

Xenomorph begins its second decade with growth on the blueprint but its founding principles intact



Greg Johnson, Chief Operating Officer at Xenomorph, is talking history – right now we are in Hong Kong in the early 1990s and a higher up at ING Barings is talking to a trader: “We have this star trader in Singapore,” says the boss. “We’d like you to replicate his performance.” Fortunately for Matthew Skinner – then trader, now a director of Xenomorph – he did not take Mr Leeson’s lead. Johnson laughs, “Matthew says that if he’d only had the tools then that Xenomorph now provide, he would have been able to work out quickly that it was impossible for Leeson to make the profits that he was claiming.”

Xenomorph is now well known for delivering its high performance



Greg Johnson: COO of Xenomorph

Where Data is King

data management and analysis solutions for the financial markets. Both their business line and enterprise solutions bring together data management, connectivity and analysis functions providing a single view through time across all asset classes. The company recently celebrated ten years in the business, and is entering its second decade having consolidated its achievements to date and preparing for expansion. Senior management have redefined their roles to best utilize their inherent skills within a larger market; the London based operation has just set up shop in New York.

Brian Sentance is now CEO, allowing him to concentrate more on strategy. Chris Budgen is Chief Technical

Architect, Matthew Skinner is Business Applications Director and Mark Woodgate is the Consultancy Director for North America. Johnson is now in charge of the operational management of the company. The company sees itself well-placed to meet the needs of the buy side, requiring fast reliable tools to research and test new structured products which place heavy demands on data management systems.

“What we do is bring together data and decision management,” says Johnson. “Other players in the market specialize in giving decision support tools, they specialize in data management, others specialize in data analytics. We bring all of those things together in one coherent platform.

The extra bit we provide is our market expertise. The people who are talking to our clients and advising them have all done the job that the guy on the other side of the desk is doing, so it’s our appreciation of what the pitfalls are as well as the technology itself.”

Xenomorph’s TimeScope is the current iteration of a product which has both evolved and been refined over the last ten years. At its heart is an absolute commitment to data management – where all roads once led to Rome, one could say the attitude here is that all challenges lead to data. The first version of the product was called XDAIS, Xenomorph Data & Analytics Information System.

“The business started because Chris Budgen was trying to provide data management solutions for time series data for Bankers Trust,” says Johnson. “He was trying to do this in the framework of a relational database structure – he worked out that he couldn’t provide the flexibility that the traders were demanding and the performance by using those traditional tools. So, he set out to build his own data model from which he could provide high speed time series data management and analytics. That’s exactly what he did, making a deal with Bankers Trust that when he had built the product they would actually buy it. That was purely analyzing

time series data for the purpose of identifying trading opportunities within Bankers Trust.”

It was 1995 when the company was founded but it was 1997 when the product was initially released.

“Over the years we have redefined the data structures and added and enhanced the analytics that sit on top of that, and we have followed the market in a number of different directions.” Johnson explains.

An obvious one is the area of quantitative finance where Xenomorph has been able to build a platform that enables people to manage and analyze vast quantities of data primarily for identifying trading opportunities, but increasingly over the years to be able to build models, and price new derivative products. The company has been swift to pick up trends from the market and implement client’s requirements at the drop of a hat.

“Over time we have enhanced the sort of out-of-the-box functionality that is available with the product.” says Johnson. “We picked up a few hedge fund clients along the way who had a few peculiarities in functionality that they wanted to implement so we built them some models; particularly in statistical arbitrage type functionality.”

At the same time, Johnson explains, their investment banking clientele continued to grow in three particular areas. “The first was in trading; people using the product to spot trading opportunities. That was based on a number of different analytics and algorithms that we provided plus the fact that by using the toolkit that comes with the system, people were able to enhance and expand those analytics and to plug in their own analytics libraries.”

“The second area was in the

Case Study



Rabobank International’s Risk Integration Services department puts TimeScope to work

The Risk Integration Services (RIS) department of Rabobank International (RI) uses Xenomorph TimeScope for historical data collection from a number of sources and validation analysis. The main instruments of interest to RI are foreign exchange, equities, bonds, options and commodities (volatilities and futures) within the American, Asia and European markets. The data is used in their proprietary Value at Risk (VaR) model and for VaR ratios, risk management and risk reporting via a link to their enterprise wide risk system.

Rabobank International is the corporate and investment banking arm of Rabobank Group, the leading Dutch financial institution with assets of Euro 342.9 billion, which is the only private sector bank in the world to be triple A rated by all the major credit rating agencies. RIS takes care of assessment of information on and control over Rabobank International’s (potential) financial impact residing from market risk exposures. Furthermore, RIS designs processes and builds infrastructure to control risk at the source and for Rabobank International to align its risk management strategies with core business.

quantitative area, where people were beginning to use the product to design, build, back test, stress test and price new structured products. The challenge that most of them were faced with was that in the past they had been able to build these products predominantly using Microsoft Excel and test it, and be pretty confident that the price they arrived at for that instrument was reasonably accurate. The issue then came with people saying “that’s all very well but how do we integrate that into our risk system and into our platform?” So people were coming up with great products but it would take them another six months before they could take it to market. What people were able to do with our system was two things: (a) they could have a centralized place where people could do the modeling, testing and pricing; and (b) they were able to feed off into the risk management system because they could guar-

antee that the data which they were working with was clean, accurate and up to date, therefore the time to market was considerably reduced. Risk managers were happy because they could trace back where all the data was coming from, what the models looked like, and the IT people were happy because they didn’t have a six month development project integrating each new product.”

With that came the need to integrate all the standard pricing models that come off the shelf. It was 2000 when the company started to move into providing their own pricing models. With feedback from Xenomorph clients the range of analytics that can be provided is now substantial.

“The third area that we started to see growth in was the area of risk management, particularly Value at Risk and people being able to manage capital adequacy. What

“TimeScope has proven to be a powerful tool and provides the transparent infrastructure for an organization like ours,” says Diederick Huszar of Rabobank International. “The project started as a redesign for data collection and distribution in early 2003. The collection of market data and use of validated information is important. Due to this the main goal of the project was to improve the quality of the historical data collection by creating a less complex and more transparent environment. After over two years of progress we are now moving towards this new environment and Rabobank will use Xenomorph’s TimeScope system in production.”

“The objective of the project in the original brief was: ‘a systems infrastructure for historic market price data collection for all types of products based on one single database and software concept, which will lead to one common information system. With this project the majority of the infrastructure will be implemented.’ Further to this, as the requirements of our implied equity volatility project became clear it was evident that this would be part of the TimeScope system,” Huszar explains.

“The areas affected will include control, equity business and also market risk areas, the development of the TimeScope system is likely to lead to changes in market risk daily practice that will have a significant effect on the local risk managers and the risk control department.”

we found, perhaps slightly unwittingly, was that we had a set of tools that made that job very simple. We could narrow down where prices came from, what cleansing had taken place on those prices, any anomalies between prices stored in the database and those that might have been used for trading purposes. It made it very easy to spot anomalies and put in place a way by which people could analyze risk not just by exceptions but also by planning in advance. One of the beauties of our platform is that it does an awful lot of things and sometimes it takes our clients to spot the things that you can do with it. Our risk area grew more by clients realizing that by using this same tool that the traders had they could get very valuable risk information out, so we have some clients who use the product exclusively in the risk area in market risk.”