# Understanding the benefits of a robust intraday liquidity management system

Managing an effective intraday liquidity system doesn't have to be a tedious and drawn-out process.



The COVID-19 pandemic has not only disrupted the workplace but has magnified the strength or weakness of a bank's liquidity management amidst the economic challenges that followed the crisis. And with social distancing and lockdowns significantly impacting Asian economies, the immediate aftermath was for many Asian banks to preserve capital and stockpile cash as well as provide credit to businesses-thus, leading to a host of liquidity risks that can jeopardise their operations and affect their long-term sustainability.

Liquidity risk refers to a bank's inability to cover a payment or obligation at an expected time due to inadequate cash on hand. One prime example of this was the 2008 financial crisis, where, despite having enough capital on hand, many U.S. banks went bankrupt because they weren't able to raise the needed funds to meet their obligations in due time.

This problem could have been averted if the banks had an effective way of

managing their liquidity risk. Liquidity risk management, which also includes managing intraday liquidity, is important for banks because having little or no liquidity means banks lack money to fund their dayto-day business as well as any new business venture. Moreover, it can also lead to a liquidity crisis if new commitments don't push through due to a lack of funds.

Firms that can manage their intraday liquidity well during the business day enable them to make payments and settle security obligations day in, day out, and at any time of the day. Payment delays until the end of the day can severely be detrimental to the smooth operation of a bank's payment and settlement systems. Moreover, it can also increase the amount of credit risk and settlement risk in the financial system.

## Features of an effective intraday liquidity management system

Currently, the problem in managing intraday liquidity is that many Asian banks still rely on manual techniques. Research made by advanced technologies solution expert SmartStream revealed that many financial institutions still rely on a combination of spreadsheets, emails, phone calls, and manual gathering of information needed from various accounting, treasury and risk software, and core banking applications to manage cash and liquidity.

This process is highly ineffective. Aside from being a time-consuming process, it's complex to operate.

Banks with enhanced liquidity management systems in place will not only have a clearer, up-to-date picture of their liquidity, but they can also protect themselves more effectively. For example, these systems can issue automated early warnings on excessive changes in liquidity, or assist firms to stay within internal policy guidelines and alert them of any breaches.

This is an ambitious undertaking that requires the help of technology. Upgrading to an effective intraday liquidity management requires four important features: a single global platform, extensive real-time reporting, regulatory alignment, and stress testing results in minutes

#### Single Global Platform

Automation simply means having the process or system operate automatically, thereby replacing human labour—and errors.

Developed to deliver real-time cash and liquidity automation and reporting, SmartStream's Cash and Liquidity Management solution creates a single, global view of balances across all currencies and accounts – allowing an accurate understanding of data that includes funding, borrowing, and lending requirements. Furthermore, the solution uses artificial intelligence and machine learning to predict settlement times of projections that have yet to be cleared through the account, for example. This allows for better decision-making.

"If we look at it, having an automated data gathering capability, having the ability to get the liquidity position as it happens, knowing where that liquidity crunch point is and being alerted if you go beyond the guidelines—it's all in part and parcel of being able to automate that process and have data in as much as real-time as possible," said Nadeem Shamim, SmartStream's head of cash and liquidity management. "So effectively, you need to have the right level of data at the actionable time to make an informed and right decision," he said.

#### Extensive Real-Time Reporting

Real-time refers to data or information that is communicated or passed along at the time it happens, or with only a brief delay.

Applying this in managing intraday liquidity is important since it allows financial institutions to understand funding, borrowing, and lending requirements as they happen—from the highest level down to the individual transaction.

Real-time updated positions deliver up-to-date information, enabling firms to optimise their use of all available liquidity. Consequently, the treasurer has greater confidence in making funding decisions.

"I think the expression that I used earlier on is quality information, actionable timeframe. It helps a treasurer or cash manager monitor their liquidity in realtime," said Shamim.

"It integrates with internal systems to create an automated process to gather not only once a day updates on the liquidity demand, but regular updates as they come in, and then compare this with the automation on the external side. As the SWIFT messages come in, it then creates an updated position to say what I was expecting to settle and what has settled on the account," he added.

#### Financial Regulatory Alignment

Financial regulatory alignment allows clients to respond to industry regulations, ensuring they have the necessary risk controls in place to assist with compliance rules.

SmartStream's cash and liquidity management solution delivers the tools to actively manage a bank's liquidity as well as producing regulatory reports. Its TLM Cash & Liquidity Management solution supports banks to comply with BCBS 248 intraday liquidity management directives, delivering reporting within the BCBS 248 framework.

It also facilitates the active management of intraday liquidity, enabling banks to better meet several central banks' guidelines relating to internal capital and liquidity assessment processes.

Banks need to demonstrate to the regulators that they have intraday liquidity metrics at their fingertips. This means knowing exactly what their liquidity position is at any given time of the day. Coupled with the real-time information, having detailed analytics comparing point-in-time liquidity metrics with averages over a period is key to this control.

Stress Testing Results in Minutes The COVID-19 pandemic has made intraday liquidity stress testing more essential than ever. However, carrying out a stress test – defining its scope, gathering data, and running the test – currently can take up to eight weeks. Moreover, it also requires a large team and a good deal of manual effort. The cumbersome nature of the process makes running ad hoc scenarios virtually impossible, preventing a more proactive, dynamic approach to risk analysis.

According to Shamim, most Asian banks have been doing intraday liquidity stress testing, but they use a manual process in getting the information and changing the leavers.

"It takes a long time. So you need to have a more flexible tool for that," he added.

Stress testing moving beyond the regulatory tick box exercise. This is now being seen as a central pillar in a sound risk management framework. Financial institutions need to be proactive in their risk analysis to be better prepared to counter liquidity crunches. A flexible stress testing capability to generate risk reports quickly and accurately also facilitates more informed and timely decision-making. Importantly, through powerful analytical capabilities, quantifiable data, and metrics it provides, it can help banks understand whether they can reduce regulatory liquidity buffers—or not.

SmartStream's Intraday Liquidity Stress Testing module allows banks to define and run stress tests on-demand, utilising existing data. On-demand test execution means that results are available in a matter of minutes, rather than days or even weeks. The module provides extensive, real-time reporting, as well as sophisticated analytical capabilities and liquidity risk metrics.

### Upgrading to a more powerful intraday liquidity management system

Creating a more robust intraday liquidity management that uses advanced technology like AI and ML may be a challenge to attain for some banks, but Asia is ready for it.

"I think the Asian market is ripe for expanding into these intraday liquidities as the Asian banks are becoming prominent on the global stage. Many are now more advanced in their use of new technologies," explained Shamim. One of these is the use of machine learning and artificial intelligence.

"We use machine learning and artificial intelligence to start predicting the liquidity needs going forward," explained Shamim.

"So let's say that at noon, I have a certain number of payments and receipts that are still outstanding. Do I know what time they will settle, i.e. can I predict the settlement time of those payments and receipts? Does that create a potential liquidity crunch point? If not, does that mean some of the receipts that are coming in are too late? In that case, what payments am I obliged to make, and are they going to be delayed or missed for that matter? That has a significant impact not only on operational risk but with reputational risk as well." he added.

Moreover, Asian regulators are increasingly concerned about banks' ability to manage liquidity risks. Asian banks need to demonstrate that they have sufficient controls, framework, and management actions in place to address any changes in liquidity demands.

"Most of the Asian markets are ready for that right now. Still, what is becoming clear is that having an additional liquidity buffer sitting on top is no longer a viable option. Asian banks need to be actively managing it. And central banks are saying: 'Yes, I know you manage liquidity actively, but I need you to tell me exactly what liquidity you have at X point in time of the day. And that is becoming more critical than ever," he added.

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