment – that specifically meet their objectives, adding or replacing capabilities as needs change.

By choosing from best-of-breed tools (i.e. **Acquia as the DXP** and commercetools for the API to power eCommerce sales) to build a custom eCommerce tech stack uniquely suited for their needs, marketers can reclaim power over their eCommerce strategies and better connect with customers.

The goal is to deliver the best possible shopping experience. Being able to pick and choose the best technology components for a specific industry or profile of shoppers can make their experience more personal and relevant.

71% 44%

COMPOSABLE COMMERCE MOVEMENT

Demand for composable commerce solutions is growing rapidly. A recent survey commissioned by Acquia found that eCommerce platform selection has gained significant traction in the past 12-24 months.

Seventy-one percent (71%) of respondents state that eCommerce solutions are a top strategic priority and 44% view their eCommerce strategy as an integral component of their long-term growth strategies.

The survey also revealed that the biggest pain points users face when it comes to their current eCommerce solutions are the inability to modernize quickly enough for today's environment, budget constraints that force organizations to select suboptimal all-in-one systems and inflexibility of current solutions. As a result, 43% are either moving in the direction of adopting a flexible, composable approach or have already.

THE RAPID EVOLUTION TO D2C ECOMMERCE

The unrelenting pressure eCommerce giants like Amazon and Walmart are putting on the rest of the retail industry is forcing all brands to experiment and innovate to provide compelling digital experiences for customers. And, with the acceleration of eCommerce ignited by COVID-19,

the urgency for brands to embrace new channel mixes and marketing methods has only grown stronger.

Here's a look at some of the most rapidly growing eCommerce trends that brands are pursuing:



Augmented and Virtual Reality (AR/VR): Providing consumers a better visualization

of what a purchased product will look like in the customer's environment.



Artificial Intelligence (AI): Supporting personalized marketing and advertising to individual consumers based on their observed shopping habits.



In-App Purchases: Adding touchpoints for customers to make purchases without leaving the digital experience in which they are engaged.



Buy Online/Pick Up In-Store: Offering the convenience of same-day purchase and acquisition while reducing consumer exposure.



Direct to Consumer (D2C): Allowing brands to build relationships directly with customers without relying on third-party retailers to distribute their products.



Over-the-Top (OTT) TV: Providing consumers with the opportunity to purchase goods from within content streaming services.

The pandemic has been a clear driver in the increased interest in composable commerce solutions. Organizations want to avoid being locked into single, outdated systems. Though adoption of modern eCommerce solutions is

still young, there is a clear shift in preferences that favor best-of-breed or composable commerce stacks over all-in-one suites – 70% of respondents view composable, best-of-breed toolsets favorably (up from 45% only two years ago).

A unique partnership between Acquia, commercetools and EPAM is making composable commerce integration a reality for VitalAire, a leading home healthcare company specializing in diabetes management. The company was able to launch a patient portal in just five weeks. Now its 1.4 million global customers and patients can remotely manage their treatments with ease, and purchase devices and accessories from the convenience of their homes.

Consider selecting the right eCommerce platform a top strategic priority

44%

Identify eCommerce as an integral part of long-term growth

43%

Intend to adopt composable commerce solutions soon

MODERN ECOMMERCE TECH STACK

Moving to a composable commerce architecture is about bringing together best-of-breed solutions that are designed to address specific aspects of commerce functionality and putting these pieces together into the right custom solution for a company's needs. The flexibility of this approach means that instead of being forced to rely on a single platform to provide everything they need, businesses can augment their existing architectures with tools that specifically meet their requirements.

The results from a recent **survey** confirm that there is strong demand for composable commerce

solutions. While over 90% had not yet migrated to third-generation systems, which are defined as composable ecosystems that allow for best-of-breed feature swapping over time, 70% either slightly or strongly favor a move to a best-of-breed/composable approach.

The biggest hurdle? Forty-five percent (45%) see integration as the biggest challenge of moving to a composable solution. Business leaders are cognizant of the long-term payoffs from composable solutions, but they lack the resources to undertake these transformations in a timely way.

The #1 inhibitor of greater composable adoption is the availability of integration resources.

Starting down the composable path can often feel overwhelming and a bit risky. By picking one business capability and integrating it into your experience layer, you can formulate a plan to migrate off legacy platforms in a thoughtful manner."

BRIAN GILMORE, DIRECTOR OF DIGITAL ENGAGEMENT, EPAM SYSTEMS, INC.

Limitations on personnel resources and expertise can be common obstacles to adopting any new technology, including composable architecture or, more specifically, composable commerce solutions.

Enlisting the help and guidance of an experienced system integrator (SI) can help overcome these challenges. A seasoned SI can help navigate the waters of composable solutions, get buy-in from key stakeholders, ensure governance, and deploy strategies and tactics around staff training and enablement. The Acquia Partner Ecosystem can be a great place to identify the right SI partner and eCommerce vendor.

While composable commerce requires a modest increase in resources, the gains in productivity and business outcomes more than offset the needs of maintaining best-of-breed systems.

Composable tooling frees up organizations to select the most competent solutions on the market. Improved functionality and reliability are the main reasons why organizations increasingly favor composable solution sets, followed by cost savings, time to market and more leverage across vendors.

Composable Commerce Perks

- Better functionality and reliability
- Reduced costs and increased revenue opportunities
- Improved operational efficiency
- Rapid response to customer demands
- Faster time to market
- Vendor lock-in elimination
- Better integration
- More relevant digital interactions

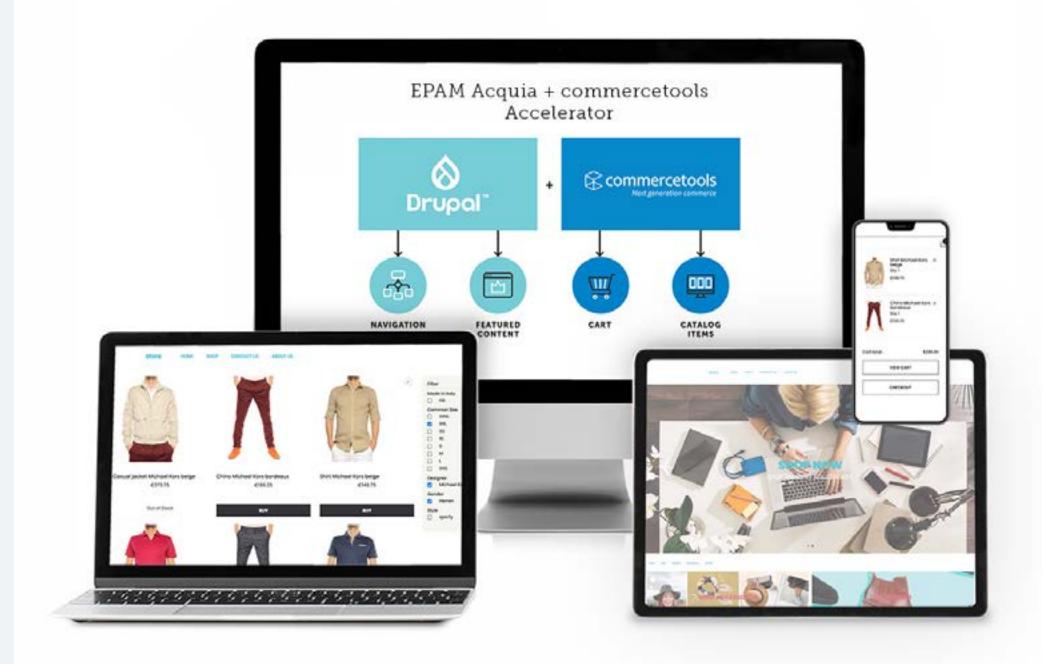
Composable digital commerce architecture has more moving parts than the traditional monolithic, single platform. As such, companies generally take one of three approaches when planning and executing the move to composable commerce:

- DIY with a dedicated team of software architects and developers
- DIY with support provided by an implementation partner for specific elements of the project
- Partnering with an SI where an implementation partner is commissioned to fully support the project and provide full-service capability and support

Many companies find that partnering with a full-service digital transformation and product engineering provider (such as EPAM) to identify, build and implement a composable commerce solution allows them to deploy faster and create digital commerce experiences across all brands more efficiently than doing it in-house.

So, what does a composable commerce stack actually look like? The image to the right shows what a company might choose to implement based on its needs.

To learn more about the accelerator, <u>click here.</u>



COMPOSABLE COMMERCE IN ACTION

OVERVIEW

A unique partnership among Acquia, commercetools and EPAM is making composable commerce integration a reality for VitalAire, a leading home healthcare company specializing in diabetes management, sleep apnea and COPD oxygen services, with over \$3.5 billion in revenue and 1.4 million global customers and patients.

THE CHALLENGE

The ability for patients to manage their healthcare remotely became increasingly important during the pandemic. Yet, VitalAire did not have an existing digital touchpoint for patients and customers, and lacked an eCommerce solution. Patients were placing orders through call centers and other offline processes, which were negatively impacting customer satisfaction and, ultimately, sales.

To attract new customers, improve the patient journey and ensure a user-friendly experience, VitalAire needed to create a digital platform with superior features and functionality that would enable customers to order refills and supplies online. Given the pandemic and an upcoming release of an innovative new insulin pump product, VitalAire wanted to move quickly to bring this new patient portal to market before its competition did the same. To meet the deadline, the portal needed to be up and running in just five short weeks.

THE OPPORTUNITY

VitalAire recognized an opportunity to improve the patient experience through the digitization of medical supply refills, allowing diabetes patients to remotely manage their treatments and easily reorder supplies without leaving their homes a critical need in the pandemic environment. To accomplish this goal, VitalAire turned to EPAM, a leader in digital transformation services and product engineering, to develop a custom-built commerce-enabled patient portal that would support its patients in need of lifelong care to manage their diabetes.

EPAM worked quickly with VitalAire to identify and implement the best technologies for the initiative. The portal was built using the EPAM Acquia + commercetools Accelerator. commercetools was selected for its flexible commerce functionality, ease of integration with Drupal, powerful API, strong data security and excellent performance due to its microservice architecture. For the front-end hosting, Acquia's Cloud Platform was selected for its seamless integration with Drupal, content management features, PIM and its open digital experience platform (DXP).

THE RESULT

With a tight deadline, the Acquia Platform alleviated many infrastructure-related time constraints from the equation, allowing EPAM's team to focus on the design and development of the application itself – a streamlined, private, online program that supports a patient's need for lifelong care.

With both phases of the project complete, patients can now remotely manage their treatments with ease and purchase devices and accessories online – not only for diabetes, but across all VitalAire therapeutic areas.

The new award-winning VitalAire patient portal, with its prescriptionbased ordering tool, was completed and launched on time and within budget in May 2020. Patients can now remotely manage their diabetes treatments and easily reorder supplies from home. Following the rapid implementation of the patient portal, the second phase of the project extended the eShop and its commerce capabilities to incorporate other therapy areas and included a full visual redesign of the existing web portal, further improving the end-toend user experience.

A Better Patient Experience with Composable Commerce:

- Redesigned website
- Access to product information
- Multiple payment options
- Search capabilities
- Enhanced user profiles
- Appointment requests
- Order status and reordering capabilities



Being able to give our healthcare customers easy access to their daily necessities is key to providing a successful and life-sustaining therapy to the patient. Together with EPAM, Acquia and commercetools, we have composed a great custom solution in an impressively short time."

Hannes Frank, Head of Marketing and Product Management, VitalAire, GmbH

THE POWER OF COMPOSABLE COMMERCE

Contact us today for your custom demo of the EPAM Acquia + commercetools Accelerator at WFBAcquia@epam.com.

Want to learn more about the future of eCommerce?

Acquia Survey Report: Composable Commerce: Trends, Challenges & Opportunities commercetools White Paper: Modern Commerce Playbook for Business

EPAM eBook: Critical Insights B2B Businesses Can Leverage from B2C Success



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