

# Innovations in asset management and technology

Asset management companies have been chasing alpha for a long time through traditional strategies: the aim has been to achieve higher returns than the benchmark index while balancing risk. So far, derivatives have been used by asset managers primarily for risk mitigation. However, the flexible nature of derivatives enables managers to reproduce any desired risk profile and to consider every desired asset class. This is precisely the reason why structured derivatives are so important in modern finance. Now, a new breed of asset managers wants to seize the opportunity that comes along with these sophisticated instruments, and *Assenagon* is one of them.

Due to the complexity of structured derivatives, IT solutions play a pivotal role when it comes to implementation. The collaboration between *DEVnet*, Microsoft and AMD has resulted in an IT solution that meets the challenges in this business area.

## Derivatives are essential tools for asset managers

Investment banks are the predominant experts and suppliers of structured derivatives. More recently, however, asset managers have been striving to capture a segment of this growing market. The flexibility of structured derivatives enables asset managers to reproduce any desired risk profile on any desired asset class.

Nevertheless, in employing structured derivatives, there are several barriers for asset management companies:

□ **Cultural and organisational adaptation** – Using structured derivatives to maximise performance for a given risk profile or minimise risk for a given return requires cultural and organisational adaptation. Structured derivatives add a new, non-linear risk/return dimension that defies traditional asset allocation, portfolio management and risk controlling processes.

□ **Specialised know-how** – Achieving risk/return optimised portfolios requires technical expertise in designing payouts by fusing vanilla and exotic derivatives. Derivative pricing models rely on complex mathematical algorithms, drawn mostly from the field of stochastic analysis. However, most asset management companies still have to develop the required in-depth knowledge.

□ **Integrated IT solutions** – IT solutions that integrate all parts along the business value chain, allowing the handling of structured derivatives across all asset classes, are imperative to a fast-changing market. Given the lack of a comprehensive IT product, an asset management company will hardly find an integrated IT solution that is both affordable and meets all of its needs.

## Assenagon is a first mover in structured asset management

Only a few specialised investment companies are ready to construct investment funds by employing structured derivatives. *Assenagon* is the first independent asset management company in Europe that

has positioned itself as a structured derivatives specialist.

Hans Günther Bonk and Vassilios Pappas have partnered to launch this business, building on past successes and in-depth market experience. They have jointly developed structured derivatives trading, structuring and sales at HypoVereinsbank up to the level of a European player. Together with their colleagues back then, Bonk and Pappas created IndexChange, the company that became the market leader in exchange-traded funds and was subsequently sold to Barclays Global Investors.

Confident, owing to their past success, Bonk and Pappas left their employer and dedicated themselves to the concept of constructing investment funds by using structured derivatives. With their flexible organisational structure, they are offering truly transparent investment funds to their customers with improved risk/return profiles.

Given the inherent challenges in the ever-evolving marketplace, Bonk and Pappas decided on the following principles:

□ **Recruiting top-notch specialists** – a seasoned, talented team usually found within investment banks.

□ **Strategic partnerships** – partnerships that enable *Assenagon's* team to focus on its principal area of expertise while complementing it.

□ **IT** – using IT as a key strategic advantage by investing in next-generation software solutions for the benefit of the complete value chain.

"IT is the driver to our success", confirms Pappas. Therefore, choosing the right partner for any IT solution is a process of particularly careful consideration. A strong commitment to support the new company and its creativity has been an important criterion when searching out an integrated and affordable IT solution. "The outstanding experience and the long track record in enabling business by innovative IT solutions is the reason why we chose *DEVnet*," he adds.



Hans Günther Bonk (left) and Vassilios Pappas

### **DEVnet's outstanding experience and innovation enable Assenagon's IT solution**

*DEVnet* is an association of experts who pool their experience and skill in IT projects. As entrepreneurs in a partnership, they have built a reputation for strong commitment to the success of their projects, much to the benefit of their customers.

With a successful history of delivering on large-scale projects, *DEVnet* has proven that combining reliable concepts of computer science with business aspects empowers innovative IT solutions.

"Design principles that are common to the development of industrial real-time systems became fundamental to our understanding of software", confirmed *DEVnet's* managing director in technology and engineering, Theophanis Alexandropoulos. This understanding provides an entirely new view to challenges – first and foremost in the financial industry.

The majority of IT systems in the financial sector are not designed to meet the complex requirements of the structured derivatives business. Newer systems target particular aspects of the business, such as risk management and portfolio revaluation. However, their focus is not on fully integrating all value chain activities, such as market data management, financial engineering, trading, trade processing, position and risk management, portfolio optimisation, dynamic re-hedging, real-time monitoring, web-enabled reporting, customer servicing, auditing and other value chain activities. Recent events in the banking sector emphasise the importance of an integrated IT solution.

*DEVnet* made the experience that the demanding and complex business of structured derivatives requires a truly integrated, highly reliable and precisely operating software solution. "Such a solution should allow fast introduction of new products, models and processes and constitutes a key factor for business integration and time to market delivery", confirmed *DEVnet's* managing director of business development, Andreas Kokott. "Flexible and integrated support while co-ordinating functions, data and processes and their respective interactions is paramount", adds Kokott.

In developing such IT solutions, the network of co-operation partners is a strategic asset. *DEVnet* is in direct contact with prominent consulting firms and research institutes such as KPMG and Fraunhofer ITWM. With technology leaders such as AMD or Microsoft, *DEVnet* is regularly sharing information on the latest trends and developments. This co-operation has turned out to be very successful in the development of an IT solution to *Assenagon*.

### **Microsoft provides platform capabilities to Assenagon's IT solution**

Microsoft provides key building blocks for risk analytics such as Excel, Excel Services, SQL Server and High-Performance-Computing with Windows Compute Cluster Server for distributed calculations that are needed by asset management companies to manage their risk in an integrated but cost-effective manner.

"Risk analytics is a key pillar of our risk management solutions approach", says Stefan Zimmermann, Microsoft's worldwide technology strategist for risk management and compliance solutions. "We are very happy to work with *Assenagon* and *DEVnet* and see our technology platform being used in such an innovative way."

Indeed Microsoft solution components like Microsoft's Dynamics CRM for sales, Microsoft Office SharePoint Server 2007 and Exchange 2007 for collaboration, SQL Server and .NET for *Assenagon's* custom analytics, are all combined by *DEVnet* to create a solution that is, by all means, complete.

Additionally, Microsoft is going one step further and has



Andreas Kokott (left) and Theophanis Alexandropoulos

developed solution approaches for investment management. In particular, a solution termed 'institutional client platform' addresses the client-facing needs of buy and sell side sales organisations.

### **AMD enables affordable high-performance computing**

Commoditisation in the processor area has opened up many opportunities for scale-out scenarios. High-performance computing infrastructures needed for risk analytics could now run on standard operating systems such as Windows. But, since computing power, energy and space have to be in balance to deliver an equally scalable as well as cost-effective solution, innovation down to the level of chip design is necessary to solve the challenges in the long run.

AMD invests in specialised chip designs and approaches, for example, using graphics processors to solve computational tasks – while still being used from within the standard infrastructure. This is a clear paradigm shift. This commitment to innovation made AMD an attractive partner for *DEVnet*.

### **Assenagon is going to invest in next generation solution**

As a first mover, *Assenagon* intends to capture a new trend in asset management. Important business functions like structuring, engineering, risk management, reporting and operating are all highly dependent on reliable and tailor-made software.

When *Assenagon* started building its business almost one year ago, *DEVnet* and its co-operation partners provided a lightweight IT solution on available off-the-shelf products. Now *Assenagon* is investing in the next-generation solution and is well prepared to expand its business successfully.

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Hans Günther Bonk  
E. hans-guenther.bonk@assenagon.com  
Vassilios Pappas  
E. vassilios.pappas@assenagon.com  
T. +49 89 519966 0  
www.assenagon.com

**DEVNET**  
PROGRESSIVE  
SOFTWARE DESIGN

Theophanis Alexandropoulos  
E. t.alexandropoulos@devnet.de  
Andreas Kokott  
E. a.kokott@devnet.de  
T. +49 174 3290152  
www.devnet.de

**Microsoft**

Dr Stefan Zimmermann  
E. stefanzi@microsoft.com  
T. +49 160 5892 137  
www.microsoft.com