



## How Cloud-Native Retailers Can Overcome Growth Challenges

It's clear that cloud computing is already revolutionizing the retail industry. Modern consumers have higher expectations than ever from today's retailers, expecting hyper-personalized marketing, a seamless user journey, and the 24/7 availability of products, support, and shipping.

According to [Research Nester](#), the retail cloud market is expected to surpass \$544 billion by the end of 2036, growing at a CAGR of 23 percent between 2024 and 2036. In 2023, the industry size of the retail cloud was roughly \$38 billion.

Although much of this growth is expected to come from established retailers with legacy systems and middleware-dependent businesses migrating to the cloud, a percentage of this growth will also come from new retailers claiming their market share using cloud-native systems.

### Born in the Cloud

Retailers who have established their businesses from the onset using cloud-native services are typically highly data-centric organizations that have utilized more loosely coupled architectures like microservices from their inception. They use applications that provide continuous data delivery and integration with headless e-commerce, allowing them to quickly create, modify, and improve their front-end user experience.

As a result of being a digitally native business, they can build extremely responsive e-commerce sites without affecting back-end functionality or user experience. For example, instead of trying to move an antiquated catalog system to a cloud-based system, they can easily implement QR code scans and other Internet of Things (IoT) interactions that are immediately integrated throughout the entire system. Because all capabilities exist within the one platform, a cloud-native retailer needs simply to enable the additional features or functionality to begin leveraging its benefits.

Most established retailers have built their businesses around the counter and catalog experiences. All or most of the IT infrastructure that supports these conventional retail experiences is based on

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mainframe and legacy systems that often incorporate customizations specific to each organization. To continue serving existing customers, all of these systems must be maintained.

At the same time, these retailers need to create new e-commerce channels to provide their goods to a broader audience in more geographic regions, to survive and thrive in the highly competitive retail market.

### Special Challenges

Although cloud-native retailers have numerous advantages over traditional retailers who may be struggling to migrate to cloud services, they face a different set of challenges.

They often need to become proficient at using a different set of technology tools, which inevitably requires specialized skill sets that can be hard to fulfill. For example, their system may incorporate several programming languages, requiring programmers who know how to use each or, ideally, more than one. These programmers can be few and far between and highly in demand.

**Additionally, factors like specialized tools and programming languages can create silos of teams, each with their own priorities. To relieve this friction, a seamless, end-to-end solution must be built based around the customer experience.**

The vast majority of solutions are abstract software-as-a-service (SaaS), platform-as-service (PaaS), or database-as-service (DaaS) options that extend their functionality by consuming APIs, which makes it more difficult to successfully perform customizations as not all can customize logic.

As a result, retailers might need to create components to compensate, which means more assets to maintain. Each of these services monitors their own containers and often independently releases their own features rapidly, which can require more code adjustments.

### Advantages of an End-to-End Solution

Cloud-native retailers who can take advantage of an end-to-end solution gain even more advantages over traditional retailers working to migrate legacy or mainframe systems to the cloud.

Retailers can quickly expand to multiple geographic regions simply by deploying containers for local transactions in each critical market instead of replicating data centers. Business intelligence can be managed offline and separate from critical systems, providing greater cybersecurity protections. For example, things like loyalty reward points do not need to be sent in real time.

**By breaking down specific functionalities, retailers operating in the cloud can streamline upcoming deployments, thereby enhancing scalability and resilience simultaneously.**

By dissecting individual functionality, cloud-native retailers can simplify future deployments, facilitating both growth and resiliency. They only need to replicate containers or a few components of the solution for transactions, not the entire back-office, in order to allow users to purchase products.

Retailers can strategically decide what to replicate, what's most important for disaster recovery, and what IT assets to dissect based on functionality. They can very easily discover the cost of specific functionality in an end-to-end cloud system, even down to the cost-per-product display per customer.

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That fraction of a cent can be multiplied by how many searches or look-ups are typically needed before a purchase is secured.

Having this data allows retailers to identify the most costly aspects of their IT systems and work to improve them. Each microservice can be analyzed for bottlenecks. Retailers can know that they generate so-much revenue for every dollar spent in the cloud, allowing for detailed AB testing of different marketing approaches and data-based decision making.

Ultimately, adopting an end-to-end solution provides better user experiences, more ways to integrate data, and a foundation to allow retailers to go to market even faster with new products and services.

## About IO Connect

IO Connect Services is an AWS Advanced Tier Services Partner, a certified MuleSoft® System Integrator Partner, a Salesforce Commerce Cloud Consulting Partner, and a member of the Datadog Partner Network. Our professionals have over 20 years of experience delivering complex technical solutions worldwide. We offer solutions in migration, DevOps, cloud native development, cloud solution architecture, security and compliance, and managed services. The company has achieved AWS competencies in retail, migration, and DevOps. We work relentlessly on establishing and maintaining trust with our clients and all business partners for successful long-term relationships.

Focusing on companies "born in the cloud" or wishing to migrate to the cloud, IO Connect can leverage the advantages of having a cloud-native infrastructure.

[Reach out to us today.](#) Schedule a consultation to learn how your digitally native business can overcome its growth challenges.

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