

CASE STUDY

REINSURANCE COMPANY

Improving risk mitigation through a silo-less system that fully integrates all data processes

Client Overview:

Our client had a net income of over \$4.6 billion USD in 2015, and has offices in 25 countries worldwide. Total number of employees is upwards of 12,000, with total assets of almost \$200 billion USD. The primary sites of operations using ZEMA are the clients' New York and London offices, which include the groups Underwriting, Origination, Operations, IT and Sourcing.

Business Problems:

- The inability to independently verify pricing and deal capture through Murex, along with needing SOAP APIs and integration of data collection and management with Matlab and R.
- A large portion of time and internal resources devoted to data collection, validation, analysis and forward curve construction.
- Unable to maintain auditable and transparent data processes throughout the business.
- Lack of automation for workflows and business logic leading to increased risk of human errors, unreliable data, inadequate intelligence and less precise models.

Base Requirements:

- Pricing data spanning a wide range – oil, gas, electricity, derivatives, grains and others, including a large catalogue of weather, wind and hydrology data.
- Constantly increasing data inputs – 35+ providers with over 100 data feeds.
- The ability to completely customize data report structures to fit within internal governance and modelling structures.
- Integration with downstream systems including a custom Matlab adaptor and inclusion of a Java wrapper for ZEMA's SOAP API's.
- Ability to support multiple groups separately within the client's internal structure, and support over 60 users simultaneously, along with providing training on the new system so that quick and easy adoption of ZEMA into current processes could take place.
- Scalable solution with the ability to expand proportionally with company needs, including user base, data and integration with future downstream systems, without compromising performance and auditability of resource allocation.

- Rapid implementation of new data feeds for statistical and forecasting analysis, to decrease time-to-implementation for new insights.
- On-site, client-hosted deployment due to EU and internal regulation and compliance concerns.
- The ability for the vendor to go through rigorous Change Management and data gap-filling processes so the client could maintain internal data quality and governance structures.

ZEMA Applications Licensed		
Data Manager	Admin Console	Data Direct
Curve Manager	Web Services	Data Validation
Market Analyzer	Smart Mart	Curve Portal
	Matlab Adaptor	

Managed Client-Hosted Implementation:

The client further elected to have ZE manage their instance of ZEMA while they hosted their environments on-site, leveraging two decades of ZE expertise to monitor and maintain their data and data quality, application performance and upgrade and patch deployment. With the solution hosted on the client's infrastructure but managed by ZE's experts, the client can focus on increasing model accuracy and operational effectiveness.

With well-defined Service Level Agreements based on impact to the client, the client's data collection, input validation, application or analytical troubleshooting, and patch and update management is entrusted to ZE's system and data experts. This guarantee's not only the client's satisfaction with the initial implementation and deployment, but their continued satisfaction throughout the client's development and evolution.

Solution Implemented:

The client implemented ZEMA, ZE's end-to-end enterprise data management system, to satisfy their business requirements. ZEMA was chosen due to the scalability, versatility and open architecture of the solution, along with ZE's expansive reputation, experience, and industry-specific knowledge. The client operated ZEMA in parallel to their internal processes allowing them to verify accurate reproduction of their business processes, including comparisons of historical data structures between their ZEMA environments and their internal database. The project provided many benefits, including:

- Significant increase in volume and decrease in time-to-market for new data feeds to generate marketable insights.
- Significant increase in volume and decrease in implementation time for new data feeds to generate actionable insights.
- Increased transparency, auditability, and effectiveness of internal data quality validation and analysis processes and calculations.
- Refactoring of curve methodology for more efficient and streamlined operations.
- Automation of data collection and validation from source to a centralized data repository, thereby decreasing the time and resources dedicated to manual data entry and validation.
- Security, entitlement and administration setup according to internal governance structure, specifically useful for managing expensive data subscriptions, increasing transparency, both from the internal business processes perspective, and from an external data governance and regulation perspective.
- Multiple methods of interfacing to downstream systems, including Matlab, R and other tools, reducing process and data duplication as well as eliminating information silos present within differing user groups.

Results

The outcome of ZEMA for this client is a seamless transition to a silo-less system with full integration of all data processes, business practices and modelling logic in one centralized system that is incorporated into different business groups across this global and diverse organization.

The result is a system that has greatly increased the operational efficiency and accuracy of data aggregation, validation, curve management and integration, through data collection and workflow automation. This scalable system is managed by ZE with full functional control by the client and adheres to industry-leading Service Level Agreements. ZEMA further improved the client's ROI while decreasing resource expenditure and time to implement new reports, increasing the ability to incorporate new products, adapt to changes in data sources and adjust to market place variation.



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