



Enabling Change Agents for Capital Markets



**Independent Financial Advisory and
Software Company**

INTRO



“Success would come by making quantitative tools and independent, unconflicted advice available to our clients.” *Co-Founder and CTO*

The innovative founding idea for Matthews South was to provide financial software and advice to public and private companies for large and complex transactions in capital markets spaces. To compete against the large investment banks, the company wanted to deliver innovative and flexible analysis tools that were transparent, independent, and unbiased.

PROBLEM



“We had decades of experience on Wall Street and were accustomed to sophisticated tools, such as SecDB.” *Co-Founder and CTO*

Making derivatives easier for people who were not necessarily financial engineering experts was the primary target for the tool suite. The founders wanted to enable their clients to work on an equal footing with the investment banks. Complex share and debt instrument classes, such as buybacks and convertibles, were the initial focus area. The prospective clients were large technology corporations, with high expectations for any software tools.

As a startup, the small development team at Matthews South was obviously concerned with cost, time to market, and quickly getting to revenue. Developing everything on their own was not feasible, nor was spending a lot of money on tech they did not need. They needed a base platform to build on top of that would deliver core functionality while they added their own custom algorithms for pricing, analysis, and monitoring. The five critical platform features they were looking for were:

- ▶ Cloud-based solution with integrated development environment (IDE)
- ▶ Integrated database for market data, risk, profit & loss, and other financial instrument details
- ▶ Flexibility and ease of a scripting language combined with the speed and efficiency of a high-performance language
- ▶ Distributed computing to calculate and store information for thousands of instruments
- ▶ Flexible process scheduler for both real-time and overnight calculations and reports

SOLUTION



“Flexibility to change what we want to change, enhance where we want to enhance.” *Co-Founder and CTO*

Matthews South chose [Beacon Platform](#) as the foundation for their technology before they had even incorporated their company. Beacon easily met the company's needs and delivered the desired mix of functionality, flexibility, and control: cloud-based IDE, modern data warehouse including base classes and market models, Python-based application framework, cloud-agnostic elastic compute, and enterprise-scale scheduling and infrastructure management. Full access to Beacon source code enabled them to choose what to use, change, and enhance, on Day 1 and in the future.

The development environment enabled the technology team to cleanly separate the front-end and back-end, so that corporate clients could interact with the web-based application and seamlessly run their calculations on Beacon-enabled compute engines. The application, which was quickly deployed to production, allowed clients to choose a type of instrument, adjust the parameters, and see the projected impact thanks to a powerful and scalable Beacon back-end.

As Matthews South and their client base evolved, screens, tables, graphs, and other front-end capabilities were easily and quickly added or adapted to the client's needs. The majority of the company's development effort focused on the bespoke quantitative algorithms and analytics that are the company's core business and competitive edge, leveraging [Beacon's existing classes and models](#) as the starting point. As a result, the company's technology team were able to focus on building what they are best at, while Beacon took care of what Beacon is best at: delivering the enterprise technology platform.

RESULTS



“I can honestly say that we feel at no disadvantage versus banks who have 10,000-person strong teams working on this stuff.” *Co-Founder and CTO*

Within six months of choosing Beacon, Matthews South had a working version of their product. Within nine months, they signed their first client. With a six-year track record of success, the company is proud to help their clients make more informed and data-driven decisions, resulting in greater transparency, better outcomes, and lower transaction costs. In addition to modeling and pricing these complex instruments, clients can also monitor ongoing behavior during execution, such as expected counterparty profits, graphically comparing results to expectations.

The company now has many more clients, covers more products, and analyzes thousands of financial instruments. But they continue to operate with a small development team, viewing Beacon as a partner, not as an arms-length technology vendor. This enables the company to focus resources on their key areas of expertise and client needs, not rebuilding things that have already been done.