

## Corticon Success Story

# STW

### ABOUT STW

**STW Fixed Income Management has been a specialty bond manager since 1977, serving a diverse client base ranging from pensions and foundations to wealthy individuals, insurance companies and nuclear decommissioning trusts. The firm manages over \$9 billion in assets with a focus on investing in undervalued bonds that outperform the market.**

**While the bond market is faced with increasing regulations, rising costs and growing complexities, Fixed Income Managers must still respond to client demands for highly customized products - each with their own set of investment guidelines. In this context, high quality, personalized service has become both a critical factor for success and increasingly difficult to achieve. STW has built a unique position in this market as a customer-service driven firm with sophisticated investment technology that helps optimize the risk/return ratio on even the most challenging investment portfolios.**

### THE CHALLENGE

The STW team moved into uncharted territory when they decided to build an investment technology infrastructure to support their bond trading/portfolio management process. The bond market is less automated than other capital markets, with far more complex rules and regulations that vary widely, not only across bond types, but also across individual bonds. These rules include guidelines on how and when one can buy and sell, how interest accrues, what the tax implications are, and more. On top of this, each client has a unique set of rules for their own portfolio, such as preferred industries to invest in, or level of acceptable volatility. These are not one time decisions – guidelines must be applied daily, hundreds of times, simultaneously, for all clients – in the face of fast changing market dynamics. All the while maintaining the highest standards for maximizing returns and minimizing risks – and with zero tolerance for errors.

Anton Plasil joined STW as Principal, Head of Systems and Technology, bringing over 30 years of technical expertise in developing financial systems and programs. He quickly saw how the firm could leverage technology to meet client investment guidelines, increase operating efficiencies and put the company on the leading edge of this market. A core component of his vision: automation of business rules.

### CHOICES

Plasil had previous experience with business rules management technology, so he knew what to look for. STW's complex process required a very sophisticated rules engine, but the constantly changing environment demanded a high level of flexibility, and a business friendly interface. These requirements were nearly impossible to address with a single engine. Packaged applications delivered pre-defined rules that were fairly straightforward. However introducing new complex rules into the systems was nearly impossible – and integrating these apps with other systems and data sources was a constant challenge. Traditional business rules engines had the requisite level of sophistication, but it was hidden behind rigid templates and inflexible business user interfaces that couldn't take advantage of it. Further, with the proprietary programming skills necessary to optimize these

systems behind the scenes, they wouldn't be nimble enough to adapt to constant change. And performance was unacceptable on large data sets. This simply wasn't a good fit for STW's process automation effort.

Plasil and his team knew that they needed to find a better architecture to ensure success – sophisticated, flexible, and business friendly.

## **SOLUTION**

STW found in Corticon Technologies the solution they were looking for. Corticon provides a model-driven business rules management system in which even the most complex logic is defined, verified and tested using standard business vocabulary, then packaged and delivered as decision services. STW chose Corticon Business Rules Modeling Studio, a sophisticated desktop business rules modeler and Corticon Business Rules Server, a high performance execution engine. By integrating Corticon with their database, accounting, and reporting systems, they had a solid infrastructure to help drive investment decisions.

"We were pleased with Corticon's business friendly interface", said Plasil. "Yet while ease of use is a factor, we were even more interested in whether or not it could support all of our rules. Ultimately it is the end result that matters. We found that Corticon handles even the most sophisticated rules with relative ease – and gives us the perfect springboard for a flexible decisioning infrastructure."

STW implemented a multi-tier service oriented interface, in which an application server manages integration to a master operational database, an accounting calculation engine and a reporting engine. The Corticon Rules Engine co-exists on the application server, managing the rules to support trading, settlements, compliance and client reporting. Within this infrastructure, Plasil and team were able to build several rules-based applications:

- Pre and Post Trade Compliance Check: tests client investment guidelines & other regulations before and after each trade
- Compliance Monitoring: checks account compliance nightly against fluctuating market data
- After-Tax Performance Reporting: accurately applies all aspects of taxation to clients' portfolio results and benchmarks returns
- Rules-Savvy Accounting System: accounting rules interface with the low level math library used to perform calculations

These applications require very complex analyses which are largely done manually throughout the industry - requiring dedicated staff to review all trades against rules and fix problems - often after the trade is processed. With Corticon, STW has removed this risk from the process.

All this is done with close collaboration between business and IT. The business analysts control the rules logic – modeling, validating, and testing of the rules within Corticon Studio. When satisfied, they create a service, and IT takes over, managing the deployment and integration with other systems.

## **RESULTS**

STW's successful integration of business rules across their IT infrastructure has led to improvements in all aspects of the business – from client acquisition and account management to compliance, audit and reporting. Some key results:

### **Maintain a Competitive Edge**

STW's unique capabilities, such as automated guideline checks and performance reporting have become key differentiators, helping the firm demonstrate greater reliability and faster response times than the competition. Where other companies can take weeks to process and reconcile this information, STW clients can immediately see the effects of adding or changing investment guidelines. The firm can also quickly and accurately respond to customer requests for after tax performance reports and complete audit trails.

## Increase Agility

Automating the complex work of simultaneously managing hundreds of rules has made STW a more nimble organization. For example, new products like derivatives can be added in weeks, even when many systems are impacted.

## Reduce Operating Costs

By automating these complex processes, STW is able to contain costs. For example, the Guideline Checker application requires one employee to manage 500 compliance rules. The same process can take 10 people at other firms.

“Corticon is the brain behind our business,” said Plasil. “Rules impact all of our core business processes, and we have deployed the Corticon engine across many mission-critical applications. We see gains in operational efficiencies; and our clients see better portfolio management.”

## FUTURE DIRECTION

STW continues to leverage the power of rules modeling across the business. Now an integral part of the firm’s Investment Technology Infrastructure, the Corticon Business Rules Management System is well-positioned to play a role in other key applications, such as billing and enhanced data quality management. Corticon helps STW maintain its unique position as a customer-service focused company that can help maximize returns on even the most challenging investment portfolios.

## About Corticon

Corticon enables organizations to make better, faster decisions by automating business rules. Corticon’s patented “no-coding” rules engine is used by over 450 customers to automate their most sophisticated decision processes, reducing development and change cycles by 90%. Automated decision management with Corticon empowers organizations to improve productivity and customer service, and adapt quickly to changing market conditions.

## Corticon Global

Corporate Headquarters  
1000 Bridge Parkway  
Redwood City, CA 94065  
Telephone: +1 888.619.2424  
Fax: +1 650.212.2727  
Email: [info@corticon.com](mailto:info@corticon.com)

Corticon Europe  
Limesstraat 5  
4007 LA Tiel  
The Netherlands  
Telephone: +31(0)344 785570  
Fax: +31(0) 84 719 2974  
Email: [info@corticon.com](mailto:info@corticon.com)

Sales  
[sales@corticon.com](mailto:sales@corticon.com)  
  
Investors  
[investors@corticon.com](mailto:investors@corticon.com)  
  
Public Relations  
[pr@corticon.com](mailto:pr@corticon.com)

Partnerships  
[alliances@corticon.com](mailto:alliances@corticon.com)  
  
Technical Support  
[support@corticon.com](mailto:support@corticon.com)

For more information visit [www.corticon.com](http://www.corticon.com)