

# Meet growing credit challenges with creative technology consulting

Get more from your technology. Take a fresh approach

With a continual evolution in credit derivatives, market and credit forces are becoming increasingly entwined. This means a rising tide in business and IT issues requiring innovative thinking and new technologies.

## The art of the possible

As volumes grow and investor expectations continue to rise, it takes foresight and pragmatism to realise new exotic products. We analyse your business and trading processes and suggest ways to enhance your credit pricing, trading and risk management. Applying our technology expertise, we then develop customised technical solutions that overcome immediate tactical challenges and prepare for future demands.

## Sophisticated pricing methods

Credit derivatives are difficult to price with new variants and trading methods being introduced all the time. We refactor your models to maximise their efficiency during complex calculations, giving you significantly faster analysis. We help you stay ahead by validating and integrating the latest models into your systems.

## Improving trading performance

The volume of information needed for credit trading makes normal data management techniques obsolete. For fast accurate analysis, we integrate refactored models into streamlined trading and risk systems. This allows calculations to be scaled up and huge volumes to be transacted.

## Handling information overload

The sheer volume of information also makes reporting and risk management slow and difficult. We orchestrate trading, accounting and risk management processes to help you prepare for rapid market growth. The use of state-of-the-art design techniques and database technologies ensures operational efficiency is maintained and risk contained.

Our consultants re-engineer credit systems for enhanced pricing, trading and risk management performance.

Our services include:

**Refactoring existing models**  
(for performance and scalability)

**Implementation and validation of pricing models** (using Monte Carlo, semi-analytic, Gaussian copula and intensity techniques)

**Design and scaling of pricing and risk systems** (using CPPI techniques for example)

**Database design and realisation**

**Parallelisation and grid computing techniques**

**Software selection**

We analyse your credit derivative processes and combine techniques in financial engineering, software design and data management to improve transaction speed and performance.

## Our experience

We develop solutions that improve pricing, data, reporting and risk management systems.

### Business analysis for emerging markets trading

We analysed the requirements for a new trading and risk system, designed to integrate complex credit products without delay. We liaised with all stakeholders in trading, risk, finance and operations to define their trading processes and the technology they needed.

By grid enabling the analytics, we demonstrated that the concept for the system was viable. We developed middleware to connect the trade, risk and reporting systems together. The integration of a single exotic product showed how position management, risk reporting and P&L could be significantly improved.

### Pricing model integration

We integrated multiple pricing libraries into an Algorithmics risk management platform, giving users the ability to flick between different libraries at will.

We used a common object model to ensure there was no impact on the data integration environment. By streamlining the calculations, we minimised the time needed to price the most sophisticated products, including tradable synthetic CDOs.

### Improved data handling and risk reporting

We enhanced a correlation desk risk reporting system by improving data management and integrating the latest pricing libraries. The new system handles millions of risk factors, and the time taken to mark-to-market and calculate exposure was reduced from days to hours.

#### Our expertise spans:

##### Flow trading products

- Total Return Swaps (TRS)
- Credit Default Swaps (CDS)

##### Correlation trading products

- CDO's, CDO<sup>2</sup>s, leveraged super seniors, index tranches

##### Credit trading systems and libraries

- such as Calypso, Murex, Reoch and NumeriX

##### Modelling techniques

- such as Monte Carlo, semi-analytic and intensity models

## Transform your credit technology.

To talk to one of our consultants about enhancing your technology, call +44 (0)20 7489 2900 or email [credit@riskcare.com](mailto:credit@riskcare.com)

For more about our services, visit [www.riskcare.com/credit](http://www.riskcare.com/credit)

