Trading operations: Intelligent automation and the T+1 mandate

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ABSTRACT

As the financial services industry is finalising the adoption and implementation of the shortened settlement cycle on 28th May, 2024, and its implications to procedures, technology and behaviour, this paper lays out the benefits, challenges and best practices to ensure a smooth transition and implementation to all participants. The implications of these changes are enormous and open companies up to a variety of risks. This paper informs best practices to ensure a seamless integration, including operational, risk and communications. In addition, the paper focuses on practical steps to automating processes, centralising data and utilising technology to create a more efficient future. It points out that by utilising technology as a mechanism for continuous improvement, not only will companies be able to meet implementation requirements of this T+1 mandate but also create a mechanism to continue to meet regulatory changes. By utilising technology to create an environment of continuous improvement, powered by work orchestration, a fundamental shift in workforce behaviour can begin. In doing so, companies can ensure that they meet the operational requirements of this mandate, leading to efficiencies throughout their organisation and an improved employee and client experience.

Keywords: work orchestration, post-trade processing, streamlining, technology and automation, continuous improvement, trading operations, T+1, capital markets, asset management, banking, wealth management, trade settlement

HISTORY

Since 2017, the financial services industry has been moving towards shortening the settlement cycle with the goal of reducing counterparty risk, increasing market efficiency and improving liquidity. On 5th September 2017, the Securities and Exchange Commission (SEC) approved a proposal to shorten the US settlement cycle from T+3 to T+2. Since then, there has been a push towards further shortening the settlement cycle to T+1.

Shortening the settlement cycle to T+1 requires financial services companies to streamline their post-trade processes to ensure timely and accurate settlement. In this paper we discuss T+1 trade settlement best practices and how financial services companies can streamline their post-trade environments to meet the demands of a shortened settlement cycle.

Although the T+1 mandate is expected to be implemented in Canada soon after the 28th May, 2024 deadline, how quickly Europe will transition is still in question. The Association for Financial Markets in Europe (AFME) has set up a task force of stakeholders that will be affected by the shortened cycle to review the move to T+1. According to the AFME,

> 'further consideration will be required to identify changes to the current post trade operating environment that would be necessary to facilitate the change to T+1, and to agree on actions required to deliver those changes, including the appropriate time frame'.[1]

Additionally, Tanguy van der Werve, the secretary general of the European Fund and

Asset Management Association (EFAMA), stated:

> 'Given the high degree of exposure to one another's markets, the shortened settlement cycle will invariably require changes to existing processes for European firms and US investors exposed to European Securities. It is important that we leverage on these shorter-term priorities to build an industry view on the need for, and potential roadmap to, a shortened settlement cycle in Europe.'[2]

The task force will look at all aspects of the possible change including costs and savings as well as less tangible factors such as global alignment and market attractiveness, according to a statement from Peter Tominson, the director of post-trade at AFME.[3]

As Europe continues to study the implications of T+1, the implications to both ADRs, where the underlying security does not settle in T+1, and the foreign exchange (FX) implications to purchasers of cross-border securities need to be addressed. With FX transactions settling in T+2, purchasers would need to ensure that those trades are pre-funded, or they run the risk of increasing the failure rate of these transactions. In addition, with the many trading entities and regulatory frameworks that exists in Europe, the move to T+1 is a much more complex, nuanced discussion.[4] Finally, it is generally believed that 30–35 per cent of US assets are held by foreign investors in differing time zones — up to 12 time zones ahead when looking at the Japanese market. With this shortened time frame, they will have a window of a few hours or less to manage the process to settle trades. This non-US perspective is largely being ignored by the SEC, leaving European and Asian counterparts to study and determine the worldwide effects.[5]

With this as our backdrop, our themes and best practices are US-centric but applicable to changes occurring in Europe and Asia as well.

WHY THE MOVE TO T+1

The SEC has recently finalised rules to reduce risks in clearance and settlement. One of the key changes is the move from a T+2 (Trade date + two business days to settle) to a T+1 (Trade date + one business day) settlement cycle for most transactions in securities. The purpose of the new settlement cycle is to reduce the time between the execution of securities transactions and their settlement, to reduce risk, promote investor protection and increase operational and capital efficiency. This change is designed to benefit investors, mitigate risks arising from unsettled securities trades and reduce the number of unsettled trades overall. Additionally, this change will improve the processing of institutional trades and require a broker-dealer to either enter into written agreements or establish, maintain and enforce written policies and procedures for confirmations and affirmations for certain securities transactions.[6] The new rule changes will also improve the efficiency of the market plumbing and make it more resilient, timely, orderly and efficient. Other benefits include a reduction in a firm's open exposure during the settlement period, as well as a reduction in margin requirements. The Depository Trust and Clearing Corporation (DTCC) estimates that the removal of one day's exposure of risk could lead to a 41 per cent reduction of the volatility component of the National Securities Clearing Corporation (NSCC) margin requirements.[7]

This change is not without its own set of challenges. The move to T+1 settlement could create a situation where a trade could settle in one stock exchange but fail in another, especially during periods of high trading.[8] Obviously, this change reduces the amount of time to perform the work required to settle a trade. On the surface it

appears that the reduction in processing time is 50 per cent, but AFME studies show that the reduction is 83 per cent, since at T+2 there are 12 hours of processing time for settlement, while once T+1 happens the time has dropped to 2 hours of processing time.[9]

The SEC believes, however, that the benefits of the new rule outweigh the potential risks. As the implementation date of 28th May, 2024 approaches, market participants will need to adjust their operations, processes and technology accordingly. Although the current settlement cycle for securities transactions is T+2, depending on the transaction type, the settlement cycle can range from one to three days. Currently, Exchange Act Rule 15c6–1(c), which allowed for T+4 settlement for firm commitment offerings for securities priced after 4.30 pm Eastern time (ET), has also been amended to T+2 because of the rule change.[10] In addition, this move to T+1 primes the markets for an expected move to T+0 in the future. The move to more efficient operations, processes and systems now will lead to an easier transition to T+0 in the future. When considering the time zone differentials, the move to T+1 will already have Japan effectively behaving as if they are in a T+0 environment.

Figure 1 gives an example of how settlements will be structured across the world in UTC time.[11]

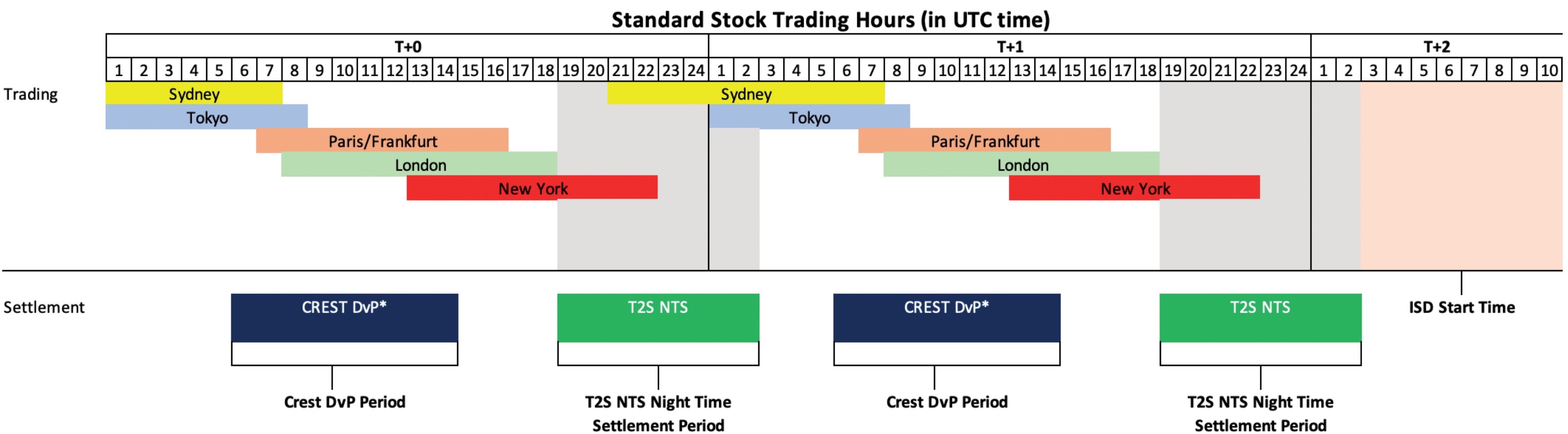
As can be seen from Figure 1, there will be times when one market is open and another is closed, leading to a disconnect in staffing to resolve issues before settlement date. This will lead to an increase in trade failures and potential changes in staffing models around the world.

The impact of this change will also be felt for corporate actions. Today, general practice states that ex-date should precede settlement date, one day before settlement date. The move from T+3 to T+2 did not affect this date structure. With T+1, this needs to change. With settlement date just one day from trade date, this would require ex-date and record date to be the same. If they are not treated in that way, there will be an increase in reverse market claims, leading to system disruptions and possible losses.[12] Systems and processes will need to be adjusted to reflect the change in the dates and their proximity to the trade activity.

The move to a T+1 settlement cycle has been in discussion for several years, with various industry stakeholders expressing support for the change. In fact, the DTCC, which is responsible for settling most equity trades in the US, has been testing the feasibility of T+1 settlement since 2016. The SEC's approval of the T+1 amendment in February 2023 has made this a reality. The T+1 mandate will have a significant impact on a variety of market participants, including brokerage companies, clearinghouses and custodians. These companies will need to update their systems and processes to comply with the new requirements. They will also need to communicate the changes to their clients and provide support for any issues that arise during the transition period.

While the T+1 mandate has been widely supported by market participants, there are also concerns about its impact on market liquidity. Some experts have warned that faster settlement times could lead to reduced liquidity, as investors will be less willing to trade knowing that they need to settle their trades within one day.

Another concern is the cost of implementing the necessary changes to market infrastructure. The SEC has estimated that the cost of moving to T+1 settlement could be as high as US$3.5bn–US$4.5bn to implement.[13] Still another potential challenge is the need for increased automation and standardisation in the market. With T+1 settlement, trades will need to be processed much more quickly than they currently are, and this will require greater automation and standardisation across the industry. While progress has been made in this area, there is



* Note: CREST DvP stops 14:00 for equities & notional fund units, and 14:55 for gilts, eligible debt securities and cash

Figure 1 Settlements structured across the world in UTC time

still much work to be done to ensure that the market can support the move to T+1 settlement.

As we continue to move forward toward implementation, a recent industry survey by Value Exchange on T+1 readiness that was co-sponsored by DTCC found that 41 per cent of respondents said they had not yet started T+1 preparations and 61 per cent of buy-side companies were unprepared for the transition. Additionally, more than 50 per cent of European and Asia-Pacific market participants have not defined their plans for managing areas including foreign exchange and securities lending.[14]

T+1 SETTLEMENT BEST PRACTICES

Clear communication

Clear communication is a critical aspect of ensuring that all parties involved in the trade settlement process are on the same page. Effective communication reduces the risk of errors and delays caused by misunderstandings or miscommunications. Parties involved in the T+1 settlement process, such as traders, operations teams and custodians, should communicate continuously throughout the settlement process to ensure that any issues or delays are identified and addressed in a timely manner. As the global financial industry has evolved in complexity, it is critical to investors that the dissemination of announcements to the market is accurate, timely and trustworthy, specifically as the industry is beginning to accelerate the settlement cycle to T+1, reducing post-trade processing time for broker-dealers, custodians, banks and other financial services organisations.[15]

The move to a T+1 settlement cycle will require market participants to adjust their operations, including their communication methods. According to the Investment Company Institute (ICI), a best practice time for allocations to be completed for a move to a T+1 settlement cycle is by 7.00 pm ET on trade date (T) to ensure that the settlement process can be completed in a timely manner. According to the SEC, the use of same-day affirmations is currently considered best market practice. Companies will need to re-examine their post-trade processes and procedures including communication methods to ensure that they can meet the new settlement cycle. Additionally, several processes that are currently carried out the day after trade execution, such as allocation, confirmation and affirmation, will need to be completed on the same day as trade execution to meet the T+1 settlement cycle. Therefore, market participants should consider adopting real-time communication methods to ensure timely and accurate communication between counterparties.

Automated processes

Automation can help to streamline the settlement process, reduce the risk of errors and improve operational efficiency. Automated trade matching and confirmation systems ensure that all parties involved in the trade settlement process agree on the same trade details. Automation reduces the time and resources required for manual processes, such as reconciling trades. Automated processes also enhance the accuracy and timeliness of settlement.

According to a survey conducted by investment management company BlackRock, 84 per cent of respondents agreed that automation can significantly improve the post-trade process's efficiency.[16]

Automation will be essential for market participants to meet the faster settlement timeline of T+1. By embracing best practices related to automation, market participants can improve the efficiency and accuracy of trade processing, reduce the risk of errors and delays and ensure they have access to the data they need to make informed decisions.

Taking 24 hours out of the system to investigate and process errors, fails, exceptions and corrections means that these processes will have to be expedited. Although we have

lost 50 per cent of the time in the settlement cycle, the actual impact to processes is an 80 per cent reduction in the time available to investigate these errors, fails, exceptions and corrections.[17] As a result, companies will be looking at automation and cost takeout to reduce manual processes and ensure lower cost of operation.

Embrace straight-through processing (STP)

Using straight-through processing (STP) to automate the entire trade life cycle, from order entry to settlement, with workflows and without the need for manual intervention is an essential step for meeting T+1 settlement requirements. STP can significantly reduce the risk of errors and delays associated with manual processing, as exceptions may be the biggest hindrance in meeting T+1 service level agreements (SLAs). To deal with exceptions, an enterprise workflow system should be considered to improve resolution times and processes. Teams that are tasked with investigating and resolving trade exceptions must have a centralised workflow system that connects disparate trading systems to back-end systems to unite data and allow for work collaboration, transparency, proactive alerts, intelligent routing and accountability.[18]

Robust risk management

Effective risk management is an essential component of the T+1 settlement process. The post-trade environment is vulnerable to operational risks such as counterparty risk, settlement risk and market volatility. Financial services companies should have robust risk management systems in place to identify and manage potential risks. Effective risk management ensures that settlements are completed successfully, and any issues are addressed promptly.

In the SEC announcement in February 2022, SEC Chair Gary Gensler stated: 'These proposed amendments … could lower risk to the financial system and drive greater efficiencies in the markets.'[19]

The theoretical practice of risk management involves a few steps: identifying, assessing, treating, monitoring and reporting risks. To manage risks associated with T+1 settlement, market participants should adopt best practices for risk management. Best practices include:

- Identify the risks associated with T+1 settlement;
- Assess their potential impact on their operations;
- Develop strategies to treat these risks, such as implementing controls to mitigate operational risks;
- Ensure that they have sufficient liquidity to meet settlement obligations;
- Monitor risk exposure and report any issues to their regulators and counterparties.

Proactive risk management is key to coping with the challenges of complex projects such as the transition to T+1 settlement. Therefore, market participants should establish a risk management framework that is consistent with their business objectives and risk appetite. They should also ensure that their risk management practices are regularly reviewed and updated to reflect changes in the market environment. By adopting best practices for risk management, market participants can reduce the likelihood of operational failures and ensure timely settlement in a T+1 standard settlement cycle environment.

Timely reconciliation

Reconciliation is the process of comparing and verifying trade details between different parties to ensure that they match. Timely reconciliation is critical for identifying and resolving any discrepancies or errors in trade details. Timely reconciliation is important for the T+1 settlement mandate because

it helps ensure that trades are settled accurately and on time. In a T+1 environment more timely counterparty obligation reconciliation will be critical, necessitating various improvements and automation.

Several processes that are currently carried out the day after trade execution, such as allocation, confirmation and affirmation, will need to be completed on the same day as trade execution to meet the T+1 settlement cycle. Broker-dealers, asset managers, capital markets companies and their institutional customers will need to review and reconcile trade data earlier in the settlement process to ensure timely settlement in a T+1 standard settlement cycle environment.

The pressure of technological change is pertinent to the post-trade system where industry-wide our capabilities are likely lagging our potential.[20] There are obvious cost benefits in simplifying. But if you look at the kinds of innovation the sector has seen since it built the systems on which it runs, there are also opportunities to take advantage of the benefits of new technologies and functions.[21] According to the T+1 Industry Playbook, 10.3 per cent of respondents identified technology as one of the biggest challenges to implementation of the T+1 mandate.[22]

POST-TRADE ENVIRONMENT STREAMLINING

Centralising data

Centralising data ensures that all parties involved in the T+1 settlement process have access to the same information. Centralised data reduces the risk of errors and delays caused by miscommunications or differences in data. Financial services companies can centralise data by using a centralised data repository that stores all trade details, such as trade confirmation and settlement instructions. In anticipation of the operational impact of T+1, 23 per cent of investors are moving to centralised SSIs and trade matching to alleviate future service provider challenges.[23]

Centralising data for T+1 in financial services refers to the practice of aggregating and consolidating all relevant data from various sources to make it available for analysis and decision making on the following day (T+1). In the financial services industry, timely and accurate data is crucial for effective risk management, regulatory compliance and investment decision making. Centralising data for T+1 allows financial institutions to have a comprehensive and up-to-date view of their operations, positions and exposures, which is essential for managing risks and making informed decisions.

There are several benefits to centralising data for T+1:

- *Real-time risk management*: By centralising data, financial institutions can monitor their risk exposures in real-time, enabling them to identify and respond to potential risks promptly. This is particularly important in today's fast-paced and interconnected financial markets;
- *Enhanced decision making*: Having timely access to accurate and comprehensive data allows financial professionals to make more informed decisions. Whether it is analysing market trends, assessing investment opportunities or evaluating portfolio performance, centralising data for T+1 provides the necessary information to make well-founded decisions;
- *Improved regulatory compliance*: Financial institutions face stringent regulatory requirements, and centralising data helps ensure compliance. By consolidating data from various systems and sources, organisations can quickly generate the reports and documentation necessary to meet regulatory obligations, reducing the risk of non-compliance;
- *Operational efficiency*: Centralising data eliminates the need to manually gather information from multiple sources,

reducing the time and effort required for data preparation. This streamlines operational processes, improves efficiency and frees up resources to focus on higher-value tasks.

Centralising data for T+1 also presents some challenges:

- *Data integration*: Financial institutions often have diverse systems and data sources, which may require complex integration efforts to centralise the data effectively. Ensuring data quality and consistency across different systems can be a significant undertaking;
- *Data security and privacy*: Centralising data requires robust security measures to protect sensitive financial information. Financial institutions must implement stringent security protocols and comply with data protection regulations to safeguard customer data and maintain trust;
- *Scalability and flexibility*: As financial institutions grow and evolve; their data volumes and requirements may change. Centralising data infrastructure should be scalable and flexible enough to accommodate future needs and accommodate new data sources or analytics tools;
- *Data governance*: Centralising data necessitates a robust data governance framework to ensure data integrity, establish data ownership, define data access rights and maintain data quality. Effective data governance is crucial to minimise errors, inconsistencies and unauthorised access.

In summary, centralising data for T+1 in financial services offers numerous benefits, including real-time risk management, improved decision making, regulatory compliance and operational efficiency. Careful planning, data integration, security measures, scalability and effective data governance are required, however, to overcome the associated challenges and realise the full potential of centralised data. With centralised data in common, market participants have the tools to create synchronisation and transparency across processes that will mitigate the risks related to T+1 settlement.[24]

Standardising processes

Standardising processes ensures that all trades are settled in a consistent and efficient manner. Standardised processes reduce the risk of errors and delays caused by manual processes or different workflows. Financial services companies can standardise processes by using common templates, workflows and protocols for trade confirmation, matching and settlement.

According to a survey conducted by financial services company BNY Mellon, a majority of respondents (85 per cent) agreed that standardising processes could improve the post-trade process's efficiency.[25] Based on new requirements under Rule 15c6-2, which came out of the T+1 change, broker-dealers must ensure the establishment and maintenance of policies and procedures to ensure completion of these processes as soon as possible, but no later than the end of trade date. Rule 204-2 under the Investment Advisers Act of 1940 has also been amended to require advisers to retain records of these processes for some transactions.[26]

Standardising processes for T+1 in financial services involves establishing consistent and streamlined procedures to ensure efficient and accurate operations on the following day (T+1). This standardisation helps financial institutions maintain operational efficiency, improve risk management and comply with regulatory requirements.

The following are key points to consider when discussing the standardisation of processes for T+1 in financial services:

- *Trade settlement*: Standardising the trade settlement process is essential for timely and accurate post-trade activities. This

involves establishing a set of procedures and timelines for confirming trades, reconciling accounts and ensuring the timely transfer of assets and funds. By standardising settlement processes, financial institutions can minimise errors, reduce settlement risks and optimise operational efficiency;

- *Data reconciliation*: T+1 requires reconciling various types of data, including trade data, transaction data, position data and cash balances. Standardising the reconciliation process involves defining consistent rules and methodologies to ensure accurate matching and validation of data across systems. This reduces discrepancies, improves data integrity and enhances operational control;
- *Reporting and compliance*: Financial institutions are subject to regulatory requirements that mandate timely reporting of trades, positions and exposures. Standardising the reporting process ensures that the necessary reports are generated and submitted within specified timelines, minimising the risk of compliance violations. It involves defining standard report formats, data extraction methods and submission procedures;
- *Risk management*: Standardising risk management processes for T+1 involves establishing consistent methodologies and tools for measuring, monitoring and mitigating risks. This includes setting standardised risk limits, defining risk indicators and implementing consistent risk assessment frameworks. By standardising risk management processes, financial institutions can improve risk oversight, make timely risk-based decisions and enhance overall risk culture;
- *Data aggregation and consolidation*: Centralising data (as discussed earlier) is a crucial aspect of T+1 processes. Standardising data aggregation and consolidation involves defining common data formats, integration protocols and data validation rules. This ensures that data from different sources is consistently and accurately aggregated, facilitating efficient analysis and decision making;
- *Technology and automation*: Standardising processes for T+1 often involves leveraging technology and automation tools. This includes implementing standardised software solutions for trade capture, reconciliation, reporting and risk management. By automating repetitive tasks and establishing standardised workflows, financial institutions can reduce manual errors, improve efficiency and free up resources for more value-added activities. Technology will effectively be table stakes in most markets. Getting it right will require a new strategic agenda and, usually, significant investment. We expect most companies to step up their digitisation activities, leading to reimagined business models, new technology capabilities, greatly increased efficiency and transformed client relationships.[27]

Benefits of standardising processes for T+1

- *Operational efficiency*: Standardised processes streamline operations, reduce manual effort and minimise errors, leading to improved efficiency and productivity;
- *Risk reduction*: Consistent processes enhance risk control and reduce the likelihood of errors or delays, mitigating operational and compliance risks;
- *Regulatory compliance*: Standardisation helps ensure timely and accurate regulatory reporting, reducing the risk of compliance violations and associated penalties;
- *Scalability and flexibility*: Standardised processes provide a foundation for scalability and adaptability to accommodate changing business needs and emerging technologies;
- *Improved collaboration*: Standardised processes enable better coordination and collaboration among teams and

departments, facilitating smoother information flow and decision making.

Challenges in standardising processes for T+1

- *Resistance to change*: Implementing standardised processes may encounter resistance from employees accustomed to existing workflows, necessitating effective change management strategies;
- *Complex integration*: Harmonising processes across different systems and departments can be challenging, requiring careful coordination and integration efforts;
- *Regulatory changes*: Regulatory requirements are subject to change, requiring continuous monitoring and adjustment of standardised processes to remain compliant;
- *Customisation needs*: Balancing standardisation with the need for customisation to address unique business requirements can be a challenge.

In conclusion, standardising processes for T+1 in financial services offers significant benefits in terms of operational efficiency, risk management and compliance. By establishing consistent and streamlined procedures, financial institutions can improve their ability to settle trades, reconcile data, generate accurate reports and manage risks effectively. Standardisation also enables better scalability, adaptability and collaboration within the organisation.

There are challenges to consider, however, such as resistance to change, complex integration requirements, the need to adapt to evolving regulatory frameworks and finding the right balance between standardisation and customisation.

To successfully standardise processes for T+1, financial institutions can follow these key steps:

- *Process assessment*: Conduct a thorough assessment of existing processes and identify areas that can benefit from standardisation. Determine pain points, bottlenecks and areas of improvement;
- *Define standardised procedures*: Clearly define standardised procedures, workflows and timelines for each process. Develop documented guidelines and manuals that outline step-by-step instructions for carrying out tasks related to T+1 operations;
- *Establish governance and oversight*: Create a governance framework to oversee the standardisation efforts. This includes assigning responsibility for process adherence, ensuring compliance with regulations and monitoring performance metrics to measure the effectiveness of standardised processes;
- *Training and communication*: Provide comprehensive training programmes to employees to familiarise them with standardised processes. Effective communication channels should be established to ensure that everyone is aware of the changes, their roles and the benefits of standardisation;
- *Technology implementation*: Invest in appropriate technology solutions to support standardised processes. This may include implementing integrated software systems for trade settlement, reconciliation, reporting and risk management. Automation tools can streamline tasks, reduce manual errors and improve efficiency;
- *Continuous improvement*: Standardisation is an ongoing process. Regularly review and refine standardised procedures based on feedback, emerging industry best practices and regulatory updates. Foster a culture of continuous improvement to adapt to changing market conditions and business requirements;
- *Collaboration and feedback*: Encourage collaboration among different teams and departments involved in T+1 processes. Seek feedback from employees on the effectiveness of standardised

processes and identify areas for further improvement.

By following these steps, financial institutions can establish consistent and efficient processes for T+1 operations, resulting in improved operational performance, better risk management and enhanced compliance with regulatory requirements.

USING TECHNOLOGY

Technology can help to automate and streamline many aspects of the post-trade process, including trade matching, reconciliation and reporting. Technology reduces the time and resources required for manual processes and improves the accuracy and timeliness of settlement. Financial services companies can use technology such as automated trade matching and reconciliation systems, electronic settlement instructions and real-time reporting to streamline their post-trade environment. According to a survey conducted by financial services company State Street, 75 per cent of respondents agreed that technology can significantly improve the post-trade process's efficiency.[28]

There are numerous ways companies can consider using technology to facilitate T+1 settlement:

- *Trade capture automation*: Automation of trade capture processes can help reduce manual errors and ensure timely trade capture, which is critical for T+1 settlement. This can be achieved using electronic trading platforms, STP and other automated tools;
- *Real-time data capture and reconciliation*: Real-time data capture and reconciliation can help ensure accurate and timely settlement by allowing companies to quickly identify and resolve discrepancies. This can be achieved using automated reconciliation tools that compare trade data with counterparty data in real-time;
- *Digital confirmation and affirmation*: The use of digital confirmation and affirmation tools can help eliminate paper-based processes and reduce the time required to confirm and affirm trades. This can be achieved using electronic confirmation and affirmation platforms that allow counterparties to confirm trades quickly and easily;
- *Business process management*: Teams that deal with investigating and resolving trade exceptions must have a centralised system that connects to disparate trading systems to unite data and allow for work collaboration, transparency, proactive alerts, intelligent routing and accountability. Workflows to automate manual process will be crucial to the success of achieving settlement SLAs, especially when they are reduced by 24 hours (T+2 to T+1). No longer can spreadsheets be relied upon to manage trade exceptions efficiently and effectively;
- *Blockchain technology*: The use of blockchain technology can help facilitate T+1 settlement by providing a secure and transparent platform for trade settlement. Blockchain can help reduce settlement times and increase efficiency by eliminating the need for intermediaries and reducing the risk of settlement failures.

Overall, the best way to use technology for T+1 settlement will depend on the specific needs and requirements of each company. Companies should assess their existing processes and identify areas where technology can be leveraged to improve efficiency and reduce settlement times. They should also consider partnering with technology providers and other companies to develop innovative solutions that can help facilitate T+1 settlement.

CONTINUOUS IMPROVEMENT

Continuous improvement is an ongoing process that involves identifying and

addressing areas for improvement in the post-trade environment. Financial services companies can improve their post-trade environment by identifying inefficiencies in processes, addressing communication gaps and leveraging new technologies and best practices. Continuous improvement ensures that the post-trade environment remains efficient, effective and secure.

According to a survey conducted by financial services company BNY Mellon, 79 per cent of respondents agreed that continuous improvement could improve the post-trade process's efficiency.[29]

Companies should be investing now into a future vision for trading operations powered by workflow orchestration which will enable a fundamental shift in their operations workforce. It should shift the focus of operations professionals from manual work and investigations to value-add activity and optimisation while allowing the business to scale, by:

- Driving operational efficiencies that lower cost and translate into better value for clients and business partners;
- Targeting solutions that enhance business partner and client experience;
- Achieving a faster time to market for new products and features that can adapt to shifting client demand;
- Building futureproofed, resilient foundations to adapt to future regulation and market innovation.

The goal should be to:

- Increase automation and standardisation across regions reducing manual touchpoints at risk of failure;
- Unify process between businesses resulting in reduced duplication where a trade flows through multiple teams;
- Reduce volume of client facing issues and improved engagement strategy will act as a business differentiator;
- Shift from manual e-mail to STP channels that allow for automated notifications and self-serve portals. Increase STP flows, preventing operational bottlenecks which make it hard to scale the business, and quickly react to external change (eg move to T+1 settlement cycle, market volatility, new business opportunity);
- Realtime management oversight and insights on operations capacity, bottlenecks, proactive notifications, escalations in the process and actionable insight to further optimise.

VISION FOR A SIMPLIFIED AND INTELLIGENT POST-TRADE ERROR RESOLUTION PROCESS

Failed trades remain a big issue and cost driver for the industry. With the shortening of the settlement cycle, the automation becomes an even greater imperative. According to the European Securities and Markets Authority, failed trades account for about 3 per cent of the trades value in corporate bonds and sovereign debt markets and about 6 per cent in equity markets. One main problem is that trade execution is often happening in aging core systems or homegrown systems that are not well integrated or built with an eye on the client experience. In addition, with a shortened settlement window, the time to resolve issues before settlement has dropped by 80 per cent. With these aging core systems and the lack of automation they provide, there is potential for an increase in post-trade failures. A modern process calls for a simpler, more data-driven and integrated workflow to reduce complexity and accelerate resolution.

Applying all the best practices above, we have established a vision for a simplified post-trade error resolution process:[30]

- *Simplify the investigation*: A single platform should directly ingest data from

the source systems, whether in the form of Excel reports or an application programming interface (API) and enrich each work case with relevant information needed to resolve the issue. Instead of juggling various systems during an investigation into an issue, personnel can determine the root cause quickly and in a standardised yet more intuitive way. This ability also can help detect recurring or bulk issues (eg with a particular account, trade subject or client) and thereby enable mitigation of multiple cases;

- *Create clear responsibility and visibility*: The ability to determine, manage and track assignments during an investigation is essential to provide all stakeholders with an up-to-date situation overview and the ability to prioritise or escalate work cases if necessary. This visibility accelerates investigations based on prioritisation, timeline and urgency and helps organisations resolve issues within the given SLAs. Optimally, this visibility also equips support staff with clear guidance on working with other stakeholders needed to resolve the issue. This system can also provide the overarching risk framework to ensure that the company's policies, procedures and regulations are being met throughout the life cycle of the transaction. With the advent of T+1 and the possibility of T+0 following soon after, a systematic approach to responsibility and management of issues with an overarching risk framework can help companies futureproof the process while providing agility and flexibility to manage regulatory changes as they arise;
- *Optimise resolution and remediation*: Following the investigation and root cause analysis, the remediation can be triggered and automatically assigned to the right stakeholder (eg the adviser to collect additional information from the client). The moment the action is completed and added to the system of record, the case can be closed or passed to other stakeholders or another action can be taken. Managing this process on a single platform will allow for the data to be compiled and leadership decisions to be made to flex to additional regulatory changes as they arise, like the possible shift to T+0;
- *Create a clear audit trail* to demonstrate mitigation within the SLA time frame and avoid potential liabilities. This audit trail, coupled with reporting capabilities, will give companies the ability to report on effective execution of the new processes that are being established;
- *Simplify the employee experience*: A guided process within a single interface improves the staff experience and streamlines employee onboarding and training, reduces the potential for errors that can cause more delays, and increases overall employee productivity.

CONCLUSION

T+1 settlement will be a critical aspect of the financial services industry, and effective settlement practices are necessary to reduce operational risks and costs. To effectively mitigate this change, best practices of clear communication, automated processes, robust risk management, timely reconciliation, centralised data, standardised processes, technology and continuous improvement are essential for successful T+1 settlement and post-trade environment streamlining.

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