

DOW CORNING: STP STARTS WITH DATA

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Srikanth Dasari
Head of Treasury Front Office
Dow Corning Corporation

CHALLENGE: MANUAL PROCESSES, COMPLEX SAP ENVIRONMENT & INDIVIDUAL CURRENCY VAR APPROACH

Challenge, part 1: Processes associated with a highly manual currency risk management program were time consuming, error prone, and heavily reliant on human capital

A cornerstone of Dow Corning's currency risk management was its balance sheet hedging program, which involved a notional value of \$15 billion across 2,000 trades per year. The time to process those exposures manually was significant: while accounting books closed by the 2nd workday at noon, exposure data was not available until the 4th workday – exposing the company to market risk in the interim. The associated human capital cost was significant as well: across the entire program, 600 hours per year in manual, repetitive work.

Manual currency management processes were also error prone. In the company's complex SAP-based multicurrency accounting environment, management of currency risk (e.g., hedging) is centralized while remeasurement is decentralized to the entity level. Entity-level accounting team members had the ability to deactivate or reactivate accounts used in exposure calculation (for a variety of reasons), but the individuals managing FX didn't have visibility into which accounts this was happening in. In that environment, exposure generation involved extracting balance sheet information from SAP and running a series of pivots and filters in Microsoft Excel.

Because that manual process was time consuming and error prone, the treasury team lacked full visibility into which accounts were actually being remeasured, and which weren't. Without that visibility, treasury was potentially over- or under-hedging, and that was causing volatility in the program. "The treasury team knew that they wouldn't be able to achieve their program improvement goals with those processes, if they didn't have visibility into which accounts were being remeasured, and which weren't," explains FiREapps' Brian French, the senior risk analyst who helped Dow Corning implement the FiREapps solution.

ABOUT DOW CORNING

INDUSTRY:

Specialty chemical manufacturing

ANNUAL REVENUE (2013):

\$5.71 billion

BUSINESS LANDSCAPE:

Global, with more than 50% of revenue outside the U.S.

ERP ENVIRONMENT:

SAP

FIREAPPS SOLUTION:

FX Analytics – Enterprise Edition

CASE STUDY HIGHLIGHTS

CHALLENGE

- » Highly manual processes were time consuming, error prone, and heavily reliant on human capital
- » An individual currency VaR approach to hedging meant a high number of trades (and associated cost) and no opportunity to leverage cross-correlations

SOLUTION

- » Comprehensive overhaul of each step in the currency risk management process
- » Automated straight-through processing to save time, reduce risk, and free up human capital
- » A portfolio approach that manages risk holistically – according to basket VaR

RESULTS

- » Gross savings of \$5 million per year from all quantifiable improvements across the FX program
- » Automated straight-through processing frees 600 hours of human capital and yields \$750,000 in reduced market risk
- » Portfolio VaR approach enables treasury to hedge less and protect more – and delivers \$2.75 million in savings



The manual nature of Dow Corning's legacy processes also meant heavy reliance on human capital. That posed two challenges: from an institutional knowledge perspective, it meant that the entire program would be highly affected if the one or two people who managed the spreadsheets that filtered balance sheet extracts and calculated exposures were not there. It also meant that much of the treasury team's human capital was consumed with non-value-adding activities, leaving little left for critical thought and strategic financial decision-making.

Challenge, part 2: An individual currency value at risk (VaR) approach to hedging meant a high number of trades (and associated cost) and no opportunity to leverage cross-correlations

Beyond time-consuming, error-prone, and human capital-reliant manual processes, Dow Corning took an individual currency value at risk (VaR) approach to hedging in both its future cash flow hedging program and tax hedging program. The treasury team assessed the Value at Risk (VaR) associated with individual currencies and chose which currency(ies) to hedge. But the lack of a holistic approach – which would take into account VaR across the company's entire portfolio of currencies – meant that the company likely executed on more trades than were necessary and missed opportunities to leverage natural hedges and exposure offsets.

“ *We didn't want to touch any data points more than once. We wanted to automate everything the system could handle and use human capital to provide thought leadership.*”

Srikanth Dasari
Head of Treasury Front Office
Dow Corning Corporation

SOLUTION: BEST-OF-BREED SYSTEM WITH AUTOMATED, STRAIGHT-THROUGH PROCESSING AND PORTFOLIO VAR APPROACH

Srikanth Dasari, Head of Treasury Front Office at Dow Corning explains the impetus behind the currency risk management program transformation: “With manual processes inside a complex SAP environment, we knew there were things we didn't know, and that made us uncomfortable. That discomfort drove our decision to transform the program.”

So the treasury team embarked on a comprehensive overhaul of each step of the currency risk management program. Dasari explains the overarching goal: “We didn't want to touch any data points more than once. We wanted to automate everything the system could handle and use human capital to provide thought leadership. Our philosophy was, and is: don't touch anything that a system can do better. Humans should spend time on value-adding activities – such as partnering with the business to foresee how developments in the pipeline might affect risk, and what needs to be done to remain compliant.”

Solution, part 1: Automated straight-through processing to save time, reduce risk, and free up human capital

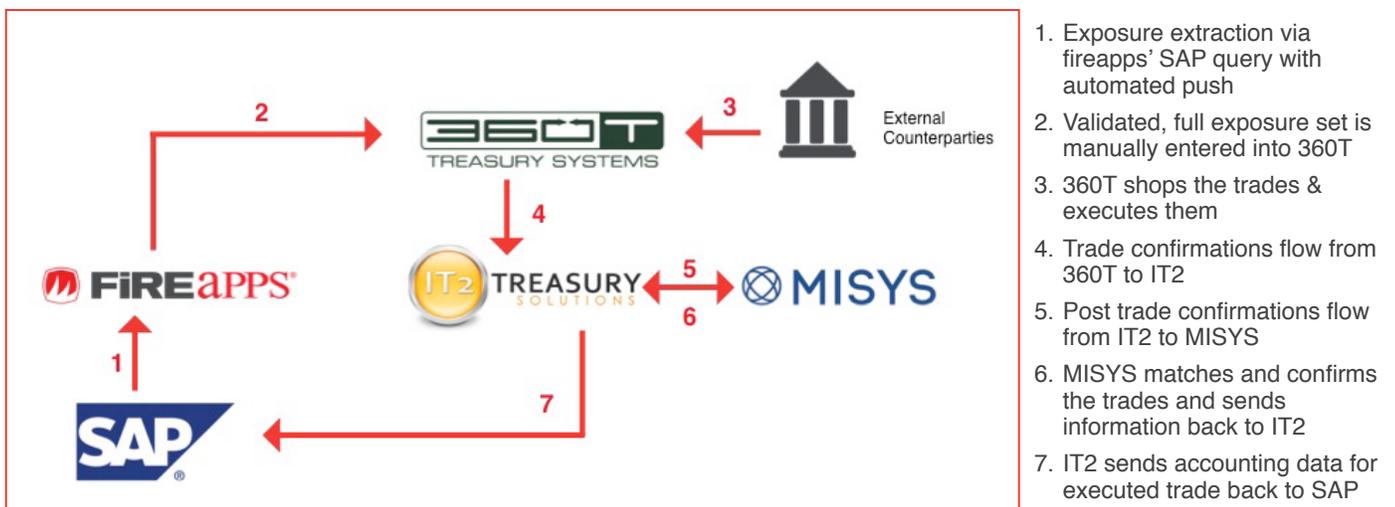
Dow Corning made the decision to implement automated, straight-through processing for three key reasons: 1) To reduce the time it took to calculate exposures after accounting books closed (eliminating the risk introduced by hedging two days after remeasurement); 2) To reduce the potential for errors via getting visibility into what was actually being remeasured; and 3) To free up human capital for higher value activities (and greatly reduce key person/institutional knowledge risk).

“ We knew that even if we automated the treasury management, trade execution, and trade accounting – if we were starting with incomplete or inaccurate data, then the system wouldn’t be fully effective. So in order to ensure accurate and complete data first, we decided to implement FiREapps in parallel with the TMS.”

Srikanth Dasari Head of Treasury Front Office, Dow Corning Corporation

First step: the data. When Dow Corning began exploring the FiREapps solution, the company had already begun implementation of IT2 as its treasury management system (TMS), planning to add in FiREapps and the other systems later. But Dasari realized that the team could take a parallel approach. “We knew that even if we automated the treasury management, trade execution, and trade accounting – if we were starting with incomplete or inaccurate data, then the system wouldn’t be fully effective. So in order to ensure accurate and complete data first, we decided to implement FiREapps in parallel with the TMS.”

Figure 1: Best-of-breed System with Automated, Straight-through Processing



Given Dow Corning’s multicurrency accounting environment, that decision was critical. “FiREapps added a lot of value in the initial cleanup of our environment,” Dasari said. “Cleanup” involved automating manual processes for determining which accounts had been remeasured. (Again, management of currency risk is centralized but remeasurement is decentralized.) The FiREapps team built a rule-based filter that automatically compares the SAP extract of all active accounts to a monthly list of which accounts should be remeasured and which to exclude. As a result, the Dow Corning treasury team now has the comprehensive, on-demand visibility they need, tailored specifically to their reporting process. Additionally, they now have a new level of visibility into which accounts are actually being remeasured – providing confidence in the integrity of their underlying exposure data.

Solution, part 2: A portfolio approach that manages risk holistically – according to basket value at risk

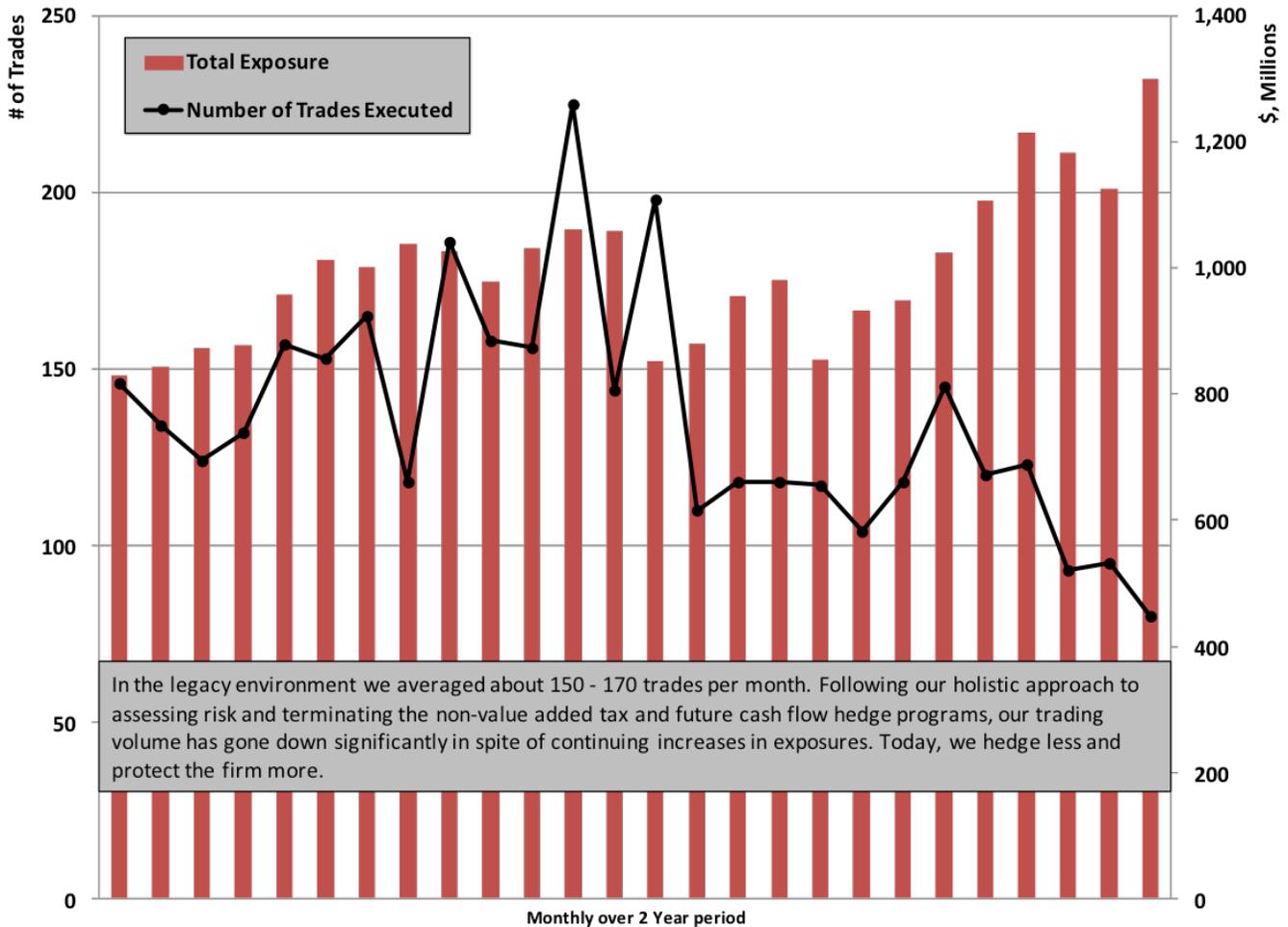
The human capital freed by automating previously manual processes allowed Dow Corning to dramatically change its approach to risk management. “We started to look at our risk holistically, focusing on basket value at risk as opposed to simply looking at and adding up the individual currency VaR,” Dasari explained. That portfolio risk approach, with analytics, allows the treasury team to understand currency risk taking into account correlations across its portfolio of currencies.



RESULTS: \$5 MILLION IN SAVINGS PER YEAR

Dow Corning estimates that its FX program transformation has generated gross savings of \$5 million per year from quantifiable improvements including reduced market risk, minimized hedge costs, natural hedging, and reduction of manual work.

Figure 2: Reduced Hedging Activity Even As Exposures Increased



Results, part 1: Automated straight-through processing frees 600 hours of human capital, yields \$750,000 in reduced market risk

The implementation of FiREapps' automated exposure extraction process enabled Dow Corning to shorten the lag between accounting books closing and exposure calculation – from two days to one hour. The reduction in market risk that had been generated in the two-day interim yields savings of \$750,000 per year. Across the entire program, automated, straight-through processing frees 600 hours of human capital a year, which the company puts toward higher value activities.

Results, part 2: Portfolio VaR approach enables Dow Corning to hedge less and protect more – and delivers \$2.75 million in savings

With the new ability to dedicate human capital to a portfolio value at risk approach, the treasury team at Dow Corning realized that its future cash flow and tax hedging programs were unnecessary. "A fresh look at our VaR analytics uncovered 70-80% natural diversification in the portfolios of both our tax and future cash flow hedging programs, justifying the elimination of both," Dasari explains.

“In fact, we were previously destroying the natural diversification with selective hedging.” Between saving option premiums and retaining natural hedging, the company has realized savings of \$2.75 million a year by eliminating its future cash flow and tax hedging programs.

Overall, the treasury team has been able to reduce the number of trades it executes, even as exposures have increased. Dasari elaborates: “In the legacy environment we averaged 150-170 trades per month. Following our holistic approach to assessing risk and terminating the non-value added tax and future cash flow hedge programs, our trading volume has gone down significantly in spite of continuing increases in exposures. Today, we hedge less and protect the firm more.”

Dasari explains that while the quantifiable dollar savings are significant, it is the harder-to-quantify outcomes that have been the most transformative. “We now understand what constitutes our exposures. It starts with access to error-free information (which we did not have in the past). In addition, we now have systems and processes to manage exposures very efficiently and effectively, despite volume or magnitude. But maybe most importantly, we now spend the 600 hours per year freed up from manual and repetitive work on long-term and big-picture ideas, and on partnering with the business. The thought leadership we now have in our currency risk management area is invaluable.”

“*Today, we hedge less and protect the firm more.*”

Srikanth Dasari Head of Treasury Front Office Dow Corning Corporation

Learn More

Many of the issues that Dow Corning describes here are detailed in the FiREapps whitepaper, Effective Currency Risk Management Requires Exposure Data You Can Trust Part 1: Setting the Stage – The Importance of Data Integrity in a Multicurrency Accounting Environment. Request a complimentary copy of the full whitepaper on our website: www.fireapps.com

About FiREapps

FiREapps is a leader in foreign exchange exposure management solutions. For over a decade, the company has helped global leaders eliminate FX surprises, reduce transaction costs and increase operational efficiencies. Its web-based FX Analytics enable corporate foreign exchange practitioners to accurately identify, quantify and manage foreign currency exposures based on complete data with minimal dependence on IT or finance resources. Beyond reducing the time, effort and complexity of data aggregation, FiREapps automates exposure calculation and provides an online view of exposures with drill-down access to account-level detail for enterprise-level analytics. They have offices in New York, Portland, and San Francisco, and are headquartered in Scottsdale, AZ.



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