Consulting & Advisory Service

Simplifying the implementation complexity of regulatory and risk-based requirements.



Introduction

With software being such an integral part of the actuarial and risk functions within an insurance company, the ef ciency and ef ectiveness of the models and related processes are extremely important and subject to much scrutiny. With ever-increasing pressures on the required complexity and regulatory demands, having access to a pool of expertise focused on the implementation, deployment and review of models and processes can be invaluable.

The RNA Analytics actuarial consulting team was created to support the initial sales and implementations of the R³S software suite. However, as the user base matured and regulations evolved, they have increasingly helped our clients in other important ways too. The team educate users and review models and processes to ensure the latest knowledge and functionality is known about and used where it should be. Coupled with this is a focus on ensuring the models and processes access the hardware ef ciently to help comply with the regulations ef ectively.

Due to the breadth of our client base the team is exposed to a range of global regulatory environments including Asia, Europe and the USA, our consultants can also provide guidance and insights into how dif erent regimes and regions approach similar situations.

Adding Value

The aim of the consulting element is to add value to businesses through a range of initiatives.

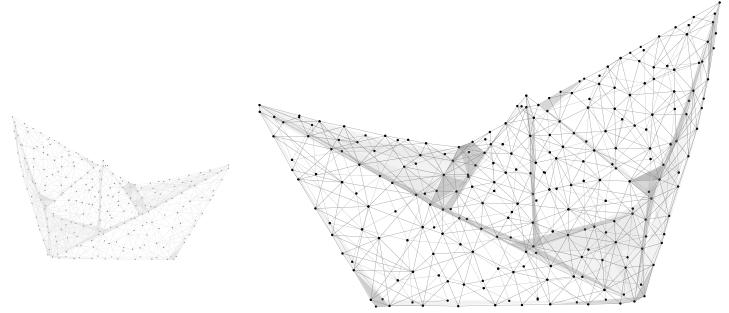
Our core specialization is modeling within R³S Modeler, particularly implementing new requirements and improving the ef ciency of existing models. In addition, we can assist clients with improving the processes around their use of Modeler as well as embedding Modeler into a broader IT infrastructure, potentially expanding the reach of the R³S software suite both within and across the business areas to provide more security, ef ciency and automation. One of the key advantages of engaging the team is our insight and depth of knowledge of the product. Our consulting and modeling advisory team work very closely with the development function, allowing us to advise clients on the latest system developments and how these could impact models and processes.

The consulting services highlighted above are not exhaustive so please do contact us for assistance with anything related to our software suite to see how we could assist.

Implementation

Implementation can take many forms, from a simple model enhancement to a full replacement of the existing tools and improving models and processes. Our team is on hand to provide any level of assistance. Some examples of previous work we have undertaken are as follows:

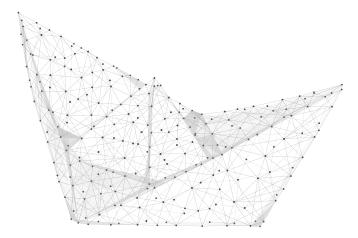
- Remodel of existing VIP4.5 models, or models previously converted from VIP4.5, using the latest standard code.
- Addition of new products and assets into existing models.
- Enhancement or inclusion of guarantee and option calculations that may not be fully modeled in existing models.
- Implementing a fund or company structure to allow for dynamic decision rules and asset rebalancing.
- Inclusion of new actuarial process calculations due to new regulation, such as Solvency II, or to expand existing functionality of the current model set.
- Amendment of the model to allow both deterministic and stochastic processing.
- Complete model documentation required for regulatory requirements



Solvency II

Solvency II has been in effect since the beginning of 2016 and we have helped many of our clients to use Modeler for many aspects of complying with the regulations. A summary of some of the areas we can assist with are as follows, but if you have any questions not covered here then please do contact your local consulting representative.

- Integrating the Standard Formula Aggregation model with your existing model set for Solvency II reporting.
- Enhancing models to ensure compliance with the new regulations.
- Enabling the ef cient calculation of the Solvency II stresses required for input into the Standard Formula Aggregation model.
- Expansion of output and mapping to integrate with required EIOPA reports.



IFRS 17

With IFRS 17 due to come into force in 2023, RNA Analytics has built a template process to show how businesses can achieve IFRS 17 compliance with R³S Modeler and R³S Process Manager. By utilizing some of Modeler's key functionality, the process can be streamlined, ensuring only calculations required at each step are completed. The consulting elements around IFRS 17 are currently focused on the following areas:

- Assistance with determining how the example IFRS 17 process model can be expanded and integrated into your existing processes.
- Enhance current base models to ensure compliance with the regulations.
- Work collaboratively with partners to ensure a full end-to-end implementation of the regulations in a range of markets.

R³S SOFTWARE SUITE

Model, Process & IT

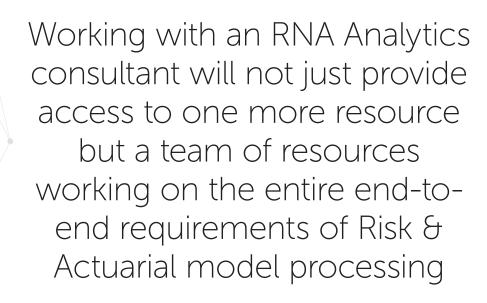
Over time, new or enhanced functionality may become available in the software, or new hardware maybe released, both of which could benefit your models. To ensure your model is performing efficiently in terms of coding, process and IT infrastructure, our combined team of technical and actuarial consultants can assist in profiling and amending the models and processes. Examples of the consulting undertaken are provided on the page to the right, but if you have any questions then please contact your local consulting representative.

- Examination of the model structure against the best-practice approach for modeling to improve model runtimes.
- Analysis of the code to determine any inef cient use of Modeler functionality or to identify code that takes a substantial proportion of model runtime, therefore highlighting where to focus attention when implementing model improvements.
- Analysis to identify what external processing is completed that could be moved within Modeler and Process Manager to reduce the end-to-end processing time and reduce manual intervention and manipulation by providing more automation.
- Model review to identify how new functionality could be used within existing models and processes along with its potential impact.
- Example runs of existing models on our in-house servers and grid setup to provide indicative runtimes for potential IT setups.

Partner Relationships

Alongside the use of our own Actuarial Consultants, we have formed several strategic alliances with a range of Consultancies who can use their access to the product suite to provide advisory and implementation services to our clients globally. We have selected partners who have invested in building teams of consultants trained to use the R³S software suite. We have chosen each consultancy based on the quality of their actuarial and modeling systems expertise, knowledge of the market they work in and their standing in the industry. We have made efforts to ensure that there are at least two firms that can cover key countries to give clients a choice of firm that will not clash with their existing audit arrangements.

Our consulting partners can engage directly with clients to provide modeling and advisory services. In addition, the consultants can be engaged to work alongside our team to provide the best possible mix of resources combining modeling support and advisory expertise on a larger scale.







Headquarters UK RNA Analytics Limited Ground Floor Bancroft Place 10 Bancroft Road

10 Bancroft Road Reigate RH2 7RP United Kingdom

rnaanalytics.com

+44(0)1737 246586