

COMPANY NEWS

Reconciliations rise to top of tech agenda

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Sarath Madakayil, SmartStream

Financial institutions have a long list of technology to-dos. Some of the most obvious ones today are being speeded up by the COVID-19 pandemic, which is serving as a catalyst to automation across the board.

Artificial intelligence has matured to the point where it can now be deployed economically to tackle some of the hardest aspects of processing in the most efficient and accurate manner. Even before the pandemic hit, reconciliations were becoming a priority.

Reconciliations is the process of ensuring that two or more sets of records, such as account balances, payments, positions, etc. are in agreement. This sounds simple but because it involves many parties and countless transactions, it is in fact very difficult. Citi alone processes \$4 trillion worth of payments daily.

Reconciliations are critical to the functioning of the industry: a “break”, or mismatched accounts, can delay payments or transactions for days and require many people to scurry around solving the error.

“Say an organization processes 1 million transactions a day and 3% are unmatched,” said Sarath Madakayil, senior business solutions consultant for Asia Pacific at SmartStream Technologies. “That’s 30,000 transactions that someone has to match manually. So even a 97% match rate isn’t good enough.”

Operations executives are therefore pushing to automate in order to support the business.

“Clients want our digital platforms to have execution capability,” said Stacey Lacy, head of operations and technology for Citi’s Asian private bank, speaking at a [recent webinar](#) hosted by SmartStream, *DigFin* and ASIFMA. “It has to be straight-through when we receive trading orders. There is now a huge demand to things faster.”

Artificial intelligence is now mature enough to automate most aspects of reconciliations. Madakayil says A.I. tools can automate the entire process. For example, SmartStream’s TLM Reconciliation Premium uses A.I. across the lifecycle of matching records. This does two things. First it helps to automate the vast majority of reconciliations. Second, it makes the exception management a lot more efficient.

The lifecycle of a reconciliations begins with onboarding: an account has to be matched so it is fed into TLM. The system reviews firms’ input files with their accounts information and categorizes these so they can be properly matched.

Sometimes the information received is incomplete. TLM uses Supervised Machine Learning to automatically enrich data on load by learning from historical data patterns. It improves data quality to increase auto match rates and improves MIS and reporting capabilities.

For example, say a firm’s counterparty goes by a variety of legal or business names. An excel spreadsheet sort wouldn’t discover this, it would simply count these as different entities and counterparties. But machines can be trained to connect the dots and recognize that different names could represent a single counterparty.

Far more transactions can now be matched without human intervention. There will however be some errors. Traditionally this is where firms would field teams of people to analyze the breaks. TLM Reconciliation Premium uses A.I. to remove unnecessary headaches.

Through Supervised Machine Learning, TLM automatically enrich data using information from previously resolved breaks. Data patterns are analyzed to identify the best department or business entity for investigation. This process can significantly improve break resolution efficiency, as the trade is presented to the optimal business entity first. Importantly, it removes wasted effort involved in manual re-allocation of breaks.

It also predicts how long a break will take to resolve based on their data patterns (type, reason, resolution, account, amounts, etc). It can highlight critical and higher-risk breaks to the business. “Our output can be explained [‘Whitebox A.I.’] and audited,” Madakayil said. “We also provide a confidence value for each of the match group created by A.I. which a client would normally match manually.”