



THE MIDST OF A POST-TRADE REVOLUTION

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In June 2020, the Bank of England (BoE) created a Post-Trade Technology Market Practitioner panel to look at the future of post-trade systems and processes. The subsequent report posited that post-trade processing across the industry is too reliant on manual and outdated technological processes.¹ Decades of under-investment in the middle and back office has meant that large-scale overhauls of post-trade platforms have been few and far between. Consequently, post-trade operations involve the most amount of manual processing of any part of the trade lifecycle. Without modernisation of post-trade technology and processes, the elusive aim of straight-through processing (STP) is unachievable. This article examines the challenges and possible solutions to the 'post trade problem' and what might be done to accelerate the move towards full automation of the trade lifecycle.

Post-trade is an umbrella term to define all events and activities that take place in the lifecycle of a trade after the point of execution. Colloquially, the term is used to describe only processes undertaken by Operations teams, such as confirmation, clearing, settlement, collateral allocations, margin calculations and corporate actions, but it can also be extended to include other downstream processes, such as regulatory and management reporting and processes performed by Finance and Risk departments. While they are sometimes viewed as taking place at the mundane end of the trade lifecycle, post-trade services are an indispensable part of the end-to-end transaction and value chain, enabling the discharge of obligations entered into at trading level, and the processing of corporate actions initiated by issuers for the benefit of investors.

The Post-trade Patchwork Quilt

Post-trade activity within financial services firms – particularly larger organisations – tends to take place across a variety of systems, teams and locations, often with significant differences in structure between products and product sets and not infrequently within the lifecycle of a single product. Typically, technology investment in the back office is enough to make it work and a 'good enough' mentality has been rife for many years. So, although for the most part, the trade lifecycles conclude as expected, the post-trade stretch of the trade lifecycle requires the most effort.

It goes without saying that the highly manual, non-standardised, non-linear, often duplicative nature of these processes is inefficient and unnecessarily complex. Multiple systems and data sources as well as disjointed workflows are often the root cause of post-trade issues, and add extra layers of reconciliation and correction. Inefficiency at the end of the trade lifecycle is not the only concern: there is also a high risk of errors or even fraudulent activity being undetected as a consequence of the overly complex and manual nature of many processes. To alleviate this post-trade industry-wide issue there must be a push for stricter governance, innovation and supervisory oversight.

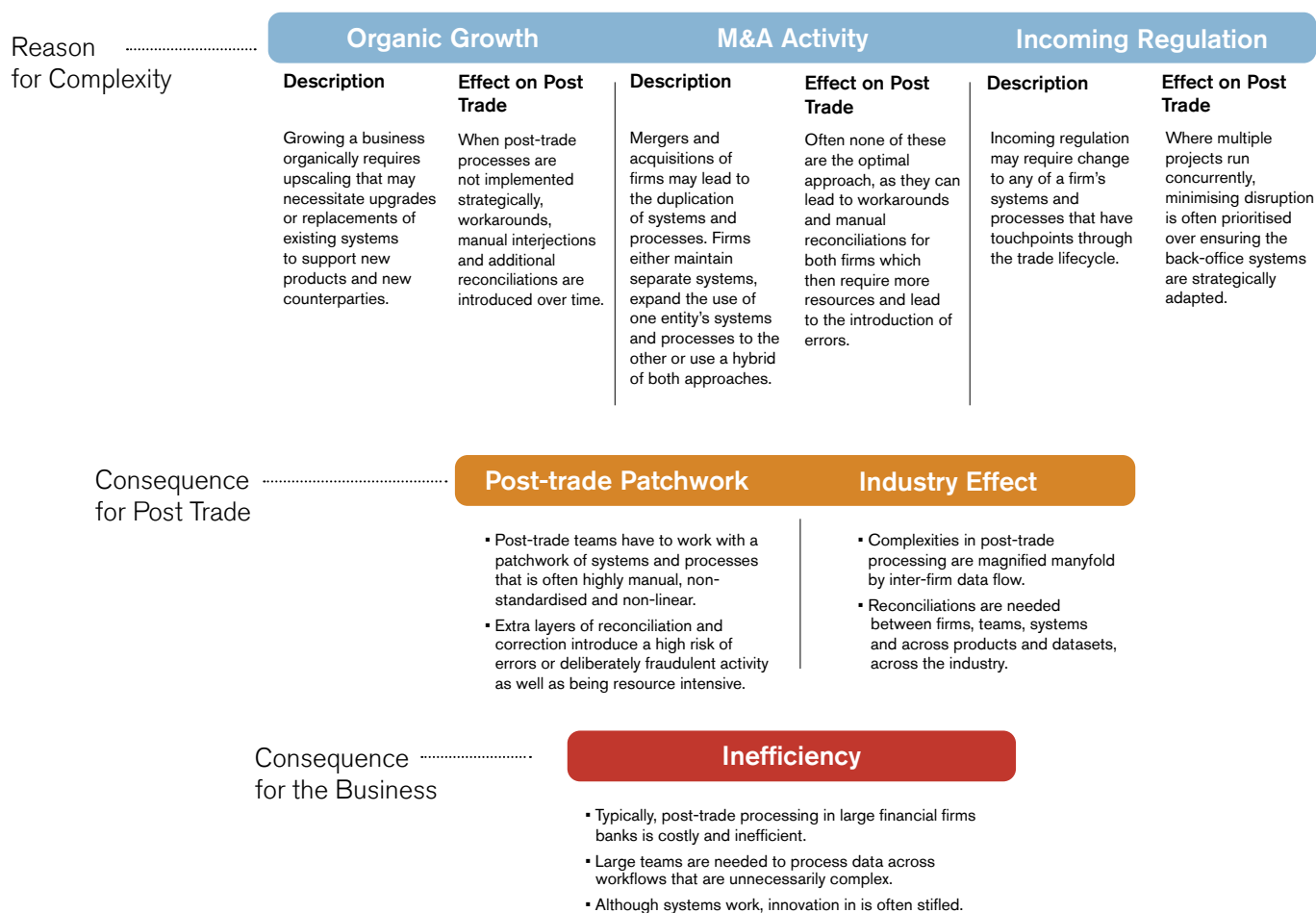
To remedy the patchwork of technology platforms that result in inefficient, duplicated and disjointed processes can be costly and difficult to manage, but without some real action being taken firms may find that their innovations in other parts of the business are limited. While a lack of investment in the post-trade part of the enterprise is certainly one of the causes – operational cost centres typically have less budgetary influence than revenue generators – it would be disingenuous to suggest that most organisations have not made attempts to reduce complexity in the back office through investment. Some of the reasons for the problematic technology landscape within an organisation are outlined in [Figure 1](#).

Without modernisation of post-trade technology and processes, the elusive aim of straight-through processing (STP) is unachievable

¹ Bank of England, 2020. The Future of Post-Trade: Findings From the Post-Trade Technology Market Practitioner Panel. [online] Bank of England. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/report/2020/the-future-of-post-trade-report.pdf>

Figure 1: Key Reasons for Post-trade Processing Complexities

Source: GreySpark analysis



Much of the post-trade system complexity in financial organisations arose from rapid non-linear business growth, in a quickly evolving regulatory landscape. New products, trading strategies, counterparties, processes and controls, technology, regulations and many other changes have been introduced tactically with processes, systems and workarounds 'patched' on to existing infrastructures. As well as creating myriad systems, this approach has also led to a plethora of non-standardised data, both inter- and intra-organisation.

An often-cited example of what this leads to is the generation of multiple trade IDs for a single trade – as many as one trade ID per system via which the trade is processed across the organisational infrastructure. Indeed, just tracing a trade through the various systems up and down the trade's lifecycle is difficult for many firms. A similar number of IDs for the same trade in the counterparty's systems and, possibly, more generated by other third-party organisations – for instance, agents and clearing houses – and a firm-wide issue turns into an industry issue.

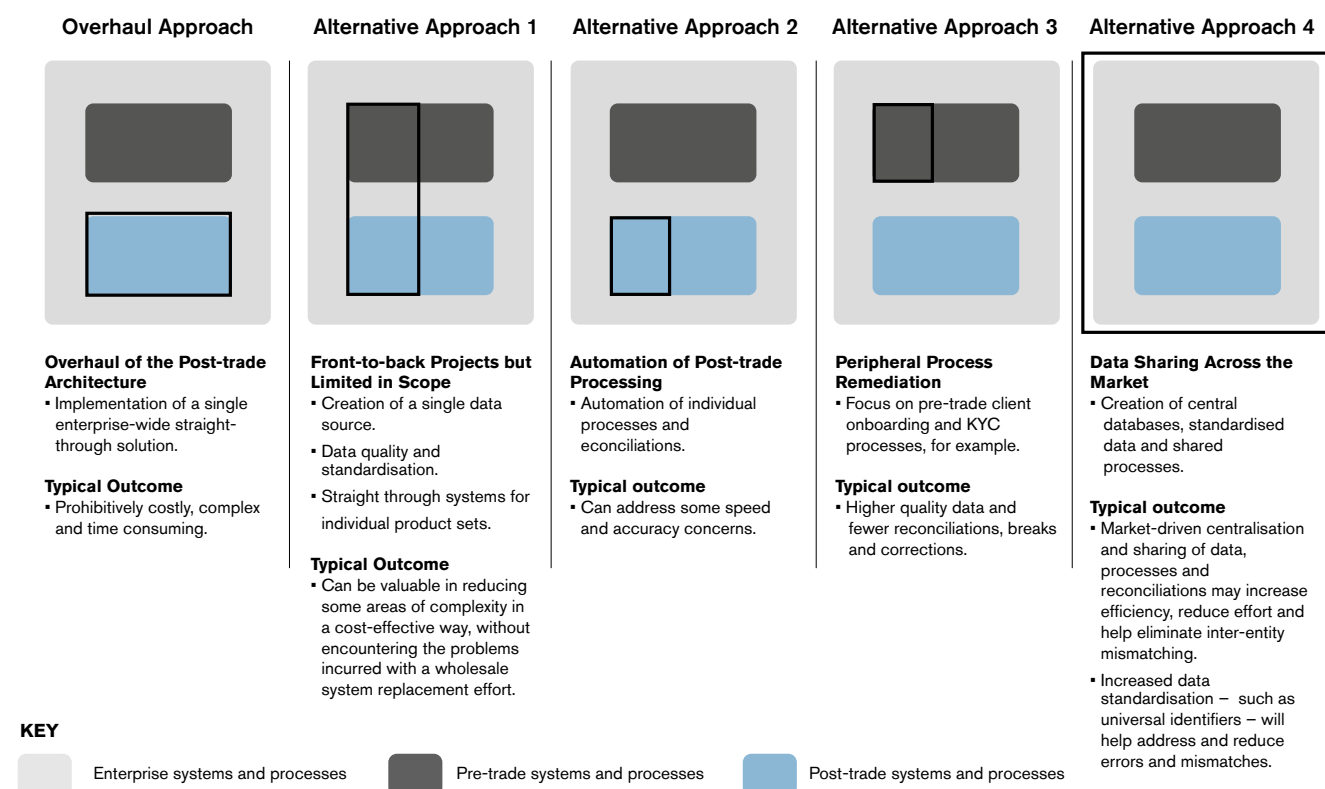
Unblocking the System

On the face of it, the obvious organisational solution would seem to be a complete overhaul of the post-trade architecture – the replacement of existing systems with a single solution – one system, one dataset and minimal hand off, manual activity and reconciliation. However, in reality, for any sizeable organisation, this is likely to be prohibitively costly and disruptive – even if there were a suitable single solution on the market that could do everything required by each bank with its unique business profile. Building a post-trade processing platform in-house could overcome some of these issues but it would still only address the intra-organisational part of the problem and would likely become unmanageably costly for any single organisation attempting to do so. GreySpark has identified four other potential approaches to addressing issues in post-trade (see [Figure 2](#)).

Smaller internal projects, or partial solutions – **Alternative Approach 1** – could go some way towards addressing one or more of the complex post-trade challenges by addressing the problems that flow downstream from pre-trade systems. For example, the creation of a single source of data for the whole organisation can drive up data quality and standardisation across the trade lifecycle. This can be achieved by using integrations to enable ‘straight through’ real-time data from pre- to post-trade for key products or product sets. These kinds of joined-up-thinking remediation efforts have been and can be seen in practice in organisations and are effective in reducing post-trade issues in a cost-effective way, without incurring the problems associated with a wholesale system replacement effort.

Figure 2: Four Alternative Approaches to Addressing the Issues with Post-trade Processing

Source: GreySpark analysis



Alternative Approach 2 focuses on reducing bottlenecks in post-trade systems and processes, contending with, for example, manual reconciliations. Over the last few years, technology solutions have appeared that can automate complex processes such as reconciliations between multiple data sources and, whilst this approach does not address the root cause of post-trade issues – and, indeed, introduces an extra layer of complexity to the technology stack – it can be a low-cost way to address some speed and accuracy concerns in the post-trade space.

While overly disjointed systems and processes are most certainly the cause of much delay and inaccuracy in post-trade, there is another remediation approach that can provide firms with a quick win and that is to address data issues in systems peripheral to post-trade – **Alternative Approach 3**. Notably, the improvement of pre-trade client onboarding and KYC processes is presented in the BoE report as a case study to remediate post-trade issues. The case study implies that some improvements to post-trade processing can be secured by remediating systems outside of the post-trade workflow.

Potentially the issues with post-trade have not been solved adequately in many large organisations because the problem is bigger than it is in any individual organisation's capability to resolve. Over the past few years there have been many examples of regulatory and market initiatives that are instrumental in driving the standardisation of process (via MiFID II and the Dodd Frank Act), of data via reporting regulations (such as MIFIR, EMIR and SFTR) and of calculations (via UMR and FRTB). While industry-level change driven by regulatory forces are far from perfect, they have created an environment that is more effective when evaluated in overview.

Possibly one of the most useful potential solutions to post-trade problems of data quality and matching is to enhance data-sharing between organisations across the industry – **Alternative Approach 4**. A central database, holding data from multiple organisations, could help to reduce the burden of data remediation and reconciliation significantly. This is by no means a new concept: already, for instance, standard instrument identifiers are used across the industry and, even though they are imperfect in some ways, it is now unthinkable to operate without them.

The use of Legal Entity Identifiers (LEIs) and Unique Trade Identifiers (UTIs) required by many reporting regulations, as well as centralised trade reconciliation and data sharing by the registered Trade Repositories could be potentially extremely valuable for intra- as well as inter-organisation reconciliation and matching. The market-driven data sharing initiatives, such as the large KYC / AML and SSI databases used by many institutions may be indications of the way the wind is blowing across the industry. Centralisation and the sharing of data – and even some processes – could improve efficiency significantly.

The Wind of Change

The selection of approaches presented here describe five potential ways that issues in post-trade processing could be addressed, but they also raise questions. Whether or not it is possible for individual organisations to do anything other than chip away at the surface of the problem is open to debate. The level of appetite for market-driven initiatives is uncertain, but there are pros and cons to mandating change.

The readiness of the industry to suffer short-term pain to achieve long-term efficiency gains and to facilitate innovation could be delayed by the economic consequences of the global pandemic. Even with regulation in place, the idea that anything other than local standardisation in a global marketplace would be challenging.

In GreySpark's view, while individual organisations can – and should – strive for increased efficiency in the post-trade space, a wider market-driven solution would be the optimal way to achieve maximal efficiency. While there is little doubt that mandated change is effective, it may well also be possible to achieve elements of a global solution if sufficient desire and cooperation from enough market participants were demonstrated. In lieu of this, a series of partial changes – for instance, standardising one data element at a time or initial implementation of smaller shared databases or processes to targeted participants – could be an efficient and minimally disruptive way to start the industry down the road toward delivering a robust and reliable post-trade framework.