



# Complex Client Structures and Fragmented Systems Landscapes



Jonathan Poole Partner, Fin-Reg



**Tom Stock** SVP Global Head of Product Management, GoldenSource Corporation

The Entity Data Management Challenges Presented by Complex Client Structures and Fragmented Systems Landscapes

## **SUMMARY**

Large organisations commonly recognise the need to effectively manage their client data not as a strategic imperative, but rather as a function of projects that are conceived to solve a specific challenge. These projects will typically be based on one of a number of disparate drivers including CRM initiatives to identify new sales opportunities and drive revenue growth, regulatory imperatives such as the global banking reforms, technology drivers (e.g. system obsolescence), organisational restructuring or internal processoptimisation targets.

In this paper Jonathan Poole from FinReg and Tom Stock from GoldenSource discuss the data management challenges that are faced by organisations and the rationale for the tactical approach that is typically adopted by projects within those organisations. The authors discuss the necessity of an enterprise data governance strategy and entity data management strategy against which to identify the organisations level of maturity with regards to entity data management. The strategy is critical as terms of reference for project stakeholders within the organisations and their strategic partners (being systems or data vendors) in order to quickly and effectively identify wider organisational opportunities that are identified during projects whilst ensuring that the project objectives for entity data management are met.

# GLOSSARY

AML - Anti-Money Laundering

- **CRM** Customer Relationship Management
- M&A Mergers & Acquisitions
- **SPV** Special Purpose Vehicle

## HOW DID WE GET WHERE WE ARE TODAY?

Complex organisational structures exist in large multinational organisations for a myriad of reasons. Complex structures commonly exist as a consequence of organic growth as companies move into new (geographical or business) markets and sectors, acquisition or retrenchment, for legal and regulatory reasons (e.g. requirement for local licenses) and to limit financial exposure to the organisation (e.g. using SPV's and syndicated lending). Combined with increasingly onerous AML / KYC regulatory requirements globally for financial institutions to understand the ownership and control structures for their clients, and with multiparty service models comprising relationships such as prime brokerage and asset-management agency agreements that require organisations to 'look-through' the relationships between entities that are not within the same ownership structure.

Many of the drivers for complex organisational structures are similarly responsible for systems fragmentation within individual organisations, the outcome of which is typically observed as entity data being managed in multiple systems. Systems are separated either in terms of functional capability with each one being used to perform tasks based on a sub-set of entity data, or in terms of different systems that are used for the same underlying purpose e.g. credit risk management, being used in different areas of the same organisation.

The onslaught of regulation, particularly in the banking and finance space, has meant that accurate identification of client, counterparty and issuer data and its orchestration across multiple systems is paramount. Organisations are additionally faced with IT service agreements for incumbent systems which present a headwind to change due to the significant perceived costs associated with it.

Many of the drivers for complex organisational structures are similarly responsible for systems fragmentation within individual organisations. The authors, like many project management and consultancy professionals, have observed first-hand the disparate entity data management architecture that seems to be an inherent feature of many large multinational organisations. These features tend to arise from the organic growth of systems within those organisations. This growth is typically the result of one or more of the following factors;

- historical organisational changes (particularly M&A)
- solutions built in the absence of a data governance strategy (change was managed within separate business units with different priorities over time)
- solutions built with strictly defined project time or cost constraints
- solutions built as tactical project (or business) responses to challenges that have subsequently become business critical

The onslaught of regulation, particularly in the banking and finance space, has meant that accurate identification of client, counterparty and issuer data and its orchestration across multiple systems is paramount.

## WHAT ARE THE CONSEQUENCES OF COMPLEX CLIENT STRUCTURES AND FRAGMENTED SYSTEMS LANDSCAPES?

The issues arising in this environment tend to compound in the continued absence of an enterprise data governance strategy with a clearly defined approach to enterprise data ownership that can be referenced by projects. Some organisations still may not have a coherent data governance strategy. Without such a policy the issues that have been responsible historically for the proliferation of systems with elements of entity data management are likely to continue.

The consequences of poor entity data management are well documented;

- negative client sentiment arising from situations where employees do not have the necessary information;
  - multiple requests for information that has already been provided, or even that may not even be required at all
  - not recognising the inter-relationships between client organisations; in a fragmented systems landscape many consumers of information will only have a single 'lense' through which to view client structures such as legal-entity relationships, credit risk hierarchies, client-agency relationships etc. and these hierarchies will commonly be incomplete for practical or historical reasons

- increased costs of data processing due to;
  - duplication of effort as a consequence of having to maintain multiple versions of data in different systems
  - tactical analysis and data cleansing efforts by successive projects that is undertaken where entity data is required
- increased risk of penalties arising from regulatory breaches due to;
  - operational errors
  - failure to meet obligations across complex multi-jursidictional rules sets resulting from lack of transparency between business units e.g. sanctions data and AML data
- increased risk of financial loss arising from credit events
- lost sales opportunities through wasted sales & marketing expense & distorted opportunity identification

Whilst organisations might recognise that their current systems landscapes could result in these consequences, they are typically difficult to quantify in terms of costs, or of the potential benefits of improvement, or of the probability of risks being realised. They will also tend to be identified individually based on the focus of a project, and even where wider opportunities for improvement are identified the project scope will naturally constrain the reach of any remedial action.

Key business stakeholders are likely to be well aware of the consequences of the fragmented systems landscapes and will often have been involved with successive projects that have either failed to fully deliver the benefits intended to mitigate entity data management issues, or have been cancelled or de-scoped due to the cost exceeding the available funds. These projects, in the absence of a clearly defined data governance strategy and organisation-wide entity data management solution will continue to further propagate the systems landscape fragmentation as tactical solutions continue to be delivered in functional or organisational (business unit or regional) silo's. Their narrow focus will also tend to encourage a 'best of breed' assessment within the sponsoring part of the organisation, resulting in stakeholders becoming vehement advocates for their own entity data management solution (whether internally developed or purchased).

These projects, in the absence of a clearly defined data governance strategy and organisation-wide entity data management solution will continue to further propagate the systems landscape fragmentation. In the absence of a clear enterprise-wide entity data management strategy, the experience of these key stakeholders and those from failed projects may create a level of scepticism and resistance to change for future projects that seek to implement an organisation-wide entity data management solution.

It is also worth noting that as long as the fragmented systems landscape persists, the benefits obtained from any entity data remediation as an outcome of tactical projects will tend to erode over time as the systems architecture will fail to support sustainable business change, and much of the the knowledge and learning from these projects will be lost after the projects are completed - contributing further to the creeping incremental costs of the fragmented systems architecture.

# PRINCIPLES FOR APPROACHING PROJECTS IN ORGANISATIONS WITH COMPLEX CLIENT STRUCTURES AND FRAGMENTED SYSTEMS LANDSCAPES

In the current environment internal drivers for change continue to increase within organisations in addition to the external influences that continue to be imposed on those organisations. As such there exists an increasing awareness at all levels of the benefits of a single entity data management platform that will provide a framework to resolve the common issues that are discussed in this paper.

Whilst these benefits are intuitively understood, the business case for an enterprise-wide entity data management solution is likely to be very difficult to justify financially. Calls for an enterprise-wide solution in the absence of a project mandated from the data governance strategy are likely to meet resistance from business areas that are not sponsoring the projects that identify the requirement as well as from senior management. There remain however two distinct categories of projects that offer a path to an enterprise wide entity data management solution;

## **1. THE TOP-DOWN APPROACH**

Such projects are likely to be the outcome of senior management recognition of the need to replace ageing IT infrastructure and to be supported by the development of a strong data governance / entity data management strategy. They may be driven by the organisation adopting new core business systems or by the organisation building an enterprise-wide integrated architecture around existing core business systems to properly address the entity data management issues experienced by successive projects previously

#### 2. THE BOTTOM-UP APPROACH

Where projects with a specific mandate identify entity data management requirements that can only be delivered by changes to systems and / or processes that affect areas of the enterprise beyond the business unit or region of the sponsoring organisation, or where significant synergies are identified beyond the scope of the sponsoring organisation.

In practice enterprise-wide core systems replacement programmes are rare and therefore the well-trodden and lowest risk path to enterprise-wide entity data management solution is likely to be the logical outcome of a series of projects using the bottom-up approach. Such projects will not necessarily ultimately lead to a full enterprise-wide entity data management solution, but in the context of an enterprise-wide data governance strategy and entity data management strategy different parts of the organisation will, over time, progressively move towards a more unified data model and systems architecture. Successive projects have the advantage of offering the sponsoring organisations quick wins with a number of benefits;

- improvements aligned to organisational priorities with demonstrable business benefits rather than being an ideological exercise
- projects will build credibility for the chosen systems / architecture within the organisation and form a critical mass so that subsequent projects that have entity data management requirements can build on the established foundation - particularly in specific areas of the organisation where incremental costs will be offset by compounding benefits.
- business and project stakeholders become advocates for the target solution
- business resources are deployed most efficiently

This approach does not preclude entity data being maintained in different systems, which may include deeply embedded legacy systems; rather the strategy will help to clearly define which categories of entity data are maintained in the different systems and the data primacy rules across the different systems and areas of the organisation. The entity-data management strategy will ensure that the information can be distributed across the whole organisation where relevant - or indeed suppressed where required for privacy / sanctions reasons.

It is a critical requisite of this approach that the advocates for a unified entity data architecture at the business and project levels ensure that their appetite and understanding of the need for change is clearly articulated to senior management and supported by the organisational data governance strategy and entity data management strategy - to the extent that these artefacts do not already exist they should be the imperative of any projects that involve a large entity data management component. The unfortunate reality is that where these artefacts do not already exist in an organisation, there is unlikely to be a senior manager responsible for the organisational data strategy to lead the initiative. It is therefore important that project stakeholders, recognising the inevitable march towards this approach, communicate their work across the organisation as widely as possible welcoming feedback. It is also critically important however that they avoid trying to 'boil the ocean', and whilst it's important to gain an accurate view of the organisationwide issues that need to be resolved, and understand the context for their current activity, an organisation-wide study requires senior management support to provide a roadmap and clear terms of reference.

The entity-data management strategy will ensure that the information can be distributed across the whole organisation where relevant - or indeed suppressed where required for privacy/sanctions reasons.

Even after data management strategies are defined and embedded on the executive committee's agenda, especially where prominent chief data officers have been recruited, the articulation and implementation of a data strategy roadmap will be a long term initiative and subject to many challenges, with the consequence that it will require significant investment. Project teams and data management practitioners will invariably find it difficult to articulate the value of addressing the issue due to the difficulty in quantifying the benefits or costs of these large-scale changes. In short the frameworks and data cleansing / verification that are necessary to ensure accurate client data don't easily translate into revenue uplift or regulatory fine prevention except where there is a specific and tangible threat such as an enforceable undertaking issued by a regulator. In the absence of such it is essential that senior management remain steadfast in their resolution to deliver in the context of the ongoing challenges to the funding necessary to sustain the change until the required standards are achieved at the enterprise level.

Where third party systems are adopted using this approach, the importance of a comprehensive vendor appraisal can't be overstated - the success of which is again dependent on the involvement of business stakeholders from as many areas of the wider organisation as possible. The organisation's entity data management issues will be recognised across the organisation and a broad audience will help to build cooperation and a general consensus of the likely roadmap for current and future capabilities. The initial

stages of a vendor appraisal where the organisation determines it's requirements provide the different areas of the organisation to prioritise their needs based on the unique challenges they face e.g. regulatory requirements are time driven and in the current environment are very likely be the catalyst for change. As well as contributing to an entity data management strategy if it doesn't already exist, the outcome of this work will provide a basis for Requests for Information from vendors. Some of the candidate solutions may already be an incumbent solution in parts of the organisation providing a clear advantage in terms of procurement as well as obtaining user testimonies and providing a foundation for the iterative approach advocated here. It should be noted that the road to solution procurement from external providers can be long and may be frustrating for internal business stakeholders who can see the potential benefits of the vendor solution to their business (indeed, they may be required to contribute to the business case in support of the solution). Some stakeholders will inevitably need to wait longer for elements of the solution that support their business.

Time critical requirements (typically regulatory) will tend to take priority over quality improvement requirements, meaning that business risks are mitigated in preference to quality improvements that are more likely to drive cost / revenue benefits. It is therefore essential that the business priorities are defined and articulated to all business stakeholders early in the vendor appraisal process, to ensure that the journey is not subject to unnecessary delays arising from conflicts between key decision makers. It is also essential that internal technology teams are fully engaged to ensure the enterprise requirements for establishing external system integration, connectivity and security protocols are integrated in the vendor appraisal process. Assessing external service providers and entrusting customer data to them carries a significant risk exposure burden to financial institutions and the road to evidence the necessary controls and capabilities can take several months.

Once a realistic match to the 'end state' requirements is identified (bearing in mind no solution will fully meet all of the organisations objectives 'out of the box'), project practitioners should remember that the quickest path to completion is likely to include tools that are already available to them within the organisation.

To find out more about the software and consulting solutions offered by GoldenSource and Fin-Reg contact info@thegoldensource.com



#### ABOUT GOLDENSOURCE

GoldenSource's software, services and expertise enable firms in the financial markets to manage risks, comply with regulatory requirements, and control costs in the middle and back office with a trusted source of complete, consistent information. Its products source, standardize, validate and deliver mission critical market, reference, customer, position and transaction data to the people and systems that need it, such as trading, compliance, risk management, settlements, and accounting. GoldenSource provides automated, enterprise-level processing delivered through a single hosted or on-premise platform, to achieve the highest levels of data quality and operational efficiency.



#### ABOUT FINREG

FinReg provides a boutique consultancy service to financial institutions, buy-side firms and FinTech vendors, advising on regulatory compliance and solution implementation for derivative reform and broader client lifecycle management needs.

FinReg was established to support clients in solution and process design within a rapidly evolving regulatory environment. The complexity and pace of change is prompting financial institutions to review their client data models, system solutions and onboarding processes. FinReg can provide derivative reform subject matter experts and global markets experienced professionals assist in all areas from existing solution review through to system implementation support.