

# Reducing Operational and Compliance Risks through process and data integration

The asset management industry has been enjoying a healthy growth of AuM for the past several years but it has created new operational and compliance challenges for asset servicing firms like fund administrators and custodians.

This paper makes the argument that the root cause of these challenges lies with the fragmentation of data from a disjointed operational process, and to solve this problem firms must look to put in place a process integration exercise guided by two key principles which are 1) Single Source of Truth for data maintenance and 2) Facilitate real-time data flow across divisional touch points.

This paper then makes the case that a fully-integrated system is a viable solution to achieve such process integration so firms can overcome their challenges and ensure future profitability.



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## THE CHANGING LANDSCAPE OF ASSET MANAGEMENT

The asset servicing industry has been enjoying phenomenal growth for the past several years.

According to PWC in their report, Asset Management 2020 – A Brave New World, the rise in the volume of investable assets is set to increase from around \$64 trillion today to \$102 trillion by 2020, a compound growth rate of nearly 6%.

But while asset managers celebrate, asset servicing firms like fund administrators and custodians are discovering that this growth has created new challenges that are putting them and their clients at greater risks.

Eroding profit margin on traditional products has led to asset managers becoming more innovative in their asset allocation strategies. To help boost yield, they are expanding their holdings globally and increasing the use of complex and illiquid instruments. These activities have made things more complicated for asset servicing firms as they struggle in processing and valuing these assets, and that in turn exposes them to potential operational and compliance risks.

In addition, asset managers are expanding their distribution cross-border to open up new markets and creating new share classes. Globally with the exception of European Union, there is not a single overarching fund framework, and the onus falls on the asset servicing firms to make sure that their clients' distribution activities adhere to the global and local regulatory standards for KYC, suitability, and tax reporting.

Finally, the velocity of regulatory changes with regards to timeliness, frequency, and content of reporting, is pushing asset servicing firms to the breaking point as they scramble to update their reporting templates and processes so as to remain compliant for both their clients and themselves.

## OPERATIONAL AND COMPLIANCE RISKS FACED BY ASSET SERVICING FIRMS

With added complexity comes added risks, and asset servicing firms like fund administrators and custodians must recognize these risks and take a holistic and strategic approach in tackling them. And, they must do so without disrupting their profitability and operational capability.

The following are the areas most cited by the practitioners in asset servicing as being the most worrisome.

### Regulatory reporting

Regulatory reporting has been identified as the number one concern, and it comes as no surprise that such worry is mainly due to the lack of consistency and integrity of the data managed within the asset servicing firms. And we can attribute this poor data quality to the overreliance on paper-based and manual processing in the asset servicing industry.

To this day, many subscription/redemption orders are still being transmitted through fax. Trade order confirmation from asset managers are transmitted by emails or paper-based print-outs. Corporate actions are processed on multiple spreadsheets that are shared and maintained across different siloed divisions.

These fragmented manual processes have led to data being inaccurate, inconsistent, and even incomplete. This makes regulatory reporting more difficult, time consuming, and expensive as extra man-hours and headcounts are spent just to double, even triple check if the reports are produced accurately.

### Asset valuation and NAV

The accurate valuation of a fund's assets along with the timely calculation of net asset value (NAV) is the heart and soul of a fund administrator's business. But it is also an area of great concern.

The risk for valuation and NAV originates in three main areas: Order capture, asset allocation, and NAV calculation methodology.

Many asset servicers are still receiving buy/sell order confirmations from their asset managers via unstructured channels like emails and faxes and many still maintain the records of these transactions in spreadsheets. Set up like this is susceptible to human input errors and processing delays which can ripple downstream to create bigger problems. And as regulators become more demanding, such oversight may be seen as a breach of duty of care, especially when reporting cannot be performed rapidly in the event of an issue arising.

In order to generate accurate asset valuations and NAV calculations, each buy/sell record from the fund manager must be accurately recorded on a timely basis. Furthermore, NAV calculation depends heavily on the timestamp of the trade as each fund has its own designated cut-off to which a trade is priced in or not. Adding on to the fact that many strategies now include global assets and structured products, the job of ascertaining an accurate asset valuation and NAV has become insurmountable.

Such failure has led to financial liabilities of the asset servicers firm, the executive of the firm<sup>1</sup>, and its asset management client. Case in point, in 2014, the FCA fined both Investco Asset Management along with Invesco Fund Managers over 18 million pounds for numerous internal control failings, including failure to take reasonable care to ensure to have systems and controls in place for sufficient record of trades on a timely basis. And in 2018, the SEC assessed a civil monetary penalty of \$400,000, in addition to other penalties, against Gemini Fund Services, a Fund administrator for allegations that it struck an inflated net asset value (NAV) for one of the funds it is servicing.

The fines themselves obviously represent a monetary cost to the firm concerned, but it is the potential long term reputational damage that will have greater ramifications as it will disrupt the firm's future ability to attract new partners, new clients, and new talents.

## Compliance monitoring

In 2015, Citco Group, a fund administrator, agreed to pay \$125 million to settle claims from investors that it misled them into investing with Fairfield Greenwich Group, the biggest operator of "feeder funds" for the infamous Bernard Madoff.

The case has set an important precedent that irrevocably set that asset servicing firms have a fiduciary duty to the end investors to ensure the assets within a fund are managed in a compliant way in accordance with the rules and strategies outlined in the fund.

The scope of compliance monitoring of asset servicing firms spans various operational areas, this include and are not limited to monitoring the investment activities of the fund manager, monitoring the sales & redemption of shares, monitoring the cash flow of the funds, and many others. All these while having to keep on top of the compliance requirements for its own operations.

But many asset servicing practitioners have highlighted that monitoring these activities has been a struggle due to not having ready access to consistent and accurate data across the firm. Headcount spending for compliance monitoring has increased dramatically<sup>2</sup> and these headcounts are mostly focused on ensuring the data they're monitoring is accurate and consistent across different metrics. However most practitioners agree that throwing headcounts at this problem is hardly a sustainable strategy.

<sup>1</sup> As of the writing of this paper, fund administration and custodian is not covered by the Hong Kong Securities and Futures Commission as a regulated activity, hence the SFC does not have the power to reprimand the firm. However, it does have power to reprimand the individual in charge of the firm. Furthermore, in December 2019 the SFC has put forth a proposal to have fund administration and custodian listed as a regulated activity under a Type 13 license.

<sup>2</sup> According to "Cost of Compliance 2019" report by Thomson Reuters, 65% of senior executives expect the cost of senior compliance staff will rise.

## Corporate action processing

Corporate action processing is one of the most routine operations of asset servicing, but is also an area of vulnerability.

Although the use of SWIFT MT564 has standardized the notification of corporate actions, the tasks of sorting out the source notifications, the processing of voluntary events, and handling of complex corporate events remains largely manual.

Close to one million corporate actions take place every year worldwide and the processing of corporate actions can range from payment of a simple cash dividend to managing the effects of a complex rights issuance or takeover. Of those 1 million, 10%-15% of those are voluntary and time sensitive where investors are given a number of options to choose from within a set time frame. Processing these corporate actions in a manual way with inconsistent or inaccurate share ownership registry data can lead to investors not getting timely or accurate notification or their decisions not being confirmed before expiry.

Regulatory repercussions notwithstanding, failure to handle even a single complex event could potentially mean covering tens of millions of losses to investors. Custodians face the highest risk in this area because they act as a safeguard of assets for many investors. Hence firms have spent a large proportion of their budget on failure prevention.

An estimation based on available data suggests that European fund management industry spends over 65 million Euros in corporate action failure prevention.

## IT'S ALL ABOUT THE DATA

A careful analysis of the aforementioned challenges will lead to a simple realization that these are just symptoms of a single underlying problem that can be summed up with a single descriptive statement - The fragmentation of data due to disjointed operational processes.

Across regulatory reporting, asset and NAV valuation, and compliance monitoring, they all share a common denominator, the need for accurate and consistent data.

But when the internal operations are disjointed, the accuracy and consistency of the data used across various operational divisions will undoubtedly suffer. Operational staff are constantly spending hours digging for data from numerous sources, and verifying their accuracy and timeliness. Such mundane tasks are what takes up the bulk of the operational overheads.

To solve this problem, asset servicing firms must shift their focus on streamlining how the data travels across the divisional chains and how they can maintain its accuracy and consistency throughout the process cycle.

## What is process integration?

Processing integration is taking a holistic and strategic approach to process design which emphasizes the unity of the process and considers the interactions between different unit operations from the outset, rather than optimizing them separately. The key word here is "interaction" as the different units making up the divisional chain of asset servicing are very much dependent on each other.

A typical fund administration workflow for a new fund order starts with receiving of the subscription order, which will be input into a register after it has been validated and checked for compliance, the order is then sent to another division who will calculate the NAV unit price minus any relevant fees, while another division will verify, reconcile and update the receipt of cash proceeds from the investor. Finally another division will determine the unit allocated to the investor based on the NAV and cash receipts and send that off to accounting for posting and reporting. Throughout the above process, even one minor error or misstep in between these "interactions" between the various divisions can have a ripple effect on the entire portfolio valuation, NAV and fees calculations, accounting and reporting processes.

Yet, many asset servicing firms are still very siloed in their operational setup with each division processing data that independently optimizes their narrow scope of responsibilities while neglecting how those processing will impact the data quality for other divisions. Adding on the fact that data is stored and transported in an unstructured manner such as Excel attachments in emails, very soon you will have a messy data trail with multiple copies in individual inboxes.

Hence, the ultimate goal of any process integration exercise should be to achieve a process design that facilitates data straight through processing where the firm would have the same information which can then be streamlined across multiple points.

To achieve this end, there are two guiding principles:

## **Maintaining a Single Source of Truth**

From a technical perspective, a Single Source of Truth, or SSOT, is the practice of structuring information and associated data such that all the data of the firm is stored and edited in only one place. From a business value perspective, a SSOT ensures that everyone in an organization speaks the same language and bases all business decisions on the same data.

In the world of asset servicing where every step of the process involves the capturing and editing of data, having a SSOT structure would dramatically minimize risks and cost.

Transactional information that is captured and stored within a single database platform will allow all stakeholders across the firm to have instant access to a complete, consistent view of the transaction data. Delays and misinformation can be greatly reduced and will improve the timeliness of delivery of any regulatory reporting as well as strengthening the level of confidence in compliance monitoring.

## **Facilitating real-time data updates**

To achieve data consistency through process integration, beside having a SSOT infrastructure, another key principle is to make sure the integration design facilitates real-time data transfer and updates.

Today, asset servicers need real time visibility to perform many critical activities, such as generating timely reports for intraday NAV for ETFs. Having real-time transfer capabilities built within process integration will allow for instantaneous data availability that will result in reduced divisional dependency and speedy actions.

Hence any process integration exercise should strive to achieve real-time data flow across all operational touch points.

## **A CASE FOR A FULLY-INTEGRATED SOLUTION**

Having the proper technology infrastructure is key to a successful process integration exercise. Throughout this paper, we've highlighted that many asset servicing firms are operating in a siloed divisional environment. This often impacts how they implement their technology systems.

In a siloed technology environment, integration is achieved using various Application Program Interface (APIs) that sit between systems and relay data to and from each other. One critical task for these APIs is to act as a data translator between two systems similar to two people speaking different languages. Without this translation, data transfer cannot be performed.

However, using only API-based integration has three main drawbacks. First, transforming data from one format to another can be processing intensive, hence it is extremely difficult for data to transfer in real-time between two systems. Second, during the transformation process, it is not uncommon for data to get corrupted, creating errors in the destination system that compromises data consistency and accuracy. Third, maintaining APIs can be

extremely costly. A version upgrade from either the source or destination system can lead to an API needing to be redeveloped from scratch. Hence for smaller asset servicing firms of lesser scale, process integration based mainly on APIs can lead to potentially high operating cost and risks.

To achieve true process integration where data can remain consistent in real-time, the ideal solution would be to have a single unified system that is fully-integrated across different divisional units.

A unified fully-integrated system is designed to achieve true data STP and should provide complete end-to-end functional support for asset servicing. It can streamline the operational processes including subscription/redemption processing, portfolio compliance monitoring, fees and NAV calculation, corporate actions processing, and fund accounting.

And because a full-integrated system only requires the use of a single database, it creates a Single Source of Truth that ensures data remains consistent across all divisions. This could mean potential savings as well as a reduction in technology risks as it allows the firm to reduce the use of excess APIs.

And even though all processes are performed in one unified system, access to data and operational functions can still be securely segregated with the proper implementation of user access rights in the system. The asset servicing firm can still streamline their entire operation without sacrificing any internal security, further helping to eliminate any human errors.

## **CONCLUSION**

Overall, asset servicing firms should feel bullish about their future as their asset management clients continue to expand and explore new opportunities. However, they must also recognize the many challenges and risks ahead so they can take decisive actions that are holistic and strategic to minimize them.

Asset servicing firms would be best advised to take a closer look at how data currently flows across their operational divisions, and engage with experts to see how process and data integration can help in further improving accuracy levels and services while controlling if not reducing costs.



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