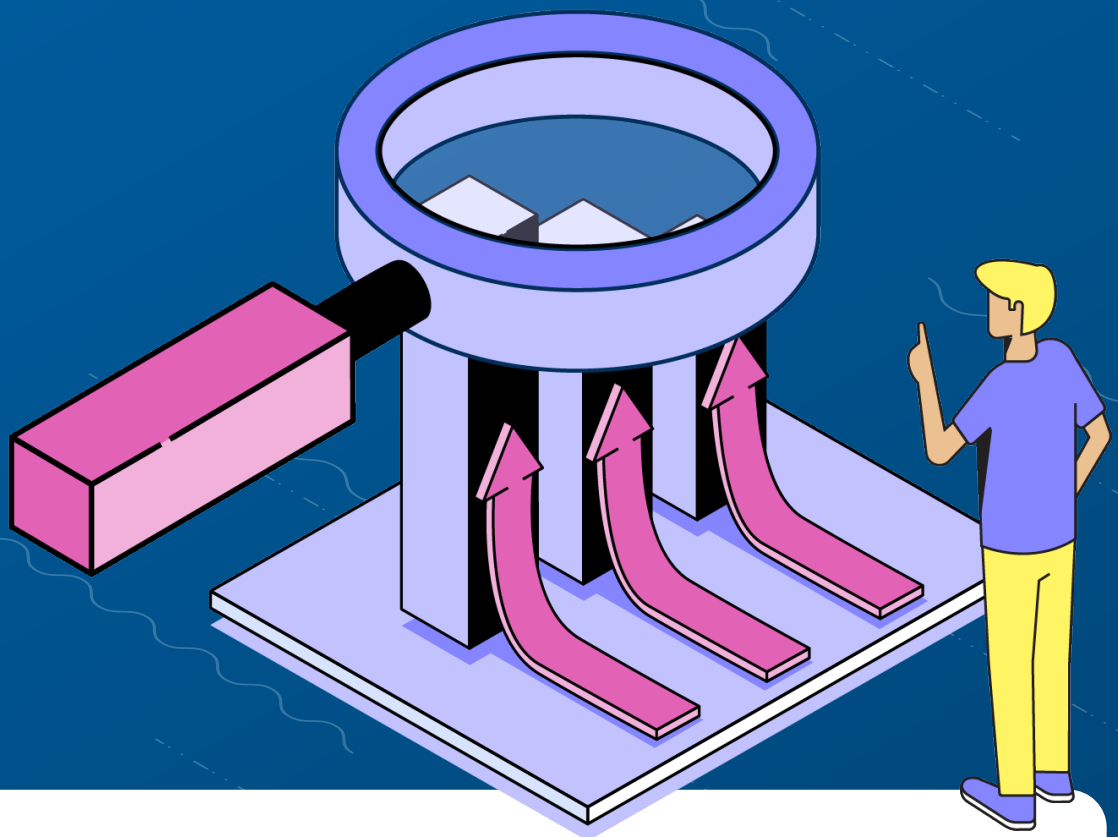




Scalable data onboarding: How FIA Tech balances speed and engineering discipline with CloverDX



FIATECH

FIA Tech, a financial services technology company servicing over 8,000 firms, needed to scale their data onboarding process for a rapidly growing client base.

The challenge: Enabling collaboration for speed, flexibility and reliability

FIA Tech needed to ingest data, at scale, from clients into their Trade Data Network (TDN).

TDN brings together trade data from market participants to create a unified ledger of trade information. It enables market participants to normalize their data and communicate seamlessly with other participants, providing operational efficiency, elimination of bottlenecks, and reduced costs.

The challenge comes as market participants use different formats to send data to TDN, from industry standard FIX through to flat files or xml.

Key to the network's success is the ability to ingest data from disparate sources, in different formats, and integrate it into a shared golden source of trading activity.

Chris Leigh, Connectivity Manager at FIA Tech, says: *"We're basically saying give us your data and we'll put it into the standard format. Rather than each sell side having to connect individually to dozens of buy sides — and vice versa, we handle the transformation into a common standard, eliminating the need for custom point-to-point connections."*

And it's crucial that the data processes are reliable. As FIA Tech CTO **Yossi Leon** says *"The market is very much dependent on us and our platform to provide them transparency about where trades are at any given time."*

To achieve that, two teams within FIA Tech – the Engineering team and the Client Operations team – needed to work together on onboarding client data to TDN.

Technical Lead Engineer **Jay Thakker** describes the data ingestion process: *"We have people who know the data really well and people who know technology really well. Both of them work on CloverDX. One group sets the business rules... and on our Engineering side it's more like, how do we make this rule possible... and make sure the data is flowing in the right order?"*

What's your point of view?

Stakeholder

Business expert

IT architect Developer

- ▲ **Flexibility:** Coding capability alongside a visual interface, to handle any client data formats and standardize them.
- ▲ **Collaboration:** Enabling the Client Operations and Engineering teams to work together – delivering domain expertise and fast turnaround, as well as ensuring performance and scalability.
- ▲ **Robustness:** Support for robust software development lifecycle processes, to ensure resiliency for real-time data processing and adherence to strict SLAs.
- ▲ **Integration:** Support for modern platforms, especially Kafka, to support time-critical trade information.

George Mohr, Senior Vice President and Head of Software Engineering at FIA Tech explains: *“The Operations team needs to get things turned around very, very quickly, under a lot of pressure. We tried to just focus on speed for as long as we could, but pretty quickly reached the point where things start to strain.”*

They needed a platform to help balance dynamic responsiveness with engineering discipline, and build a solid foundation for the company to grow. As CTO **Yossi Leon** says *“We’re building generic processes that will serve us not just for the next 10 participants, but for the next 100 participants. It will help us minimize the time to onboard new firms, and minimize the maintenance load we have.”*

Solution: Why CloverDX was different

The previous tool that FIA Tech had been using for data ingestion was user-friendly but limited.

Debby Planer, who as Head Of Connectivity at FIA Tech leads the Client Operations team, explains: *“The tool was designed with a strong focus on the end-user experience, enabling non-engineers to deliver results quickly. However, for our particular use case, we required more flexibility and the ability to handle greater complexity than the platform was originally intended to support.”*

Technical Lead Engineer **Jay Thakker**, who sits on the Engineering side, agrees: *“The platform offered a standardized set of capabilities, which worked well for common use cases. For more tailored or customized needs, however, there were some limitations. But CloverDX gives us flexibility in terms of writing our own custom code, as well as providing a lot of out-of-the-box functionalities.”*

George Mohr agrees that the previous tools struggled to scale: *“It wasn’t designed with advanced engineering use cases front of mind — such as integrating with streaming technologies like Kafka. As our needs evolved, we required a more technically sophisticated platform to support those capabilities.”*

What’s your point of view?

Stakeholder

Business expert

IT architect Developer

Enabling collaboration between technical and business teams

With CloverDX, the Engineering team builds reusable, generic components and processes, and the Client Operations team uses and extends them for client-specific integrations – delivering fast turnaround for client onboarding.

Jay Thakker explains the importance of this generic approach to building ingestion pipelines: *“We want to move away from bespoke solutions; they require a lot of human intervention and limit straight thru processing. We’ve*

now built shared workflows that are constantly purposefully reused. The Operations team maps clients onto their own small piece, which then gets mapped to that shared process."

Being able to have the domain experts in the Operations team able to manage their part of the process is crucial for responsiveness and accuracy. Connectivity Manager **Raul Rodriguez** explains: *"Our expertise comes because we really understand the data."*

As **George Mohr** notes however: *"It doesn't matter how fast it is if it doesn't work. You can churn out things quickly but if they don't work in production, that's not helpful."*

CloverDX not only helped the teams collaborate, but also brought a more reliable platform.

Performance and accessibility

Previously, the teams had struggled with performance. Connectivity Manager **Chris Leigh** remembers: *"Our previous solution was designed with user-friendliness in mind and worked well for simpler workflows. However, as our processes became larger and more complex, we began to encounter performance limitations that it wasn't originally built to handle."*

CloverDX offered a platform that non-engineers could interact with, but was also a solid development tool that delivered the flexibility and reliability that FIA Tech needed.

Raul Rodriguez comments: *"That balance between 'can a non-technical person use it' versus how much effort you have to put in is important. Performance is number 1 for us. I'd say CloverDX hits the right notes for us."*

Getting that balance right, with a platform that delivered reliability as well as enabling collaboration, was a key goal for the FIA Tech team.

What's your point of view?

Stakeholder

Business expert

IT architect Developer



"Nay-sayers said 'you're not going to find the combination of performance with the ability to have non-developers use the platform. But CloverDX actually met that requirement."

Debby Planer
VP, Head of Connectivity

True flexibility - visual + code

Previous tools had proved too rigid. But with CloverDX, **Debby** found: *"It was a relief that there weren't the restrictions we previously experienced. With CloverDX it was a case of 'Of course you can do that' - it was just super flexible."*

George agreed that: *"The ease of use, drag and drop interfaces are important, but at some point you want to be able to dig below that, providing source code control, change management, environment integrity, and externalization of parameters."*

The teams both realized that CloverDX's combination gave them the flexibility they needed to handle all their client data ingestion.

George recalls: *"With CloverDX, when I saw that you could exit into Java and write code, I thought 'OK, now I feel comfortable that there's not a use case that'll pop up that, at least conceptually, we can't write a solution for.'"*

On the Operations team, **Chris Leigh** also appreciates the flexibility: *"CloverDX gives us a much greater degree of flexibility compared to the more predefined, canned rules we worked with previously. It's like moving from large, fixed blocks to smaller Lego pieces — we now have finer granularity that lets us build more tailored solutions efficiently, without starting from scratch."*

Results

Easier, more scalable client onboarding

CloverDX enabled FIA Tech to scale data onboarding by letting the Operations team handle client delivery without waiting for developers and without dealing with the core of the pipelines.

"We can take a generic graph that does all the key workflow features, and the Operations team can take the client-specific transformation aspect, all in one platform and without having to reinvent the wheel" explains **George**.

Debby agrees: *"It's easy to add new clients because we're only building the client-specific piece of the workflow."*

Jay Thakker adds: *"If we have everything in place, the time it takes for onboarding is significantly less – we can pretty much take a client live within a week."*

CloverDX's ability to support different data sources and formats, especially the native Kafka integration that's a core part of FIA Tech's workflows, means that the teams can handle whatever data clients supply.

What's your point of view?

Stakeholder

Business expert

IT architect
Developer

Better observability and error handling

FIA Tech's logging capabilities built on top of CloverDX enable proactive support for demanding SLAs.

Chris Leigh explains how even the less technical Operations team can see any errors: *"The logging will tell me where something failed and for what reason, so we can usually figure out what's wrong. For the more complex stuff we can call in the technical team."*

George explains: *"If something does go wrong, you need to be able to address it. Some firms can maybe say 'We'll just fix it in tomorrow's file', but that's not good enough for us. CloverDX lets us replay any affected flow and turn around a fix quickly."*

Long term architectural benefits

Jay Thakker explains how CloverDX has supported FIA Tech's shift to more resilient data ingestion processes, future-proofing against changes in client data formats or increased volumes: *"We can now make some mature engineering decisions rather than just throwing something out there because it works."*

The Operations team also appreciates the solid foundation CloverDX provides. **Raul Rodriguez** says: *"The stability to me has been the most important thing. The ability for Clover to process the volumes of data we need."*

And with *"...engineering tools created out of the box as components"* as **Jay** describes, the FIA team are able to deploy and deliver faster.

Collaboration for the best of both worlds

Simplicity might seem like a clear benefit, but some tools can ignore key capabilities such as version control, error recovery, or scalability – things that are vital to enterprise-grade platforms.

CloverDX enables collaboration between technical and less-technical teams at FIA Tech, balancing developer-grade power and reliability with accessibility and client responsiveness.

What's your point of view?

Stakeholder

Business expert

IT architect
Developer

"We get the speed and scalability from the client's perspective, and the technical scalability of a good architecture. That to us is a win."

George Mohr
SVP, Head of Software Engineering

