BEST PRACTICE: AUTOMATION

BUILDING DYNAMIC "WHAT IF" SCENARIOS IN AN AUTOMATED SYSTEM

PLAYERS:

- Stifel, Nicolaus & Company, Incorporated (Stifel), a subsidiary of Stifel Financial Corp. (NYSE:SF) headquartered in St. Louis, Missouri
- First Empire Securities, Inc. (First Empire), headquartered in Hauppauge, New York
- ZM Financial Systems (ZMFS), headquartered in Cary, North Carolina
- Jason Murray, CFA, Director of Fixed Income Strategies, Stifel
- Ben Thomasson, Director, ZMdesk Support, ZMFS

Stifel provides securities brokerage, investment banking, trading, investment advisory and related services to financial institutions nationwide. When Stifel acquired First Empire, the company expanded its reach to include a significantly larger group of credit unions nationwide.

PROBLEM

Stifel had an established client modeling environment around ZM Financial Systems' flagship solution, ZMdesk. Processes that had been refined over more than 10 years needed to be combined with those being used for First Empire clients. Additional scenarios and other differences posed three main challenges:

1. Efficiency: An all-Excel-based process needed to be converted and merged into the existing flow without creating extra work.
2. Data: First Empire client data needed to be imported cleanly and effortlessly into the ZMFS platform.
3. Retention: Changes needed to be carefully planned to minimize impact on clients and client satisfaction.

SOLUTION

Jason Murray from Stifel engaged Ben Thomasson at ZMFS on ideas for automation. Several aspects of the data loading process were identified, and the instrument query feature of ZMdesk was utilized with three specific goals:

1. Simple learning curve – Set up an easy-to-use mechanism for users to make changes as needed to instruments, without having in-depth knowledge of the system;
2. Compatible processes – Marry the data import and analysis processes Stifel and First Empire have for both banks and credit unions; and
3. Faster turnaround – Speed up both data retrieval and data transformation.

ZMFS developed a series of instrument queries that allowed Stifel to target specific product types and alter their behavior. This allowed Stifel to condense the various stress scenarios into a single button click. The instrument queries simplified Stifel's procedure to only two run settings: one is base-set with traditional EVE assumptions and the other set includes stress scenarios, what-if analysis and other non-traditional EVE analysis.

"We looped these instrument queries and run settings into the batch process," said Murray, "which helped us marry our SABER/Bank process and the credit union process. We did not want to have two systems in terms of how you operate them – one for credit unions and one for banks. The process needed to be easy for any analyst to use no matter the client."

Ease of Use

For Murray and his team, being able to take the data straight from the SQL database and deliver it for clients in an automated fashion was extremely important. Because the process is now automated, analysts can run the system effortlessly. Thomasson recommended the Instrument Query for its ability to isolate sub-sets of a portfolio and apply run time updates.

"It is such a powerful tool" Thomasson said. "Once built, it can be easily attached to a scenario, which keeps the procedure simple and automated."

"Being able to run different types of scenarios and stress tests is amazing – there are unlimited possibilities," says Murray.

He continues, "The SQL backbone of ZMdesk is one of the nicest features about the software. Having that type of connection allows us to extract the data and present it in whatever way we want. When working in Excel, you run the risk for a lot of errors. We don't find that is the case with SQL."

Marrying the Process

With the instrument query, Stifel is able to automate everything as long as they can package it. Before utilizing the instrument query, Stifel had to create multiple copies of the chart of accounts and make changes, process the runs individually and pull results. The instrument query transforms the laborious process into an efficient one.

"Being able to latch on to the specific batch process has been invaluable for the analysts," said Murray. "The database gets so large from having numerous and different clients loaded. The batch process improvements eliminate the need for analysts to see who else is loading data, and then make sure data runs are not getting stacked on top of each other. This process improvement has been a really big deal for us, especially with the First Empire integration."

The Need for Speed

Stifel prides itself on having the ability to automate their procedure and maximize "hands-off keyboard time" – time users spend running their simulations without interacting with the model. This extra time is priceless as it allows analysts to focus more of their time to analyzing the data and providing personalized strategies and advice.

"We believe this will be a complete turn-around from where we were," says Murray. "Hands-off keyboard time will be expanded significantly, and that's a big deal because the goal here is to spend more time looking at the runs and talking with clients about results and finding a strategy that fits in with their position. Having the AL model results in front of us quicker allows us to do that."

The speed of SQL in both retrieving and transforming the data is significant as well. Putting a procedure in SQL takes fractions of a second to retrieve the data in the format Stifel needs. Queries they have written are not complex – their value is they make the process more efficient.

WHAT'S NEXT

Murray sees the combined teams as a valuable resource to both banks and credit unions alike. Stifel has personnel who have expertise in several areas related to Treasury, as well as the portfolio side – mortgages, corporates, municipals, agencies, etc.

"The amount of overlay and synergy we have been able to create as a team has been fantastic," says Murray. "Collectively we have been able to make each other better and focus more on our clients."

The information that ZMDesk is generating is valuable, especially considering the modeling approach they are taking. Murray explains, "Using ZMdesk allows us to tailor our holistic balance sheet approach to individual clients. The next six-to-nine months will be really challenging for a lot of our clients, with the potential of a 20-30% unemployment rate looming. Loan growth will likely slow down after the PPP [Paycheck Protection Program] injection is over. Clients will need help in a lot of different areas, and we will continue to have spaces where we can carve out more efficiencies and be more responsive to clients, such as running additional stress tests and running negative rate scenarios."

"Having the ability and time to run these for clients is critical," said Murray. "To be able to offer the peace of mind that their balance sheet is ready to withstand this pandemic, or give them advice based on the results to make corrective changes is invaluable."

For ZMdesk, the team continues progress on client enhancements and new versions, and welcomes client input.

"I love working with Jason and we've been solving problems and finding solutions for about eight years now," Thomasson said. "Jason knows ZMdesk very well and is not afraid to call into our support desk for advice. Even if Jason thinks he has a solution, he'll give us a ring to make sure there isn't a more efficient way or if there is new functionality he's overlooked. It is why I always encourage our users to call in: having an open dialogue helps the user get the best solution and helps keep me and my staff up to speed on what challenges our users are facing."

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