

## **The Big Data Challenge – Transforming a Global Operating Model**

Since 2012, Pentagon has been working with a range of Asset Owners to conduct reviews of their global TOM and we have advised and guided multiple organisations to transform both their technical and operational efficiency.

This includes decommissioning of 'best of breed' solutions offering silo functionality and replacing with Front to Back alternatives encompassing IBOR functionality. Other Managers are looking to the buy-side vendor market to provide IBOR connectivity to existing third party applications.

### **What challenges do Asset Managers face?**

Data management and aggregation are constantly evolving challenges for most financial organisations, with Asset Managers continually assessing how they can deliver and present data throughout the business on a global scale.

Historically, for 'managers of assets', concerns and demands from the front office commonly drove this debate, as in many cases the data available from traditional back office systems did not meet the standards and quality needed to make real time investment decisions. Componentised technical architecture, which resulted in data and 'events' occurring in numerous onerous platforms in batch processes overnight is now becoming a process of the past when Managers are reviewing their target operating model (TOM).

Clearly, data and event management are at the core and in most cases, there are many data sources and relationships with multiple providers to contend with, combined with services and platforms that create or trigger events that have a continuous impact on positions. This is not just a technical challenge but an operational one too, as data needs to be normalised and of a usable and consistent quality that can be utilised by a variety of platforms and end business users.

However, Managers are also looking at how they build the desirable data management technical solution for their business whilst also improving operational efficiencies at the same time. For many Managers, with existing operations in multiple locations and 24/7 operational processing using multiple vendors and processes, changing from being silo-ed and multi-regional to truly global technical architecture and operational delivery is a priority on their roadmap.

***The following case study demonstrates how a Pentagon client effectively created a global data platform, revolutionising both their technical architecture and operational delivery.***

## **CASE STUDY - Data Management & Investment Book of Record, Change Transformation Programme**

### **Overview**

The primary deliverables of the programme were to assist the client in migrating to a new Middle Office provider, creation of a Global Investment Data Platform and Global Data Management function.

### **Existing data challenges**

Existing architecture provided no enterprise data hub or data management function that centralised, cleansed and published the investment data to the downstream consumers. As a result, services such as Performance & Attribution, Risk and Client Reporting relied on point to point interfaces directly with the vendors.

Data challenges that needed to be addressed included:

- The lack of oversight and ownership of their data
- Global outlook of the business vs regional reporting
- IBOR data not being available for all regions, resulting in ABOR data being used rather than IBOR
- Data quality variation, dependant on vendor
- Downstream systems being responsible for data cleansing, affecting timeliness of their output

### **Approach**

- Analysis of the Middle Office providers data offering, providing functional plans to integrate with the new Global Data platform and downstream consumers.
- Management of the customisation required to the Middle Office providers standard data offering to meet the data needs of the client.
- Functional management and ownership of developing the Global Data platform
- Ownership of the client-vendor relationship on all data related matters
- User acceptance testing and providing a Go/No-Go decision for the migration
- Defining Vendor SLAs and KPIs for the delivery of data
- Defining the Target Operating Model – set up of Global Data management function, processes, daily runbook, escalation procedures etc.
- Management of the migration of each region to the new vendor from a data perspective, incorporating Data platform seeding requirements, reconciliations, Day 0 procedures.

### **Solution Delivery**

A single Middle Office provider globally was enabled integrating the data requirements of:

- Standardised IBOR data (Positions, Transactions, Cashflows) for all regions
- Standardised Security ID – Unique ID per security irrespective of the region/portfolio
- Price consistency – one EoD price per security irrespective of the region/portfolio
- FX rate consistency – one FX rate used per currency pair/day used for valuation of all positions

A Global Data Platform was also created to provide consistent and accurate Security Reference Data and Investment Book of Records (IBOR) which would be used by downstream services – Performance, Risk, Client Reporting etc.

This was realised by two sub-initiatives:

### **Global Investment Data Platform**

A centralised data hub being built using IHS Markit EDM, to provide the golden source of Security Reference and Investment data (IBOR) data for all downstream systems. A Global Security Master created based on data from multiple sources i.e. Bloomberg, Trading platform and Middle Office provider. This platform also provides functionality to validate data and raise exceptions reporting where applicable.

The global IBOR is now representative of the IBOR data supplied by the Middle Office provider.

### **Global Data Management**

The introduction of a new global multi-location Data Operations team that works around the clock to ensure that the data in the Global Investment Data Platform is of the desired quality and standard. The team is now a centralised operational function for all data queries/exceptions globally. Data queries are analysed and explained, or the resolution managed with either the third-party vendor or internal IT support in addition to monitoring the delivery of data against SLAs and reporting of breaches.

### **Post-migration (BAU phase)**

- Monitoring of the BAU process to ensure procedures are adhered too
- Identification of opportunities to improve/automate existing processes and presenting of the business case to internal stakeholders and sponsors.
- Root cause analysis of issues – i.e. structural/systemic issue or BAU issue due to human error/known issue.
- Management of Change Requests to the vendor based on new/additional requirements from the business users.
- On boarding of new downstream consumers to the Global Investment Data Platform

*For further information, please contact Carole Wiles, [cwiles@pentagonconsulting.com](mailto:cwiles@pentagonconsulting.com)*