Your industry is in the throes of massive change. The pandemic has fundamentally altered consumer buying habits when it comes to shopping online, with ripples spreading throughout the retail industry. Within the last two years, e-commerce sales grew by 46% and are expected to grow to 22% of all retail sales by 2024.¹ Your industry is shifting to a blended hybrid model between the physical and digital worlds, and this shift has increased expectations from your customers.

Customers now expect that they can go on their devices and see exactly what’s in the store down the street. They want to order things on your website through desktop and mobile interfaces, or purchase via voice on their in-home countertop device, and pick it up outside the store. Consumers want what they want, when they want it, and in the way they want it. And they are loyal to the business that delivers it. Retailers are looking to enable seamless-first transactions, but more importantly, keep customers coming back for more by delivering highly personalized experiences based on insights about each customer’s individual needs and behavior. If you can’t keep up, your competition is just a browser or app away.

What powers this new retail landscape? Data. Personalization just isn’t possible without a real-time and historical 360° view of each customer—what they’ve bought in the past, what they’re looking at right now, previous interactions with customer support, their product reviews, and more. Core retail infrastructure such as store operations, inventory management, and procurement are also in need of fresh thinking to enable true omnichannel experiences, with a connected inventory strategy and access to stock wherever it sits in the supply chain.

Retailers struggle to break down data silos

For many retailers, data is a huge challenge. Rather than fueling a premium customer experience, it remains locked away in dozens of siloed systems—supply chain, website, customer support, point of sale, etc. There’s no easy way to extract and combine this data, and no easy way to crystalize the business and customer value. Doing this in real time is an even bigger challenge. At best, many retailers extract data using slow batch processes, creating huge delays. It’s no use having inventory that’s a day out of date or reacting to a customer’s needs after the buying moment has passed.

Confluent and the power of data in motion

What is data in motion? It’s a new paradigm, where data is continuously moving across and breaking down silos, made possible by a data platform built to set your data in motion. It allows you to build rich, digital front-end customer experiences, transition to real-time software-driven backend operations, and share updates in real time, turning them into streams of events that other systems can read. You can use this new data platform to build applications that process and react to that flow of data in real time, delivering the customer and operational insights you need to drive innovation and create a competitive advantage.

¹https://www.oberlo.com/statistics/ecommerce-share-of-retail-sales

“Confluent drives our front-end experience; our back-office operations, like warehouse management systems, order management systems, real-time inventory, all of the machine learning and data science use cases; and finally, our reporting and analytical solutions.”

Chirag Dadia | Director of Engineering, Nuuly
What can data in motion do for you?

Data in motion allows you to digitally transform your business—unlocking new revenue streams through in-context offers to your customers, reducing operational costs associated with stock outs or excess inventory, and enabling new types of product offerings. Here are a few examples.

Real-time inventory management

Serving your customers through multiple channels requires combining data from systems in your store, global order management systems in the cloud, and warehouses in real time to get accurate insights into your inventory. Otherwise, you risk selling products to online customers only to find out you’re out of stock. One bad experience like this, and a customer is unlikely to come back.

With data in motion, you can integrate all of the systems where products enter or exit—shipping, receiving, point of sale, and so on—to have a complete, up-to-date view of your inventory. And, you can seamlessly integrate your legacy systems (IBM MQ, TIBCO) to modern systems (Elastic, Snowflake, MongoDB). Working with Confluent, you can improve your inventory accuracy to 99% or more and store data in long-term, cost-effective storage to run predictive AI models on your inventory to pre-order stock.

Personalized recommendations and real-time offers

You can create a 360° view of each customer, combining historical data such as previous purchases and demographic information with real-time behavior data from your website to generate personalized recommendations and real-time offers. For example, if a customer clicks through to a product that they have looked at previously—or a similar product—you can push a discount coupon to their browser in real time to encourage them to purchase the item. Or, you can instantly recommend other products based on what the customer is viewing right now and what they have viewed in the past. The result? You increase conversions, drive more revenue, and enhance customer satisfaction.

Data in motion lets you optimize delivery in real time, enabling drop shipping and accurate delivery tracking. It also allows you to provide seamless omnichannel experiences by tracking customer interactions across channels in real time. And, it’s a key enabler for innovation, letting you modernize your IT environment and accelerate development by moving to a microservice-based hybrid-cloud architecture that still works seamlessly with your existing systems.

Why Confluent?

Confluent is pioneering a fundamentally new category of data infrastructure focused on data in motion. Confluent’s cloud-native offering is the foundational platform for data in motion—designed to be the intelligent connective tissue enabling real-time data, from multiple sources, to constantly stream across the organization. With Confluent, organizations can meet the new business imperative of delivering rich, digital front-end customer experiences and transitioning to sophisticated, real-time, software-driven backend operations. To learn more, please visit www.confluent.io.

However, don’t take our word for it. We’ve been selected as a Google Cloud Partner of the Year for data and analytics, and achieved a top 10 ranking on Forbes Cloud 100.

To find out more about what Confluent can do for your retail operation specifically, please visit confluent.io/retail.

“Walmart has initiated a digital transformation and modern omnichannel experience that allows customers to interact with Walmart.com seamlessly, order groceries online or in a mobile app, and either pick them up or have them delivered. Walmart’s investment in event streaming with Confluent has contributed to business innovation as well as company growth in the public market.”