



WOLFRAM CONSULTING SERVICES

Deploying Symbolic Computation to Build a Next-Generation Financial Reporting System

Industry: Professional Services

Applications: Reporting, Business Automation



ABOUT LANGHAM HALL

Representing assets of \$130bn and with offices around the globe, **Langham Hall** are an award-winning, owner-managed, professional services business serving the fund management industry. Leading private equity, real estate, debt and infrastructure clients place their trust in Langham Hall to provide a fully tailored service where every detail, no matter how small, has been carefully considered.

500

Langham Hall employ **500** people in their global team, across Europe, North America and Asia.

15

Langham Hall have **15** years of continuous client service, leadership and innovation.

4,000

Over **4,000** institutional and professional investors rely on Langham Hall's independent reporting.

THE CHALLENGE

In finance, every client is unique, so using industry-standard, off-the-shelf systems will always lead to compromise. Therefore, the challenge was to create a platform with

unrivalled personalisation and customisation capabilities and with the added benefit of industry-leading accuracy and reliability, all without compromising speed or efficiency.

To achieve this, Langham Hall recognised the need to look outside financial services to apply the most innovative approaches used throughout the big data industry.

To achieve this ambitious goal, Langham Hall partnered with Wolfram Consulting Services. As world leaders in computation across a wide range of industries, they were the ideal

THE APPROACH

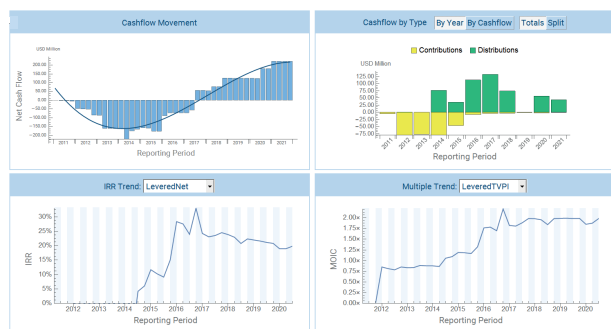
The Wolfram Consulting Services team took advantage of the symbolic nature of the Wolfram Language to build an automated pipeline for data capture and report generation, providing Langham Hall and their clients with high-level, actionable insights, without any manual calculations required.

Wolfram created symbolic representations of clients' portfolios and investments, making obtaining any detail or computed property as easy as calling it by name, removing the potential for errors created when working directly with spreadsheets and databases.

Additionally, a complete business logic platform enabled Langham Hall to perform complex, customised computations on their clients' portfolios with minimal effort, removing the risk of error being introduced when working directly with the data.

partners for a collaborative technical project.

Further, Langham Hall have a well-earned reputation for having a team of top-tier people with a wealth of expertise. Therefore, it was imperative that the solution took advantage of human intelligence and paired it with next-generation tech, augmenting human expertise rather than replacing it.



An example of Langham Hall's customisable, interactive dashboards.

Langham Hall also developed new in-house technical skills, allowing them to continue to develop the solution and rapidly adapt it to their clients' ongoing needs.

With the combination of symbolic data and built-in business logic, Langham Hall offer reporting capabilities far beyond static documents, allowing customers to adjust parameters, create time slices, forecast data and answer complex 'what if' scenarios in real time and with complete accuracy.

“Wolfram allows us to collate, compute, and update a truly comprehensive set of data points on our clients' portfolios using a straight-through process without any unnecessary manual intervention. By combining this with our highly experienced client teams, we are able to provide an unrivalled level of reliability and insightful analysis: end-to-end, highly responsive, all in-house.”

—Andrew Read
Partner and Head of Asia
Langham Hall

ACHIEVEMENTS



Removing the Compromise between Adaptability and Reliability

The Wolfram Consulting Team built a solution that enables limitless customisation while improving and ensuring accuracy, precision and reliability. Centralised definitions and computations can be customised per client and automatically applied across their entire portfolio with no need for manual calculations or "workarounds" for unusual fund terms or commercial arrangements—allowing Langham Hall to avoid the errors and delays typical of inflexible off-the-shelf systems.



Uniting High-Performance Computation with Top-Tier Human Expertise

No one knows Langham Hall's clients' needs better than the Langham Hall client team. The solution takes advantage of that in-house expertise, placing full configurability in the hands of the people who understand their customers' needs, rather than relying on third-party programmers. Built-in automation ensures accuracy and reliability, and no 'black box' ensures all calculations remain transparent, verifiable and easily explainable.



Future-Proofing Fund Administration

With the world of finance constantly changing, the Wolfram Consulting Team in partnership with Langham Hall is continuing to build a solution that is adaptable and ready for whatever comes next. In contrast to generic, off-the-shelf IT systems, Langham Hall's business expertise makes the new technology specific, relevant and useful. Hence clients can rely for their future data needs on the investment that Langham Hall are making with Wolfram.

MADE POSSIBLE BY WOLFRAM

“Using the Wolfram Language allowed us to create symbolic representations of entire customer portfolios and a complete set of definitions and business logic that can be personalised for every client. This means computations, reports and visualisations can be created by Langham Hall’s Client Team without manual calculations or abundant formulas, and, most importantly, without risking the integrity of the underlying data. ”

—Jon McLoone

Director of Technical Communication and Strategy
Wolfram Research Europe

LET’S TAKE YOUR PROJECT TO THE NEXT LEVEL

Find out how the Wolfram Consulting Services team can jump-start your project with in-depth troubleshooting, code optimisation, custom training or production deployment.