

Broker Village Transformed Their Complex Spreadsheets into Web Applications Very Quickly with SpreadsheetWEB

The Challenge

Broker Village is an exceptional analytics and consulting firm that serves the financial services industry. They help financial advisors, executives, and regulators evaluate investment opportunities and verify the accuracy of online tools and related disclosure. They build tools that can analyze funds, ETFs, financial planning decisions, and asset allocations. Their models are trusted by major investment firms including industry watchdog FINRA.

Broker Village excels in mathematical models and statistical analysis. As a byproduct, they use Microsoft Excel regularly to create those models -- models that are extremely complex and contain a mind-boggling amount of calculations.

Their promise to clients is rapid deployment of solutions, accuracy, and ease-of-use. A quick and cost effective deployment of their applications means that they can keep their customers happy in an ever-changing environment of opportunities and regulations.

"It's hard enough to model complex investment products and decisions. Imbedding the models into a web application takes complexity to the next level. And until recently, being able to tailor your models to the unique requirements of each firm, and deploy complex mathematical changes in near-real-time, was a near impossibility. With Pagos' SpreadsheetWEB platform, we now can address needs that nobody else can meet. It gives us -- and any Pagos client -- a huge market advantage."
Stu Speckman, Chairman of Broker Village

One such tool Broker Village developed is the Trade and Compliance Analyzer. This is a risk assessment tool that evaluates mutual fund and ETF trades in terms of account value, fees, and commissions. It displays the results and recommendations by running thousands of simulations.

They plan to distribute this tool to their clients. Thus, protecting their intellectual property, and security of their data, was a big concern. They needed a centralized solution that will allow the same functionality as an Excel file, but with a professionally designed front-end, all while providing a secure environment.

The Solution

Broker Village was looking for a fast and cost-efficient way to deploy their complex tools in a web-ready, secure environment. The entire calculation logic of the Trade and Compliance Analyzer was created in Excel. Coding this calculation logic in any coding language would take many months, or even a year, of development.

SpreadsheetWEB checked all the boxes. It transformed the Trade and Compliance Analyzer into a responsive web application that uses the underlying spreadsheet to interpret the calculations. The web application runs the thousands of simulations necessary on the server to generate results and display them in compelling and appealing ways.

SpreadsheetWeb allowed Broker Village to deliver the solution on-premises to large investment firms. As an alternative, the cloud model provided a cost effective and quick delivery model to smaller firms.

The Results

Pagos helped Broker Village create a custom web interface for the Trade and Compliance Analyzer and implement the iterative calculation logic necessary for its simulations. The tool became an application that can run on any device with a web browser, regardless of its processing capabilities.

The financial industry sees frequent regulatory changes in response to frequently changing products and opportunities. Having clients connect to their hosted system ensures that everyone is accessing the latest version of the tool. Furthermore, the absence of an accessible Excel spreadsheet means that end users can't copy or edit anything. The Trade and Compliance Analyzer tool is now centralized and secure.

Since the web application runs on an Excel workbook, Broker Village can make any changes to formulas or data without needing the engagement of developers. This saves them time and money.

Stu adds, *"Soon after development of our tool, a massive regulatory change affected the exact part of the industry*

Case Study



we were aiming to serve. Luckily for us, the required math changes took us just a few weeks to code. Then they were made almost instantaneously on Pagos' end. In the past, we never would have dreamt that our math changes would find their way to the web-ready version in under three to six months. In this case, it was days from the time we gave Pagos the changes."

The tool is now running on a server instead of the end user's device. This decision resulted in faster calculation speeds than running it on Excel on a desktop computer.

This project was completed in a matter of weeks and was deployed on a third-party hosting service. The scalability, ease of distribution, and cost-effectiveness of this approach has satisfied all needs of this project.

The screenshot shows the 'Trade and Compliance Analyzer Tool' interface. At the top left is the 'BROKER VILLAGE' logo. On the top right, there are navigation buttons: 'Fund Data', 'White Paper', 'Client Report', and 'Help'. The main content area is divided into several sections:

- Account Value:** A table with columns for account type and value. Values include \$213,583 for Regular Load Share A and \$169,952 for Wrap Fee Account F2.
- Total Cost:** A table with columns for account type and cost. Values include \$19,014 for Regular Load Share A and \$47,739 for Wrap Fee Account F2.
- Advisor Pay:** A table with columns for account type and pay amount. Values include \$8,950 for Regular Load Share A and \$31,610 for Wrap Fee Account F2.
- Input Parameters:** Fields for Initial Investment (\$45,000), Year Two Investment (\$50,000), Annual Return (5.00%), ROA Value (\$200,000), and Summary Horizon (20).
- Scenario Configuration:** Three scenarios are shown: Scenario 1 (Regular Load Share) with American Balanced Fund (A Share) and 0.59% load; Scenario 2 (Clean Share) with American Balanced Fund (F-2 Share), 0.39% load, trade frequency of 4, and 1.28% clean share load; Scenario 3 (Wrap Fee Account) with American Balanced Fund (F-2 Share), 0.39% load, and 1.50% wrap fee paid by client.
- Buttons:** 'Calculate', 'Run', 'Stop', 'Tables', 'Max Value 1-3', 'Equal C.L. 1-2', 'Equal Wrap 1-2', and 'Delta 1'.

The Trade and Compliance Analyzer Tool

For more information please contact:



Pagos, Inc.

47 Third Street – Cambridge, MA 02141 – USA

Tel: (860) 674-9100 – Fax: (860) 674-8430

info@pagos.com – www.pagos.com