

Arc Horizon



An Arc Partners, Inc. Publication

Special points of interest:

- Reference Data Management
- Outsourcing Reference Data
- Feature for online readers*

* If you use Adobe Reader, you can navigate the newsletter by clicking on entries from 'Inside this Issue', 'Continued on... Continued from...' notations, or 'Special Points' above.

"To limit problems and ensure a golden copy of the firm's reference data exists, firms need a consistent Reference Data Management process across the organization."

Featured Article

Reference Data Management

For several years Financial Services companies have expanded their investment in reference data programs to establish a foundation component for STP and operational integrity. Few of these programs have fully achieved their ambitions and incorrect, conflicting, redundant, and missing reference data remains. As a result, individual functions generally still take matters into their own hands and customize and supplement the central source to meet their own needs.

The need for reference data integrity continues to grow and is now driven by more than STP; regulatory requirements such as Basel II, Know Your Customer (KYC), The Patriot Act, and MiFID

have amplified the need to get reference data programs right. And because reference data typically includes critical data such as security master (security terms and conditions data), corporate action events, account master, issuer data, counterparty data, and end-of-day pricing, it is no longer acceptable for an organization's reference data to be internally inconsistent.

To limit problems and ensure a golden copy of the firm's reference data exists, firms need a consistent Reference Data Management process across the organization. To achieve this, a core unit must be established that is accountable for data acquisition, normalization, arbitration, cleansing, storing, and ulti-



mately publishing reference data out to the organization. Supplemental activities, by individual functions, should be conducted within a standard framework that ensures that if they add, enrich or correct data that is of interest to other functions this data is made available across the organization so that contradictory versions of the same data do not proliferate.

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Leaders' Notes

Special Edition: Reference Data

Recently, Arc Partners participated in the 2006 Securities Industry Association (SIA) Technology Management Conference in New York City. The conference theme this year was "Cool and Competitive Technologies." Admittedly, there were a few 'cool' technologies on display and even some that could help make companies more competitive, which is the primary reason we take the time to talk to some of these vendors... we know many of you can't be there.

As most of our clients are aware, Arc Partners is vendor-neutral and technology-agnostic, meaning, 1) we don't side with any particular vendor, and 2) we don't automatically buy into everything vendors tell us about the

miraculous nature of their technologies.

Since we don't build proprietary technologies to market at SIA, we decided to focus our team's efforts on the discussion of reference data — because we've noticed an increasing number of our clients are expressing an interest in this area.

Reference data and enterprise data management have been increasing their profile in the financial services industry over the last few years. For example, one of the largest banking groups in the world has created a C-level position to address the management of reference data, new Reference Data industry groups are forming, and a new trade magazine focused on these issues be-

gan publication this year.

Some of the materials in this special edition of Arc Horizon were used by us at the SIA conference; [Reference Data Management](#) looks at what RDM is and what you can, and should, do about it; [Reference Data Problem Areas](#), and [Arc Success Stories](#) are informational displays that initiated a lot of discussion with SIA conference participants. But some material is new, the article [Outsourcing Reference Data](#) reviews the state of the industry with regard to outsourcing.

We hope you enjoy this special edition of Arc Horizon.

— Brendan O'Sullivan, Don Harder and John Marinelli are Managing Directors at Arc Partners

Inside Story

Outsourcing Reference Data: Is it a trend yet?

As a person who follows trends in the outsourcing industry, I came across a news article in September 2005 that piqued my curiosity. Citadel, the giant hedge fund, had inked a 10-year deal to outsource its reference data function to Accenture's newly minted Managed Reference Data Service (MRDS). Reportedly, this was the world's first reference data outsourcing deal and it included pricing data, fundamental securities data, and global corporate actions with both automated and manual data cleansing, validation and enrichment.

"Hmmm, a 'new' twist, yes," I thought, "but one incident does not a trend make." So I moved on. (Yes, I sometimes construct Yoda-esque sentences; mainly to drive my kids nuts.) But while doing research for this edition of Arc Horizon on Reference Data I thought I'd follow up to see how they've progressed in the last year. This time my response was, "Mmmm! ...four there are now." (Unfortunately, I was at work at the time so the kids missed it. But my office-mates now think I'm a bit weird...) Bank of America Securities, ING Group, and Wachovia had joined the fold; ING jumping in with both feet and outsourcing up to 90% of its reference data, both public and proprietary, to Capco Reference Data Services.

In addition to MRDS and Capco, SunGard Data Management Solutions has thrown its hat in the ring and landed a piece of the BofA reference data business.

Now things are starting to get a bit more interesting.

But even with this recent activity there seems to be some difference of opinion on the issue of reference data outsourcing.

Those that are interested in pursuing it find several viable reasons to do so (see inset below). Among those that are resistant there are two trains of thought; one camp holds that there is little value in in-house management of publicly available, commoditized reference data. The other side's opinion seems more akin to capitulation to the status quo rather than the vigorous defense of a value proposition. In many of these companies the 'value' lies in not having to sort through the politics of well-integrated and entrenched data management functions, especially when the cost savings can be difficult to quantify and

outsourcing in general is increasingly perceived as 'challenging' in its own right. *

Fortunately for Accenture, Capco, Sungard, and other vendors who want in, cost — while important — is not the only driver.

ING's chief reason for outsourcing was that it recognized that the people who managed the reference data function knew a lot about the securities business, they also realized that these skills could be better applied elsewhere. They optimized their resources by outsourcing the reference data function and moving these people from non-revenue-generating activities to value-adding projects. Smart.

Ok, is it a trend yet? Unfortunately, I must fall back on, "Four deals does not a trend make." But as Don Harder points out in his featured article, the industry is beginning its move in this direction because in many situations it just makes sense. As more experience is gained, outsourcing of 'slam-dunk' disciplines like securities pricing and corporate ac-

tions will become more commonplace; companies are also likely to begin transferring larger chunks of functionality, which will enable them to focus on the things that they do not want to outsource, such as counterparty, proprietary, and boutique data. Improving internal data quality in these areas may alone be sufficient reason for some to jump aboard.

Internal politics and inertia can be overcome and cost savings of 30%–60% are nothing to sniff at, especially if such savings can be added to the list of other benefits.

We may not yet have a trend, but we do have something that is beginning to draw the attention of a lot of people in the industry.

"Watch this one with interest...I will."

— John Harris is a Senior Manager at Arc Partners and the Editor of Arc Horizon.

Key Benefits of Reference Data Outsourcing

- ◆ Cost savings through increased economies of scale
- ◆ Unlock resources
- ◆ Transfer value from non-revenue generating to value adding resources
- ◆ Increase data quality

Reference Data Problem Areas

	Instrument	Pricing	Customer
Architecture	Target architecture is not embraced by key business-facing IT units Interface standards missing or not enforced Migration plan or roadmap is not realistic		
Process	Additional data is purchased or created by one function but not made available to all	Same product, different desks, different closes	Account-level results can not be rolled up to relationship level
Quality Management	Hierarchy of attribute sources not defined at an asset class and attribute level	Source of price is not tracked Cleansing and validation processes address symptoms	Data errors not fixed at source No prioritization mechanisms
Technology	Fragmented legacy systems Unreliable replication and synchronization processes Reconciliation processes have gaps or are not kept up to date		
Vendor Analysis & Management	Breakdown in coordination of indicative data and pricing data services Outsourcing initiatives not well planned or poorly managed Enabling technology investments are not made		
Business Expertise	Insufficient involvement, e.g., front-office or finance, in selecting indicative data or pricing services leads to a proliferation of services to meet all needs	Operational and KYC needs dominate Not enough focus on CRM or risk management requirements	

Arc Success Stories

Customer Account Rationalization at a Top 10 Investment Bank

- ◆ Provided program management to implement a global customer management system
- ◆ Managed the data readiness and data conversion process
- ◆ Established process to link and cross-reference common customers across business lines and regions
- ◆ Converted 98% of accounts successfully on an automated basis

Strategic Reference Data Architecture for a \$12B Diversified Hedge Fund

- ◆ Designed and led strategic architecture initiative
- ◆ Reviewed and repositioned instrument data roadmap
- ◆ Addressed impediments to decommissioning an entrenched legacy system
- ◆ Created framework for quality management
- ◆ Established policies for setting and locking down closing prices across all OTC asset classes
- ◆ The reference data architecture covered security, corporate actions, pricing, counterparty, and issuer data and established broad management commitment to a practical roadmap

Risk Management and Customer Account Management Roadmap—Investment Banking Division of a Large U.S. Bank

- ◆ Assessed the client and instrument reference data capabilities
- ◆ Identified and documented the key application interdependencies
- ◆ Developed technology roadmap and business processes to migrate from redundant components to core services
- ◆ Established approach to linking credit risk across OTC counterparties, bond obligors, borrowers and CDS reference credits

Client Management Cross-referencing and Hierarchy for a Global Investment Bank

- ◆ Designed a built Proof-of-Concept for an enterprise wide client cross-reference covering 50,000 legal entities and several hundred thousand trading sub-accounts
- ◆ Managed the data analysis needed to cross-reference all subsidiaries and divisions of the firm's largest 1,500 customers ranging from global universal banks and hedge funds to strategic financial sponsors
- ◆ Designed, built and populated the key client segmentation attributes for a CEO sponsored global account review covering several billion dollars in revenue across banking, fixed income and equities

Reference Data Management—cont'd

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This can not be achieved by good technology nor good process alone. Both technology and process must be coordinated and leveraged on a holistic basis to achieve the desired result.

Reference Data Components

The four primary components of a managed reference data environment are architecture, technology, workflow, and organization.

- ◆ **Architecture** addresses the design of the data management components, data dictionary, data mapping, data storage, and the communication layer between the architecture components.
- ◆ **Technology** addresses the implementation of the data management systems, the loading,

query and distribution mechanisms, the exception management systems, and the communication layer.

- ◆ **Workflow** addresses business rules definition, exception management processing, managing the metadata repository, technology and data change management processes, and measuring and ensuring reference data quality.
- ◆ **Organization** addresses data governance structure and the roles and responsibilities of the business, technology and the data management group; processes for establishing and maintaining data arbitration and quality control must be clearly defined and adherence to the rules must be enforced.

Critical Success Factors

There are a number of critical success factors in a successful reference data environment:

- ◆ Data has a specified source and propagates in a single direction; no "back doors" into the golden copy databases.
- ◆ Ownership and responsibility for reference data quality must be clear.
- ◆ Ability to cross-reference normalized data from multiple internal and external sources.
- ◆ Commitment, from senior executives, to a program which may take years to implement and to a roadmap that delivers business value incrementally so that support is sustained while migrating to the final-state architecture.

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"A consistent Reference Data Management process cannot be achieved by good technology nor good process alone."

Reference Data Management—cont'd

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Lessons Learned

Several issues require significant attention when performing a reference data project.

- ◆ Ensure you account for the challenges associated with implementing a metadata repository.
- ◆ Implement a process to capture, measure and report on data quality metrics as early as possible.
- ◆ Establish realistic plans to decommission legacy systems so that they do not become a chronic source of conflicting data.

Industry Direction

Reference data has been a focus area for financial services companies for several years and has resulted in several vendors starting to provide packaged reference data outsourcing services to their clients.

- ◆ Accenture is offering its clients an opportunity to outsource their reference data acquisition services using their Management Reference Data Service (MRDS) service offering.
- ◆ Capco provides outsourced reference data services through its Capco Reference

Data Services (CRDS) offering. CRDS covers a full range of traded and OTC asset classes and all data types, such as counterparty, legal entity hierarchy, descriptive data, pricing and corporate actions.

- ◆ SunGard delivers pricing services for fixed income and equities through its Reference-Point™ Managed Data Service.

These services are potentially valuable compliments to data only services and internal resources. When they fit with an organization's needs, they allow an organization to access economies of scale that are greater than those possible from within their own organization.

Why Choose Arc Partners?

Arc Partners has assisted several large investment banks and hedge funds in improving their reference data processes and technology on an enterprise-wide basis. This work has covered:

- ◆ Reference data
 - Instrument
 - Legal entity
 - Customer
 - Pricing
- ◆ Market data needs ranging from credit derivatives to con-

vertible bonds

- ◆ "External party" data ranging from corporate loan obligors to reference credits on CDS's.

Our highly experienced team has expertise in trading, portfolio management, risk management and settlement processes and a keen understanding of the specific needs and drivers of each function. ☞

— Don Harder is a Managing Director at Arc Partners.

To learn more about how you can increase the success of your reference data initiatives and improve your overall results, contact Arc Partners at (212) 370-9460, or e-mail Don at:

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Managing Reference Data Doesn't Have to be Puzzling



"Transforming your vision into profitable reality"

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Arc Partners was founded during a time of unprecedented business and technology change in the financial services industry. Our goal is to assist financial services companies in improving business performance through better management and application of technology.

We are a high performance management consulting firm that works with clients to ensure key business process and technology initiatives succeed. We don't do projects to our clients. Our combination of industry expertise and consultative skills allows us to creatively analyze fast-changing environments and recommend best-fit solutions.

Arc Partners has earned a reputation for high quality, value-added service. We perform multiple engagements for over 90% of our clients, reflecting their satisfaction with their service. We continue to expand, but pace our growth to ensure continued excellence in the quality of our work.

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Arc Horizon is published quarterly by Arc Partners, Inc.

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