



Diffusion® & Diffusion™ CLOUD

The Diffusion Real-Time API Management Platform™ connects people, devices, systems, and applications for real-time data streaming and communications that easily, efficiently, and reliably scales to support development of retail applications -- add top-line growth and profit, reduce bottom-line cost, and deliver a hyper-personalized, in-the-moment, omni-channel customer experience.

Retail Highlights

- Provide up-to-the-millisecond information to thousands of customers simultaneously
- Easily integrate multiple data sources for optimal inventory management and high-quality customer experiences across omni-channels.
- Benefit from operational efficiency gains to improve supply chain management and mobile point-of-sale.
- Improve the customer experience by delivering hyper-personalization, meeting the demands of micro-moment purchase opportunities.
- Support microservices architecture with event-driven data.
- Optimize and assure data distribution even when network bandwidth issues occur.
- Reduce time-to-market for innovative retail solutions.

In today's always connected, instant gratification culture, retailers are challenged with meeting the demands of the customer – providing them with the information they need, when they need it - while ensuring back-end systems can handle the required hyperpersonalization.

Challenges exist around real-time inventory management, supply chain management, how to best target customers to deliver promotions, expanding marketing options, and increasing the speed of online payments.

Diffusion Cloud from Push Technology delivers retailers the out-of-the-box, efficient, highly scalable, real-time data streaming and messaging solution needed to: improve their customers' experience, deliver operational efficiency gains, and reduce time-to-market for innovative mobile and web applications.

With Diffusion Cloud, retailers can easily: support a microservices architecture with event-driven data decoupled systems, extend middleware, and ensure real-time data delivery for transaction, event processing, and analytics.

Retail Engagement - Anytime, Anywhere

Today, retailers must constantly engage, serve, and track their supply chain, inventory, delivery and return services, and shoppers - in-store, on the Web, and on their mobile devices - 24 X 7 X 365. Diffusion integrates and intelligently manages all of this data to assure the optimal omni-channel customer experience and fuel retail success.

"44% of retailers say *real-time retail* is one of their top three priorities!"

Boston Retail Partners POS/Customer Engagement Benchmark Survey

Real-Time Inventory Systems

Real-time inventory systems are designed to update data-storage systems automatically as soon as anything changes in the inventory – when an item is sold, or even when stock is moved from one part of the store to another. These systems enable:

- Customer experience enhancement – store associates can spend more time with buyers and help customers find products faster.
- Operational efficiency gains – Accurately and quickly determine the location and amount of products available - at any time.
- Reduce time to market for rapid innovation – Provide critical information for retailers to fine tune go-to-market strategies and engage customers across all sales channels.

Most retailers simply do not have the level of integration required to access the necessary data from all of their systems. "An inability to link existing systems is a significant handicap," according to Miya Knights, Principal Analyst for Planet Retail.

Efficient, real-time data streaming and communication is critical for inventory applications and services to accurately integrate and process multiple data sources, support rapid application architecture evolution, and influences real-time purchases.

"Six in 10 internet users check whether a product is available in a local store before visiting it."

Supply Chain Management

Real-time stock information needs to be fed directly to external suppliers, enabling only products that are in demand to be created and shipped, reducing costs, increasing margins and reducing warehouse usages and fees.

Improved Marketing

At the heart of retail, marketing entices purchasing. Promotions delivered in the heat of the moment contribute to top-line growth and profit. Online retailers can track purchases in real-time delivering in-the-moment promotions for items that are high on inventory helping to increase sales and reduce inventory.

The Mobile Customer Experience

The mobile customer experience is important for retailers to grow revenue. However, US retailers' conversion rates on desktop are twice as high as mobile conversion rates. Why? Because the purchase process on many retailers' mobile sites is still clunky. 29% of smartphone users will immediately switch to another site when a retail application doesn't satisfy their needs.

"Brands such as Walmart have experienced up to a 2% conversion rate increase simply by reducing their mobile site page load time by four seconds."

Having a first class digital experience is driven as much by performance of the application, as the interface. Customers don't expect to wait for their application to respond to purchasing (mobile point-of-sale) and this is where data-efficient real-time messaging helps.

Hyper-Personalization

Hyper-personalization demands the ability to respond to a shopper's action in real-time, based on context, on any device. But not all retailers have the level of integration required to access the necessary data from all of their systems. Data-efficient, real-time messaging can deliver the necessary solution to make hyper-personalization a reality by providing geotargeting, cart abandonment promotions, and effectively serving micro-moments - those intent-rich moments when people turn to their smartphones or other devices to know, go, do, or buy something.