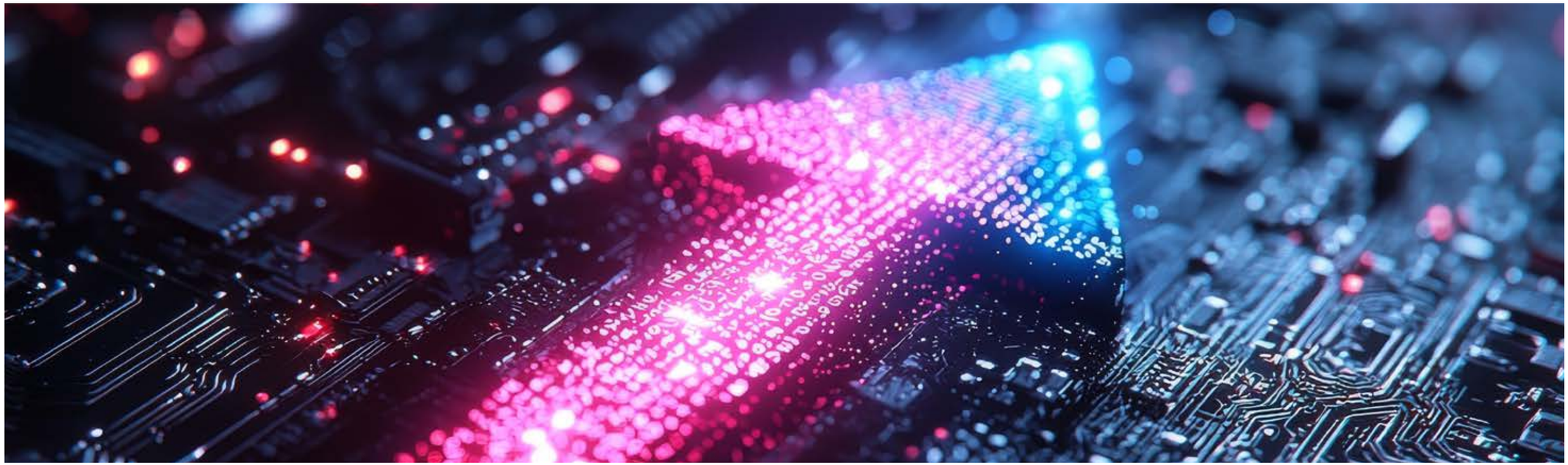
Opportunities with Technology as we Compress Settlements Towards T+0



Although many firms have viewed the migration to T+1 as a further compression of an existing tried and tested model, the models for T+0 will need a far more radical change in approach and far wider use of different technological tools.

The fact that regulators and markets are actively considering the merits and viability of T+0 is in part down to progress that has been made with underlying technologies and applications – including use of cloud, development of APIs, the growing use of AI and Machine Learning and the expanded use of data parameterisation to drive real-time analytical engines.

There are 3 core models that industry groups are considering for T+0 including end of day netting, atomic settlement and RTGS based settlements. Although each brings different benefits and implementation challenges – our view is that we are likely to see all 3 models evolve – where each aligns to different asset classes or market priorities, and hence any future focused systems will need to cater for all such options.

While atomic and RTGS settlement infer a need for total accuracy at the point of trade execution – netting still allows for an element of post trade resolution.

To accommodate these same-day and instant settlement models at scale, the market needs to address a few core areas of functionality:

- maximising settlement system availability windows and removing downtimes
- intensifying the levels and scope of pre-trade validations,
- developing near-real-time data exchanges between the actors in the trade lifecycle, and
- developing highly automated post-trade exception resolution tools.

With each of the T+0 models- the goal is to resolve as many potential issues ahead of trade execution as possible and this is the most important area of operating model transformation for the industry.

In terms of pre-validation of information – the use of Cloud and APIs will help drive the core processes to ensure that all data is accurate. For example, we have seen an expansion in the use of Cloud based central SSI repositories to digitise traditional documents and firms will use APIs to continuously validate this information ahead of trading.

The same tools on client static data will be necessary to reduce inconsistencies and errors in data related errors, ensuring these are synchronised across clients, their trading partners and custodian banks.

The industry may need to go further than this – to ensure that areas such as commissions, standard allocation ratios and securities identifiers are pre-checked and available to all parties, where reconciliation breaks are actively and rapidly resolved ahead of trading, using AI based anomaly detection tools.

Asset managers will require more sophisticated tools to control and channel their trading activity. Asset managers may need to select brokers for a trade based on the state of pre-validation matching, avoiding executing through firms where known unresolved discrepancies exist, and also ensure coverage of other areas of data pre-validation. We will see a benefit from more standardised trade

allocation sets – which in turn may adjust what accounts are amalgamated under existing bulk trading models. And funding cycles will need to start prior to trading – a shift from existing models – and maybe a move towards more sophisticated treasury engines linked to front office platforms.

The final area that is critical to atomic and RTGS focused settlement is the need to validate availability and immediate blocking of inventory and funding, and clarity on the place of settlement.

This really emphasises the importance of API based integration with trading engines / order management platforms and with near-real-time data exchange capabilities between the clients, brokers and settlement / custodian entities, and CSD/market matching platforms.

In terms of post-trade exception resolution, for the netting model, the windows will be far shorter than exist under existing T+1 or T+2 models. The industry must consider a model where issues are resolved automatically under a self-healing approach and this will require far more extensive use of APIs and AI/ML technologies.

This will require stronger market principles for resolution of mis-matches between parties, so that firms can automate resolution of discrepancies instantly without the traditional bi-lateral exchanges. Our systems will need to hold these rules and execute workflows based on the interpretation of a mis-match under these rules. Platforms that can identify parties at fault and immediately suggest digital changes will be critical to self-healing models.

Inventory issues trigger a broader set of challenges under the T+0 models, and while models for atomic and RTGS will require pre-trade validations and blocking, the netting models will offer more flexibility. Issues around different PSETs or Place of Settlements, or partially available positions will need highly automated approaches to resolution, where market rules principles are clearly configured into settlement systems across asset managers, brokers and their settlement banks and custodians.

We haven't really talked about blockchain as a solution. At a conceptual level many of the underlying issues would be solution if common single views on static and reference data are used and a common view on execution related data and integrated access to inventory data. However, the complexity lies in its rollout – and bringing multiple fragmented parties onto a common platform – for this reason we feel this is more viable initially with newer less liquid asset classes than for heavily traded equities.

At the heart of this transformation, every firm will need a clear view on their technology journey and partners that can help this journey. All the toolsets that we have discussed are available today and commonly used, however, firms will need to consider what can be progressively introduced into their existing T+1 models, and develop the foundation for these in live environments.

We are rapidly moving from scheduled push-based models on data exchange towards point of time-based pull models at a time that data is required. Our proficiency on APIs and increased standardisation to expediate adoption will be critical. It is also an excellent use case for development of AI and ML based tools – where predicting outcomes from far more complex sets of parameter data, sophisticated anomaly detection, active suggestion-based exception resolution paths and dynamic automation of operations workflows will need to be core capabilities.

And the most exciting part of this – is that all of these tools can be used to enhance existing T+1 models. And maybe for the first time – firms can get ahead of market changes and truly be future-proofed in Settlements!

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