Money is perishable

Aparajita Bose-Mullick, Product Manager of SmartStream.

ross-referencing the symbology of securities is an everyday exercise for financial firms. Yet it is often a manual process, which leads to mistakes. These result in losses and disruption across the business. Aparajita Bose-Mullick, Product Manager of SmartStream interviewed a former bond trader and a former data operations analyst about the cause and impact of these errors. Their comments a reveal a gulf in understanding and empathy – traders blame data operations for errors in manual entries, while data operations staff do not fully grasp the ramifications of mistakes. Both parties underestimate the complexity and challenge of what needs to be done.

So shouldn't it be possible to simply type in an ISIN or RIC and get a Ticker? Aparajita Bose-Mullick proposes a more reliable and intelligent alternative to traditional manual practices for symbology cross-referencing.

At present, symbology cross-referencing is not a straightforward process and it can be immensely error-prone. One of the greatest stumbling blocks lies in the fact that information relating to financial instruments is currently communicated using a variety of different codes, often devised by individual data vendors and exchanges – vendor and market identifiers, etc. Typically, these do not match up, preventing seamless intercommunication. There is no single, standardised identifier and, as the number of codes used to represent financial instruments continues to grow, complexity becomes ever greater.

Getting symbology cross-referencing right is, however, vital. A former fixed income trader, commenting about the importance of symbology (originator, dealer, exchange, and vendor identifiers)

for the trade function, said: "Money is a perishable commodity that never sleeps. My job is to make sure that it doesn't perish, and instead make it grow [through investment].

Bonds, unlike equities, are designed to have a lower risk profile, and I invest in bonds because I cannot let money perish, and letting it perish [losing money] is real, and it hurts. Missing out on trades because of mistakes in the linkage of data is an inexcusable reason to lose money. When we lose money on trade breaks it highlights missed opportunities that have little to do with my acumen, and are the result of careless data operations and data management, producing poor data quality.

Again, each event feels like a catastrophe because we lose real money. These incidences are real. Something as simple as symbology and being able to look up, seamlessly, whether an instrument I have a position in is trading up or down is a basic requirement, but without symbology and the ability to cross-reference nothing would get off the ground.

For example, when I decide to buy or sell a bond, I first identify it from the originator, and the terms and conditions that describe the bond are embedded into the construct of that identifier.

Then I need pricing for that bond from our internal systems, and market data is obtained from a variety of vendors – Bloomberg, Refinitiv, exchanges, etc. What links all the internal and external data should be the originator's identifier, but that's not always 100% reliable. Either way, I've introduced additional identifiers, from each party, into the mix. That means that I must be able to connect the instrument I want to trade with a variety of sources, both internal and external.

And I must trust that our operations team can source, merge, cleanse, manage, and maintain all

the data. It is a real risk that only gets recognised when we lose money.

Once the trade is executed, it then needs processing. If the trade doesn't execute due to bad data, like the symbology mapping is missing, then the transaction has failed – and money has perished".

The author spoke to a former data operations analyst to pinpoint why cross-referencing errors are still a frequent occurrence. The analyst explained that he had an undergraduate degree in electronics, but when he joined a financial firm, he was asked to fill in a spreadsheet to manually map the SEDOLs to the Reuters RICs, Bloomberg Tickers, CUSIPs, GMI codes, etc, which was then distributed. As he pointed out, he was not a data expert, nor did he understand the consequences of missing a code or of accidentally typing it in incorrectly. He knew that errors would impact the front-office trade function, but he did not know that their effect permeated through to the middle and back-office, potentially putting a firm in the crosshairs of the regulators.

In fact, far from simply causing disruption to the trade function, cross-referencing blunders can have a widespread impact. The tracking and processing of trades in the middle-office may be affected, while in the back-office there are likely to be implications for reconciliations, clearing and settlement of trades, back-office accounting, and regulatory reporting. In addition, P&L and NAV calculations may be thrown out of kilter, as will front-office accounting. Compliance and surveillance could be hit too.

Joining the dots can be a complex task and the success of the process rests on having reliable data. Unfortunately, mistakes do happen and then trades flounder. Slip-ups can be expensive – a failed trade may result in a significant financial loss.

To make matters worse, such failures can lead to friction between traders and data operations staff, and an erosion of trust. Trading desks then decide to move data quality functions into their own sphere, and effort is therefore duplicated, further adding to costs.

Surprisingly, many individuals working in the

financial industry are not entirely aware of the impact of these mistakes. As the earlier interview highlights, staff carrying out cross-referencing are often not data experts and nor do they fully understand the workflows running from the front through to the back office. They know the implications of an error for the front-office but may be unaware of the repercussions it can have on downstream processes.

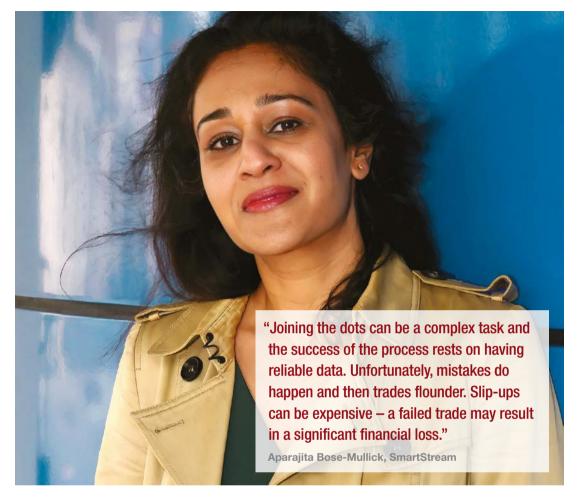
Concerningly, the financial sector appears simply to accept this situation. Yet firms are plagued by trade breaks, which represent one of the most burdensome overheads the industry currently shoulders. Given the pressure to keep costs down, such complacency is perplexing. Surely it would be better to tackle this weak spot rather than continue to clock up losses.

In response to this industry need, SmartStream has developed a symbology cross-referencing capability so that anyone can look up a RIC to get back a FIGI, etc. It offers an easy-to-use alternative to error-prone manual mapping. The service works by connecting and linking symbols used by vendors, exchanges and other bodies. It creates, in effect, a common language between the symbologies, acting as a translator between previously non-communicating platforms.

Underpinning this capability is the SmartStream Reference Data Utility (RDU). The RDU collects a vast quantity of highly detailed information on listed derivatives, equities and fixed income, from sources across the globe. The RDU is a neutral party, and a utility from which all users benefit. It is staffed by experienced industry experts, which ensures that its data is of the highest quality.

The RDU cross-referencing service is straightforward for users to tap into and, importantly, enables firms use their human capital more intelligently. Specialised resources, e.g. computer scientists or accountancy graduates, instead of being misallocated to cross-referencing tasks, can be directed to activities strategic to the firm.

For smaller firms, such as hedge funds, which want clean data and symbology but lack the headcount to tackle the complex workflows involved in manual cross-referencing, this service is



particularly beneficial, as it frees them up from the distraction of data operations.

Critically, minimising errors and improving the quality of the data entering firms' systems reduces the likelihood that flawed information disrupts downstream workflows or causes expensive trade failures.

Additionally, the RDU cross-referencing capability does not simply focus on the front-office. It offers a comprehensive perspective, providing all the necessary symbology for the front-, middle-and back-office functions to operate effectively.

More than ever, financial institutions need to be able to react with speed to geopolitical and market events. Take, for example, Western sanctions

against Russia, which left firms needing to unwind Russian positions rapidly, or the flash market crash of May 2022 – in both instances it was essential for firms to be able to trace connections between instruments speedily and identify affected positions. The SmartStream RDU cross-referencing service allows financial institutions to make these connections quickly, meaning institutions can respond promptly to today's market and geopolitical headwinds.

Finally, the SmartStream RDU cross-referencing service is already trusted at the highest levels. Its subscribers range from Tier 1 banks to margin calculators, and to some of the world's largest buyside firms.