# **Client Case Studies**

# **XENOMORPH**®

# Insight Investment

Building a market leader with technology that connects the data with the models; quickly, flexibly, transparently.

# **OVERVIEW**

Country/Region: United Kingdom

**Industry:** Asset Management

# **Customer Profile:**

Launched in 2002, Insight Investment has over £119 billion in assets under management\*\*. With a wide range of OTC products and significant growth targets for more products to come on line, the Insight Derivatives Project Team leads the way in developing all-round solutions to provide OTCs to suit the market.

#### **Business Situation:**

To develop the derivative capabilities fundamental to the LDI platform, Insight needed to:

- Quickly merge the IT systems and business processes found in the three organisations
- Build an end-to-end system to cope with any type of derivative
- Build a platform that would be able to handle the large volume of complex products that were being forecast

# **Solution:**

TimeScape has provided Insight with a platform that can handle the variety and volume of OTCs required. The data is centralised based on a flexible data model which can support any kind of instrument. The TimeScape pricing engine supports both proprietary and off the shelf pricing models that can be supplemented in-house as new instrument types are added.

#### **Benefits:**

- Support for any type of OTC
- No vendor involvement necessary to support new instruments and models
- Centralised and consistent access to both security data and pricing analytics
- Faster and more controlled processing of OTCs

"Insight had some tough requirements. They wanted the ability to quickly structure new types of OTCs, yet have all the data in one place; to add in new pricing models of their choice and at their convenience, yet do it by themselves; to move large amounts of data quickly in and out of the system yet have transparency over the entire process. This correlates strongly with the strengths of TimeScape, and I am very pleased to say that we managed to deliver on all of these."

Matthew Skinner Director, Xenomorph Software

# **INTRODUCTION**

Insight Investment was established in 2002 as the asset manager of HBOS plc following the acquisition of Clerical Medical by Halifax. Shortly after launch, Insight acquired Rothschild Asset Management, marking the start of its drive to become an independent, market-leading investment manager for institutional and retail clients.

Since then Insight Investment has grown significantly to become a top ten UK asset manager, the third largest manager of UK pension fund assets\*, and a major player in the UK with over £119 billion in assets under management\*\*. Insight Investment manages funds for institutional and retail clients across a range of asset types including equities, bonds, derivatives and alternatives, with the aim of providing precise investment solutions for its clients' investment needs.

As a leader in liability driven investment strategies, Insight takes a 'best-of-breed' approach to technology. This has enabled a comprehensive derivatives capability that includes straight through processing for OTCs, together with a golden copy of all static, market and pricing data.

<sup>\*</sup> FT Survey of UK Pension Fund Assets 2008, FTfm, 6 June 2008

<sup>\*\*</sup> As at 31 December 2008, see www.insightinvestment.com

# **SITUATION**

The challenge was threefold:

- Quickly merge the IT systems and business processes found in the three organisations
- · Build an end-to-end system to cope with any type of derivative, both now and in the future
- Build a platform that would be able to handle the large volume of complex products that were being forecast

Insight had very aggressive timelines on the first point, their business plan insisted on the second, and the third necessarily followed from their success.

Successfully integrating three companies whilst maintaining existing business operations is highly a complex process requiring significant attention to detail, and so a stepwise process, rather than a big bang approach, was adopted to ensure continuation of service.

# **SOLUTION**

Insight chose a steady, phased approach to migrate the legacy systems in order to minimise the operational risks, with the effect that the size and scope of TimeScape usage has grown incrementally. It now includes a central security master for all the traded OTC contracts with all their reference data plus all the data and models needed to price them on a daily basis, including:

- Market prices and rates
- FINCAD
- Historic Volatility Surfaces / Cubes
- Insight's proprietary models
- Historic yield curves
- TimeScape Models

Data such as the above often has two or three sources, whilst some (such as the volatility surfaces) has many sources. The stored data also includes all the derived data, which is saved alongside the OTCs, and is comprised of theoretical values, Greeks and other risk measures. The history of each of these is kept to provide a full audit capability.

Insight also takes full advantage of the ease with which external and proprietary models can be added to TimeScape, without the need to modify downstream systems. As soon as the model is registered, it is available to be used from within TimeScape, and can take advantage of the speed of the database to perform the calculations. As well as analytics and valuations being run as an over-night batch process, new trades can be modelled and priced, and existing positions can be re-priced as required on demand intraday.

"Xenomorph's TimeScape is a robust and scalable OTC enabling technology; the flexible data model and subsequent data accessibility are key factors in our ability to support the use of OTC instruments."

Gareth Exell Head of IT Strategy, Insight Investment

"As our business continues to develop, TimeScape's flexible toolkit approach, speed and ease of development means that it continues to grow with the company, keeping pace with our demands as they change."

Tim Smith Derivative Program Manager, Insight Investment

Insight took special care in designing the end-to-end derivative life cycle to be valid for any asset type and hence ensure straight through processing will always be possible in the future.

To that end TimeScape contains the full golden-copy data for each OTC, and receives and passes partial datasets to and from other systems as appropriate. TimeScape currently contains OTC positions arranged across 25 product flavours, including:

- Long dated (IR) swaps
- LPI / Index linked swaps
- Swaptions
- IPD swaps, Variance swaps
- Credit default swaps
- · Equity derivatives
- FX derivatives

There are currently tens of thousands of other market instruments stored within the system to support the pricing of these OTCs. Their static and market data are also kept up-to-date on a daily basis. To support Insight's growth targets, the number of positions and data required to support these are on course to rise significantly in the medium term.

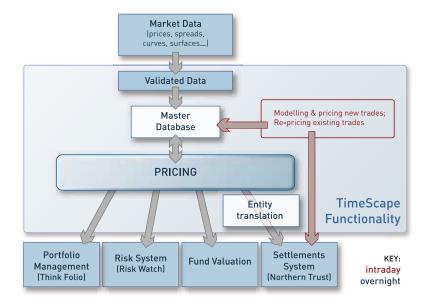


Figure 1 - TimeScape has provided Insight with a platform that can handle the variety and volume of OTCs required.



#### **BENEFITS**

TimeScape offers database performance and the management of derivatives' data and pricing with a technology that fits comfortably with the surrounding applications, and hence with Insight's 'best-of-breed' paradigm.

The key characteristics that continue to deliver value for Insight are:

- Instrument Coverage Support for any type of OTC
- Reduced Costs No vendor involvement required to support new instruments and models
- Consistency Centralised and consistent access to both security data and pricing analytics
- Faster STP Faster and more controlled processing of OTCs

"TimeScape is ideally suited to the iterative way of working at Insight as its data model is extremely flexible and its transparency allows any potential issues to be caught early. The multisourced nature of the system enables multiple versions of the same data to be stored and fed into the analytics as required. This enables valuations to be made using different assumptions, ensures that prices can always be calculated and helps when assessing quotes from different counterparties. This linkage between the data, the models and the pricing really helps when first making the trade, and subsequently when managing the risk on their positions."

Matthew Skinner
Director, Xenomorph Software

# **MORE INFORMATION**

**Xenomorph** delivers analytics and data management solutions to the financial markets. Our TimeScape technology leverages our clients' proprietary expertise, enabling them to analyse and manage more data with greater control and transparency.

Our focus is to make our clients more successful by closing the productivity gaps between high performance database technology, data management and end-user data analysis. Through unified and transparent access to data and data analysis, our clients achieve even higher levels of financial innovation, business process efficiency and regulatory compliance.

Trading, research, risk, product control, IT and back-office staff use Xenomorph's TimeScape data management platform at investment banks, hedge funds and asset management institutions across the world's main financial centres.

Established in 1995, Xenomorph has offices in London, New York and Singapore.

Version 1.1 November 2011