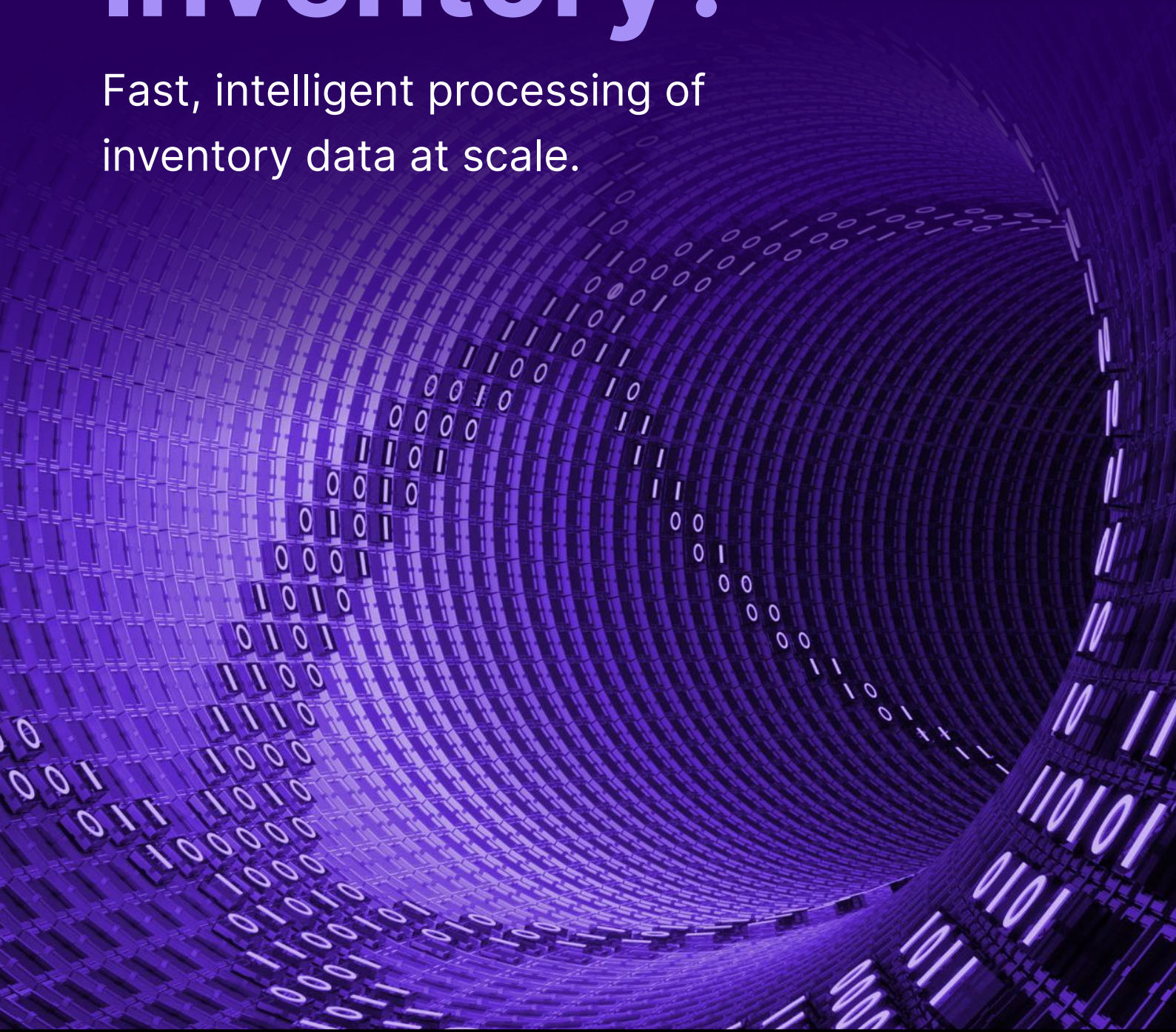


What is Fluent Big Inventory?

Fast, intelligent processing of
inventory data at scale.





What's the biggest challenge in a distributed order management project?

(hint: it has nothing to do with orders)

When people think about distributed Order Management Systems (OMSs), they typically think in terms of orders. How are they going to be processed? What sourcing logic can be used to optimize fulfillment? How many orders per second can a system support? What's the best way to integrate with my commerce platform?

And these are all perfectly reasonable questions. Except they only look at part of the problem to be solved. After the 'Buy' button.

Before the buy button

After the buy button

Inventory availability before the 'Buy' button

A big part of the role of your OMS is to quickly and accurately calculate, and show, a view of what's available to sell before the buy button in your purchase channels. And to do that, your OMS needs a smart view of all your inventory sources, as quickly as you can provide them.



Why is that so important?

Prevent overselling, underselling and a poor customer experience

Before your customers can add an item to their cart, you have to show them what stock is available. And if they want to do store pickup, you also need to show them where it's available. If you get this wrong, what happens?

You end up overselling, which leads to canceled orders. Or the item shows up as out of stock when really you have it at one of your locations, so you

miss a sale. The cost of poor inventory visibility and accuracy is high. But it's not easy to get it right. Why not?

Inventory data sits in multiple systems

To calculate what you actually have available to sell, you need to start with what stock you have on hand. Typically that baseline, onhand inventory data comes from your ERP, your inventory master. But you also need to continuously update stock availability based on transactions throughout the day.

On hand
inventory
(ERP)

— Online
Sales
(ecommerce)

— Store
Sales
(POS)

=

Available
to Sell
(OMS)

When these transactions are online, it's fairly easy to track, because your OMS and your commerce platform are connected. They talk to each other in real time. But when these transactions are in stores, it gets tricky.

“When organizations can’t optimize their inventory feeds, it means that rather than sending what’s important, frequently, they only send everything, infrequently. As a result, inventory updates take longer to process than they should, which impacts the near real time accuracy of inventory availability.”



Alan Jackson, VP Solution Engineering, Fluent Commerce

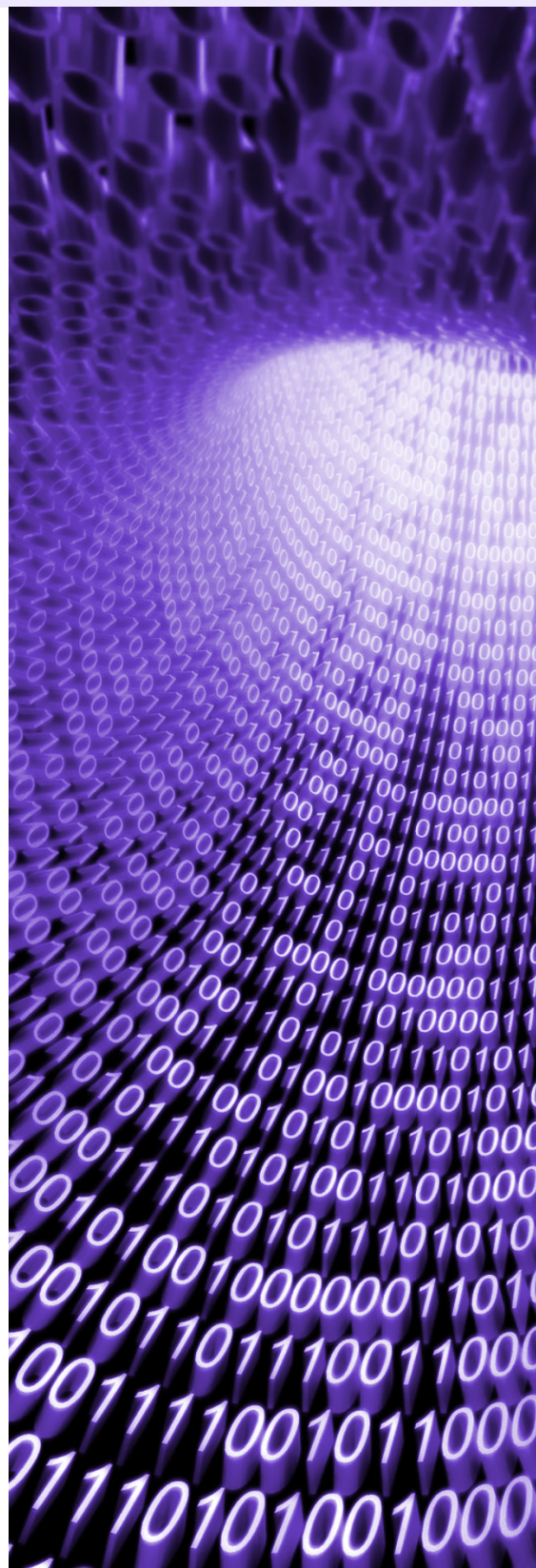
Enterprise Architecture is a Challenge

How do you make sure your inventory is accurate?

- Do you integrate your POS with your OMS?
- Do you just integrate your ERP with your OMS?
- If so, does POS data flow through the ERP?
- Do you have other inventory sources, like 3PLs?
- If so, how quickly can you get those updates to the OMS?
- And can you send just a delta feed of records that have changed?

Overnight reconciliation batch jobs are too slow for modern commerce

In the world of inventory, overnight batch jobs don’t work. They’re simply too slow and not fit for purpose. You need to keep data in sync in near real-time. But not all systems were designed to share data at the speed required by modern ecommerce. In part because they can only send big batch updates that include every inventory position—even ones that haven’t changed. Which isn’t efficient. For modern commerce, you need delta feeds.



The stock availability calculated by your order management system is only as good as the inventory data coming in.

But surprisingly, most organizations can't provide them at all. Those that can have typically built a custom middleware solution to filter their inventory feed.

Traditional Middleware isn't up to the task

While traditional middleware is great at transforming data from one format to another (e.g., XML to CSV) and switching protocols (e.g., mainframe flat file to GraphQL API), it's not 'smart'. Middleware's core strength is to convert x into y. That means the effort to build out a middleware solution that can create a delta feed (i.e., receive a

bulk batch of inventory and just output the changed inventory positions) is hard and expensive.

It's not designed to analyze the data that it's processing and make decisions on how to process it optimally. Data it receives is queued for processing, and typically processed in a 'first in, first out' fashion. The middleware's primary job is to make sure it parses data correctly, and checks that it has received and forwarded data as expected. Which is fine for data that's simple in structure and not very time sensitive, but not for inventory. Modern commerce requires something better.



Middleware solutions for inventory have three key problems:

- Cost to build, run and maintain
- Time to process massive inventory data sets
- Middleware isn't 'smart'— there is no machine learning applied to optimize how inventory updates are applied

Introducing Fluent Big Inventory

What is Fluent Big Inventory

Fluent Big Inventory is fast, intelligent processing of inventory data at scale. It enables you to process hundreds of millions of inventory positions updates. Doing so at a speed like never before. With Fluent Big Inventory, have confidence in your technology scaling with you. Improve operational efficiency with a single view of your inventory inflows and outflows. Allowing you to make every business decision and system, inventory aware. With Fluent Big Inventory make light work of heavy volumes of inventory updates.

The risk of not improving your inventory feed

Inventory accuracy is critical to achieve your business goals. Without it you end up in a vicious cycle of underselling and overselling. First, you're overselling and you have to disappoint your customers and cancel their orders. To fix that problem, your only option is to increase safety stock. Which leads to underselling and missed sales.

The cycle never ends. To fix one problem, you cause another. Your customer experience suffers no matter what. The cost to your business continues to increase. It doesn't seem like you can win, does it?

Features



Process hundreds of millions of inventory position updates



Monitor and control inventory data flows in real-time



Export optimized inventory data to any system

Benefits

- Get real-time accurate inventory
- Process inventory updates faster, at scale
- Eliminate overselling & underselling
- Reduce canceled order rates
- Never miss a sale
- Decrease out of stocks
- Increase revenue

**Learn more about
Fluent Big Inventory today**

Talk with an expert

fluentcommerce
order management. accelerated.