



## How Middleware-dependent Companies Monetize the Cloud

Technology has developed so rapidly over the last two decades that it has been challenging for retailers to know which to readily embrace, which to consider watchfully, and which to ignore completely. While some major, conventionally successful retailers have used technology to boost existing brands and infrastructure, other mid-market, newer retailers have leaned more heavily into technology to accelerate their growth. This has often translated into investing in new technologies and seemingly profitable partnerships with third-party vendors that promise best-of-breed services. Integrating all these technologies and partnerships into a cohesive, seamless system is often complex, with mid-market retailers turning to middleware as a makeshift solution.

Migrating a legacy system to the cloud is often a logical next step today; however, existing infrastructure, processes, and workflows pose potential roadblocks to quick adaptation.

### Challenges for Middleware-based Systems

One of the most significant issues for retailers that incorporate many different vendors and their systems is how their downtime, integration, and latency issues affect retailer performance.

For example, a retailer that uses a third-party vendor has no control over that vendor's disaster recovery protocol. Likely, the issue is never addressed until something on the vendor side fails, creating negative repercussions for the retailer.

**“Tying third-party vendors seamlessly to a legacy-based back office, custom front office applications, and other technologies can create data silos that muddy transparency.”**

Tying these third-party vendors seamlessly to a legacy-based back office, custom front office applications, and other technologies can not only be resource-intensive but also create data silos that muddy transparency. Figuring out when and which third-party vendor is down, determining the

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best way to catch and log exceptions in the system, and figuring out how to work around unrecognized codes and other data challenges can render efficient workflows nearly impossible.

Making an effective transition to the cloud can be achieved, allowing these middleware-driven retailers to successfully monetize cloud computing for the future.

### Phase One Focus on Shifting Expensive Infrastructure

Retailers who rely on multiple technologies and middleware to hold everything together can begin by shifting their highest-cost infrastructure to cloud servers, allowing them to pay only for the computing power they need. In many cases, these retailers may still have components of their business on mainframe and legacy systems, requiring an ongoing investment in maintenance and capacity.

**By migrating this high-cost infrastructure to the cloud, retailers can successfully align IT costs with actual sales, enabling resources and funds to be redirected to revenue-generating activities.**

This immediately reduces the total cost of ownership for servers and data centers that must be maintained on-premises to handle the retailers' busiest seasons year-round. It also facilitates an internal culture change of seeing IT as an investment in the future instead of only a necessary cost center.

### Phase Two A Different Kind of Integration

Middleware solutions were built to help retailers and other organizations ensure that all their applications and technologies could communicate effectively with one another. These solutions initially allowed software developers to connect different systems without going in and rewriting original codes, enabling developers to focus on designing new features and working with business logic instead of dealing with connectivity issues.

After shifting infrastructure as part of cloud migration, the next course of action is embracing the idea of platform-as-a-service through managed services. This facilitates a different kind of integration, tying back office enterprise resource planning systems with front office e-commerce platforms, and doing so in a way that focuses on the functionality provided. Successfully managing a hybrid system that includes legacy, custom solutions, and cloud computing streamlines operations and significantly reduces long-term overhead costs.

### Phase Three A Foundation for Advanced AI and ML Solutions

The final phase involves modernizing applications to enable a granular analysis of every customer journey and sale cost. For retailers who use multiple third-party vendors, this includes transparency in a cloud system to identify who is responsible for particular failures in the system so compensation can be accurately obtained.

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For example, many middleware-dependent retailers may know that a customer order was not delivered and can reship a product to satisfy a customer. However, without transparency it's impossible for the retailer to know whether its logistics, warehousing, or shipping partner was responsible for the missed order. As a result, the retailer incurs the loss. By migrating to the cloud, each step along the customer journey, including order fulfillment, can be analyzed in real time, improving accountability for all parties.

This modernization also means that integrating data lakes, data marts, and data warehouses is streamlined and integrated, ready and waiting for advanced technologies such as machine learning and artificial intelligence to take these retailers to the next level of growth and success.

### 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 enables them to leverage the advantages of having a cloud-native infrastructure.

[Reach out to us](#) today. Schedule a consultation to discuss how we can optimize your middleware deployment and achieve monetization in year one.

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