

A woman with voluminous dark curly hair, wearing a black blazer over a white t-shirt and blue jeans with a black belt, is smiling and holding a white tablet. The background is a blurred indoor setting with warm lighting. The image is framed by yellow and blue geometric patterns in the corners.

aptos®

Commerce, Unified.

A retailer's guide to delivering agile, flexible and profitable experiences with Unified Commerce

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Rise to ever-evolving challenges

Retail is in the midst of rapid change. A global pandemic, combined with shifting consumer preferences, has dramatically altered what customers expect from the retail experience.

Chief among these new expectations is flexibility. Shoppers want retailers to offer experiences that meet their expectations in the moment, whether that's exchanging an online purchase in the store, picking up an eCommerce order at the curb or checking out on a mobile device while at an event. The pressure to deliver on diverse demands rests squarely on retailers. In fact, **90% of consumers** say they want retailers to offer agile shopping experiences and they don't care how they accomplish it.

Rising to the challenge means delivering a unified brand experience throughout the shopping journey while keeping previously siloed backend processes and technologies organized, integrated and operating seamlessly. Many retailers have recently

upgraded their eCommerce and digital processes, particularly during the pandemic. Yet most are still searching for ways to create connected and adaptable in-store experiences.

To meet the rapidly changing needs of shoppers, retailers are beginning to invest in Unified Commerce technology.

With this eBook, you'll learn how these platforms overcome the many backend issues that limit agility and lead to better, more flexible experiences for consumers and much improved results for retail operations.



Unified Commerce Defined

“Unified Commerce” is typically used to describe the processes and technologies required to deliver seamless customer journeys across channels, touchpoints and locations. Many solution providers define Unified Commerce solely as the process of connecting all digital commerce channels — or even connecting digital channels and order management. But most of these vendors tend to offer digital-first solutions that either treat the in-store experience as a lower priority, or they ignore the store altogether.

At Aptos, we believe that truly Unified Commerce actually **prioritizes** the store. That’s important because **recent research** found that 40% of global post-pandemic consumers make a purchase at a physical retail store at least once a week (and only 27% purchase online once per week). Unified Commerce should unify every aspect of customer experiences both inside and outside the store, and should include sales, customer relationship management, inventory management, fulfillment and returns.



Disparate backend systems that govern POS, inventory management, CRM, eCommerce, mobile channels, fulfillment, cross-channel returns and social commerce are often disconnected and siloed. Unified Commerce platforms should bring the various pieces of the customer experience puzzle together to create seamless end-to-end experiences that are tailored to the unique needs of your customers within each journey.

Enabling Unified Commerce

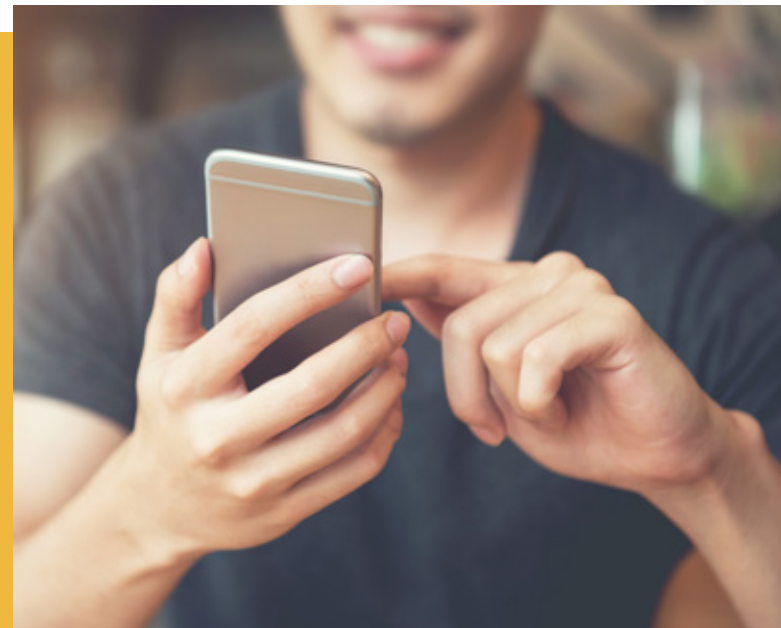
Two major models have emerged to enable retailers to deliver Unified Commerce experiences. The first is a series of custom integrations that connect existing solutions to allow them to work in concert. This approach achieves some of the goals of Unified Commerce, like connecting numerous complex backend solutions. However, it comes with significant drawbacks that can't be ignored.

Building custom integrations is a complex, time-consuming and resource-intensive task that may be too much for many retailers. Once a custom solution is in place, innovation is challenging. Integrating new channels and tools requires additional intricate custom work that can slow down the process, add significant cost and hamper the very flexibility and agility retailers strive to achieve. Maintaining custom integrations is also limiting, challenging and expensive in terms of dollars and resources.

The second model is the easiest, most cost-effective and most durable way to power a Unified Commerce experience: through a platform that incorporates a wide range of

microservices within a single cloud-native SaaS environment. Rather than building custom integrations to unify disparate services, retailers can easily leverage all the necessary tools and services within a single unified platform.

This approach allows retailers to respond quickly to changing customer expectations by leveraging microservices and APIs rather than individually sourcing new solutions and waiting days, weeks or even months while engineers labor over custom integrations.





Benefits of Unified Commerce

For retailers hoping to remain competitive in a time of shifting retail trends, Unified Commerce carries a wide range of benefits.

Relevant and agile experiences

Customer expectations and demands are notoriously fickle. What's important today may be irrelevant tomorrow. Curbside pickup was barely mentioned outside of big box and grocery stores at the end of 2019. By the end of 2020, it was a critical option for shoppers in virtually every category. Now, the ongoing importance of curbside is less certain as more and more shoppers resume in-store shopping. Regardless of the reasons—be they pandemic-related or simple preference shifting—it's imperative to be able to effectively align and adapt your experiences to consumers' expectations, and to do so quickly.

Customer loyalty

Creating customer experiences that stay closely aligned with consumer expectations is a great way to ensure shoppers return again and again. Meeting—or anticipating—their expectations engenders feelings of confidence, trust and satisfaction. And those feelings lead to loyalty. [A recent study found](#) that 43% of repeat customers spend more money over time with businesses to which they feel loyal. Satisfied customers today yield larger carts tomorrow.

Operational efficiency

A Unified Commerce platform ensures that everyone across channels and stores has an identical view of the business and customer. As a result, decisions are made more effectively and efficiently across the entire enterprise. Meanwhile, and most importantly, customers get a consistent experience regardless of where, when and how they choose to interact with your store.

Rapid innovation

With a platform that helps deliver fully unified customer-facing experiences, retailers gain the ability to test new innovations and then run experiments at scale. They can quickly learn which new innovations satisfy shopper expectations and drive the most revenue (and which don't achieve the desired results) and use that data to determine enterprise rollout strategies.

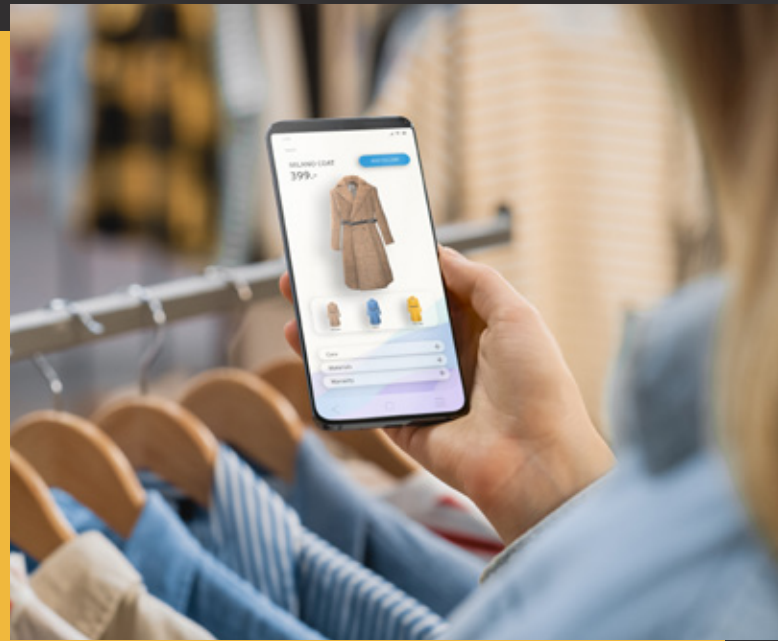


How Unified Commerce appeals to shoppers

Support for in-demand services

As has been highly discussed, the pandemic accelerated changes that were already underway across most retail markets. eCommerce was on the rise when lockdowns drove even the most committed store shoppers online.

Shoppers in ever larger numbers are now embracing hybrid shopping journeys that combine online and offline sales. A [recent study by Criteo](#) found that 60% of shoppers surveyed in the US, Australia, France, Germany, Japan, South Korea and the UK use buy online, pick up in-store (BOPIS) or curbside pickup options, while 77% research purchases online before making purchases offline (in the store). For retailers looking to maintain in-person connections with customers who may have shifted more purchases to eCommerce storefronts during the pandemic, these are critical services. While typically about 9% of in-store purchases are returned or exchanged, [online purchase return rates can be as high as 30%](#). Facilitating returns in-store is critical to retaining customer loyalty in the long term—and maximizing every opportunity for new purchases while in the store.



Flexibility

Customer shopping habits have been transformed, both by the pandemic and the ongoing integration of eCommerce into everyday life. However, this change isn't monodirectional. Instead, the retail experience has become fragmented. Some consumers want to shop exclusively online. Others still prefer seeing, touching and trying on products in a traditional retail experience. Many will choose their preference depending on the time of day, the density of their schedule or the type of item they are buying. To satisfy everyone, retailers need to offer flexible options that adapt to the needs and preferences of each journey.

Personalization

Customers appreciate and typically reward a personal touch, whether shopping in-store or online. Many companies have worked hard to recreate the personalized experience of the early days of in-store retail, replacing the knowledgeable associate who remembers your taste and preferences with CRM tools that know your last purchase. As customers return to in-store shopping, it's important that associates replicate that attention to detail while also creating a human connection with the shopper, something that's been very missed during the pandemic. A Unified Commerce platform ensures that every associate can access a customer's purchase history—supplemented by recommendations and offers—from their mobile device for a fully personalized in-store experience.



Commerce anywhere

With online services broadening, ubiquitous mobile devices and 5G on the rise, digital is everywhere. Digital tools and experiences are embedded into everything we do—meaning that commerce, and the opportunity to engage in retail experiences, are everywhere. Retailers need to be just as agile in the physical world as they are in the digital space. Unified Commerce allows physical retail to expand beyond the store and meet consumers where they gather. That could mean creating pop-up stores, setting up event-driven commerce opportunities, creating one-off activations or cultivating ongoing retail partnerships.

All of this is only possible if critical retail processes like inventory management, sales and CRM are unified, connected and easily adaptable to paradigm shifts. Once again, flexibility is the key to mastering the current retail market and meeting customers where they are without sacrificing accuracy, personalization, customer service or the ability to collect more customer data.

What Unified Commerce means to my operations

Empower associates

While customers are always at the forefront of a retailer's mind, store associates will be among the first to appreciate the benefits of a Unified Commerce platform. It enables associates to do more, assist customers faster and be more efficient with less effort. The ability to access customer records to help solve tricky problems—or to check out a hurried customer from anywhere in the store—gives associates more agency to make customers happy.

Keep inventory organized everywhere

Connecting in-store POS transactions to online and in-store inventory makes it easier for your teams to manage the accuracy of inventory online and offline. Web and in-store teams have direct access to real-time information about which products are in and out of stock. That makes it easier to provide recommendations, serve customers and drive revenue that would otherwise be lost. Tighter inventory management can reduce errors, minimize fulfillment costs and get products into customers' hands faster.



What Unified Commerce means financially

While there's a direct link between customer satisfaction, operational efficiency and revenue, it's worth examining the specific ways Unified Commerce impacts a retailer's finances.



Customer retention

In an increasingly competitive retail market—where flashy new competitors emerge online with minimal overhead—customer retention is critical. Historically, customer retention has always been more cost-efficient than acquisition, but effective retention today relies heavily on experience. With more than 90% of customers saying they seek added agility and flexibility in their retail interactions, retailers who embrace Unified Commerce are better able to create unique experiences that keep customers loyal.

More productive associates

Customer data and tools, combined with context-appropriate and adaptable experiences, empower associates to more easily make decisions, fulfill requests and solve problems.

Better organization

Unifying all of your experiences, services and supporting technology means less lost data, better inventory tracking and fewer lost sales. The ability to facilitate the best possible purchase option from anywhere will also, of course, have clear benefits for your bottom line.

Reduced R&D cost

Flexibility and agility are baked into Unified Commerce platforms like [Aptos ONE](#). With a technological framework that supports agile innovation, your developers and engineers spend less time, money and effort on complex custom integrations, allowing you to launch new tools and services and start seeing revenue benefits faster, without excessive complexity and overhead costs.

Microservices: The building blocks of Unified Commerce

What are Microservices?

Microservices is a term for a software architecture comprised of individual modules of business functionality. These functions can be developed, deployed and managed independently, but they exist within the same cooperative framework, communicating via API. It's easy to add, activate and link new services to meet new customer needs without building costly custom integrations to wrap around existing software tools. A [2021 study found](#) that 45% of enterprise businesses currently employ microservices and another 26% plan to adopt them as part of their 2022 roadmap.



Why Microservices are essential to Unified Commerce

Microservices are the foundation of Unified Commerce. Because a microservices architecture reduces software complexity, platforms built on microservices offer the flexibility and adaptability that most retailers require to quickly test, adapt and scale new ideas. Microservices architecture is inherently modular, allowing operators to add and remove new tools and services with minimal effort and time.

Microservices build on the principles of Service Oriented Architecture, but updates them for a network- and cloud-enabled world. Each application within a microservices architecture owns its own data, and that information is exchanged through a set of interconnected APIs, allowing the entire platform to un-silo useful data and exchange it between services and tools. Each function operates autonomously and in concert with others, without the need for overarching orchestration to centralize and distribute data.



Done well, a microservices architecture enables:

Speed to market

Microservices architecture enables retailers to deploy new capabilities in a highly cost-effective way quickly and to continuously improve capabilities independently of major upgrades.

Flexibility

Flexibility here can be measured in terms of the retailer's ability to work with partners to innovate within the bounds of the architecture, flexibility in choosing how or where to deploy new capabilities, and flexibility in quickly changing or adapting how microservices are orchestrated to enable new processes.

Lower cost of ownership

The flexibility of microservices enables retailers to take advantage of three major areas of cost savings in technology deployments. Fewer developer hours should be required to make code changes. Integration is faster and standards-based, eliminating the cost and time of maintaining hard-coded integration points. And infrastructure costs are also significantly reduced because each microservice is independently scalable.





Greater IT - business alignment

Retailers leveraging microservices should be able to adapt their technology to business process change as it happens, eliminating the business case challenges—and time delays—that have kept them from alignment in the past. These capabilities make it easier for IT and business leaders to stay much more closely aligned, to respond much more quickly to business needs, and to work more collaboratively on innovations and enhancements.

Greater ability to innovate

Retailers often undertake experiments in customer experience or services, but because of their brittle technology infrastructure, they often position these experiments far outside the enterprise, and with little path back into operations. Microservices are designed to enable innovation, and if a small experiment is successful, it is simply a matter of moving the experiment into the live environment to deploy it at scale.

In order to take advantage of these benefits, retail executives—including business leaders and not just IT leaders—must understand how a microservices architecture forms the foundation of their ability to innovate and differentiate by using microservices to their own advantage.

How Aptos ONE helps retailers achieve Unified Commerce

Aptos recognizes the need for a Unified Commerce solution to help retailers navigate, survive and thrive in this fast-changing landscape. It led us to launch [Aptos ONE](#), our Unified Commerce platform, built upon a microservices architecture, to support your Unified Commerce strategy.

In addition to the general principles of microservices, Aptos has identified four key pillars that are central to our approach to a microservices architecture:

1.

Cloud-native microservices

It has only been since the arrival of microservices that technologists are truly able to take advantage of the benefits that the Cloud can provide. Microservices, combined with containerization (where applications run in isolated user spaces while using the same shared operating system to form a fully packaged and portable computing environment) and cloud deployments are what make it possible to manage scale tightly.

2.

Extensible

Because microservices are minimal and complete, taking advantage of microservices-based solutions should not require customization, or even a complex level of configuration.



3.

Mobile first

Recognizing that more and more users (whether employees, customers or even business partners) are interacting with mobile devices, Aptos felt it was important to design user experiences that can be delivered on small screens on a resource-constrained device that may or may not have good connectivity.

4.

Store resilience

Stores are diverse enough and far-flung enough that an always-online assumption for store-based technology is a very high-risk proposition. Our approach was to carefully account for disconnected selling operations with an overarching goal of never losing a transaction, anywhere. Several components of the retail platform services within Aptos ONE provide the local data sync and local management of transactions to ensure that every transaction is captured and ultimately communicated to the enterprise.



But most importantly, we have taken the opportunity afforded by our approach to envision and truly enable an omnichannel-native future. This vision is embodied in Aptos ONE, our platform for retail microservices.

Aptos ONE is API-driven, which means it was developed around APIs first instead of creating the solution first and creating APIs later. Integrations with third-party or external solutions can now be facilitated easily and quickly via native APIs instead of via the hard-coded methods that retailers are familiar with today.

The platform's mobile-first design allows associates and shoppers to engage via mobile devices. Easily and securely extend in-store selling capabilities to any location, whether it's parking lot checkout, curbside pickup, special events or popups. Stores can go wherever customers gather.

Our lighter, more nimble architecture ensures retailers will no longer have to make major investments in operating systems, hardware and software every three to five years. In the cloud-based SaaS environment, retailers can update their stores as the business (and the customer) requires without the disruption and high cost of traditional upgrades.

Aptos ONE delivers unified experiences that seamlessly bridge the gap between your eCommerce efforts and in-store experiences for customers and associates. With its open architecture, Aptos ONE can accommodate new tools and services to create agile experiences that easily adapt to meet the shifting demands of the customer, the market and the business.

Ready to unify your commerce experiences?

We are in a period of industry transformation. Retailers need agility, customers demand flexibility and associates crave empowerment. Unified Commerce, delivered via a cloud-native, mobile-first, omnichannel solution like Aptos ONE, answers all of these needs. Digital is everywhere, and that means retail must be everywhere as well. Easily extend your online and in-store experience to every location without sacrificing accuracy, customer personalization, service or sales. And do so profitably.

Start your Unified Commerce journey today.

[Connect with an expert](#)

Have you (and your customers) outgrown traditional POS?

Consumers want seamless service, flexible fulfillment and on-demand access to savvy associates. Do you have the technology in place to support this? Answer 8 questions to find out.

[Start assessment](#)





About Aptos

Aptos is the leader in Unified Commerce. Built with the wisdom gained from thousands of retail implementations around the globe, Aptos ONE's modern microservices-based architecture enables you to deliver dynamic and differentiating experiences in every channel and location. We took over thirty years of point of sale and omnichannel expertise and distilled it all into the essential microservices needed to deliver customer experience as a retail platform, in the store, online, and anywhere else you need to be. A technology platform as a service, tuned, and optimized for stores and beyond. With the inherent flexibility of Aptos ONE, any space can become a store and every interaction can become a transaction.

Learn more at aptos.com