



HEXAWARE

Trading Platform Development and Enterprise Data Management for OTC Derivatives

OTC derivatives trade processing platform helps a global financial services firm achieve a 50% reduction in manual reporting through improved enterprise data management.

Case study

Client

| Client

Challenge

Solution

Benefits

Summary

The client is a global financial services enterprise headquartered in the US, managing over \$1 trillion in assets and safeguarding over \$10 trillion in assets under custody.

They sought a consolidated trading platform development to enhance enterprise data management, optimize operational processes, and efficiently handle rapidly increasing trade volumes and quotes.



Challenge

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- Challenge**
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The client was consolidating its trade processing and phasing out a third-party product that had significant scalability and support issues. The new trade processing platform was to be implemented with the onboarding of 40 over-the-counter derivative product types as a part of its derivatives transformation program.

The 40 product types included some high-volume products like IRS (interest rate swaps) and CDS (credit default swaps), some complex and exotic derivatives like asset swaps, swaptions, and CFDs (contract for difference), as well as product types like commodity index, equity index, equity swap, zero coupon swaps, basis swaps, variance swaps, cross-currency swaps, and options.

The derivative portfolio's wide variety, complexity, and exotic nature made it difficult to onboard products on the current platform.

Over-the-counter (OTC) derivatives are private contracts between counterparties that are not traded through major exchanges or other intermediaries.

The price of the derivative is derived from the value of one or more underlying assets. When the value of the underlying assets (stocks, bonds, currencies, commodities, and/or market indexes) fluctuates, the value of the derivative will also fluctuate. Unlike listed derivatives, there is no intermediary to specify the nature, quantity, or value of the OTC derivatives' underlying assets. OTC derivatives are usually negotiated and customized to suit the exact risk and return needed by each party, and prices are not visible publicly. That gives flexibility but adds to the complexity of auto-processing and poses credit risk due to the absence of an intermediary clearing corporation or central exchange.

Following the financial crisis of 2008 the leaders of the G20 nations noted that the unregulated practice of OTC derivative trading contributed significantly to the crisis. International laws were passed to ensure that OTC derivative contracts were traded on centralized exchanges and reported to trade repositories.

The emphasis on efficient information exchange and related regulations does not consider the extensive range or complexities of the servicing tasks that need to be undertaken before arriving at a derivative valuation.



Challenge

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Data management and utilization gaps

The client handled massive amounts of critical customer data, including financial data, comprehensive trading information, and other secure details. However, gaining useful insights or business value from the data was challenging, because their new trade processing platform had inadequate data management, reporting, and reconciliation capabilities.

Moreover, downstream systems like fund accounting, asset and pricing platforms, data stores, and client reporting systems found it difficult to use the data effectively.

The wide variety and complexity of the derivative portfolio made it difficult to onboard all products on a consolidated platform. Efficient reporting and effective compliance were increasingly hard to achieve.



Solution

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The Hexaware team recognized the critical need to standardize and ensure accuracy in the OTC derivatives post-trade data. To address this, we designed and implemented a comprehensive data management solution using an enterprise data management (EDM) tool. This solution made it possible to onboard 40 OTC derivative product types that were previously unsupported.

Data from trades processing platforms—including transactions, positions, complex trade events, reference data like securities and pricing, accounts, entities, etc.—was loaded into the EDM system. After validation, enrichment, and translation, the processed data was loaded into the data warehouse. This system also supported different versions of trade data in FPML (Financial Products Markup Language) format, as defined by the International Swaps and Derivatives Association (ISDA).

Additionally, we developed robust API interfaces to facilitate seamless data retrieval from source systems and support the generation of complex reports, ensuring regulatory compliance.

Hexaware partnered with the client to address data managers' demands for speed, accuracy, and efficient reporting and reconciliation, while ensuring excellent data quality.



Benefits

Client

Challenge

Solution

| **Benefits**

Summary

We were able to deliver a scalable, flexible, and customized trade processing platform that took care of all our client's business needs and exceeded customer expectations. This platform:

- Significantly improved the reliability and accessibility of critical trade data.
- Simplified and accelerated the reporting process for greater efficiency.
- Implemented a common data model and data warehouse to centralize and standardize data.
- Provided a 360-degree view of trade lifecycles through an intuitive dashboard.
- Developed an exception-handling dashboard for the trading operations team.
- Created a user-friendly interface to monitor trade statuses at every stage.
- Introduced an automated regression testing framework to ensure zero business disruptions.

Tangible outcomes:

- **100%** reduction in application downtime.
- **2X** improvement in data volume handling.
- **50%** reduction in manual efforts for reporting.



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A prominent US-based global financial services company faced challenges in consolidating its trade processing platform. The existing platform struggled to onboard 40 diverse and complex OTC derivative product types. Additionally, inefficient data management, reporting, and reconciliation processes hindered the utilization of critical customer and trading data. Downstream systems faced significant difficulties in processing and leveraging this data, impacting compliance and operational efficiency.

Hexaware leveraged an enterprise data management (EDM) tool to standardize and validate the OTC derivatives post-trade data, enabling the onboarding of all 40 product types. The solution integrated data from various trading systems, enriched it, and stored it in a centralized data warehouse. It also supported FPML trade data formats to ensure compliance with industry regulations. Additionally, Hexaware developed APIs for seamless data retrieval.

As a result, the client gained a scalable and flexible trade processing platform, improved data quality and accessibility, and streamlined reporting. Tangible benefits included a 100% reduction in application downtime, a twofold increase in data volume handling, and a 50% decrease in manual reporting efforts.

Hexaware's solution empowered the client to operate with greater efficiency, accuracy, and compliance, driving sustainable growth.



About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>

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