November 2015

waterstechnology.com/ird

Data Governance

Special Report



Harness the Power of Your Data

Managed effectively, investment data is your firm's most valuable asset.

Today, many of the world's most influential investment organizations are relying on Eagle's Data Management solutions to deliver a "single version of the truth": high-quality, governed data that maximizes the transparency and accuracy of their investment decisions.

Your business demands a stable and flexible platform that enables you to consolidate accurate information from multiple global locations and business lines.

From a single platform, Eagle can support data management, investment accounting, and performance measurement requirements to help you more efficiently manage your investment portfolios.

Enterprise Data Management | Investment Accounting |
Performance Measurement and Attribution

Contact us today to learn how Eagle can help your business:

Americas +1 781 943 2200 Asia Pacific +65 6432 0581 Europe +44 20 7163 3827 Mainland China +86 10 58771605

www.eagleinvsys.com

Eagle Investment Systems LLC, a leading provider of financial services technology, is a division within BNY Mellon Asset Servicing and is a wholly owned subsidiary of The Bank of New York Mellon Corporation.







Editor's Letter



The EDM/MDM Challenge

Asked whether enterprise data management (EDM) as a method of data governance has weaknesses, AIM Software's Olivier Kenji Mathurin says EDM's problem is a lack of transparency (in the Virtual Roundtable beginning on page 8 of this report). A possible reason for this, Mathurin says, is that retracing the technical implementation of data policies can be necessary to uncover

implementation information and make the data governance transparent.

While EDM can ensure consistency, it does not address whether processes should be governed centrally or in more distributed or federated fashion, says Mathurin's counterpart, Paul McInnis of Eagle Investment Systems. Master data management (MDM) uses aggregation of sources to ensure a consistent view, McInnis adds. Yet, MDM and EDM can possibly complement each other, according to Acadian Asset Management's Brian Buzzelli.

These views raise the question of whether both MDM and EDM should be used, and used together, to get data governance benefits that would otherwise be impossible to achieve—especially transparency. MDM should be viewed as a component within EDM, according to Scotiabank's Paul Childerhose, interviewed in a Q&A on page 14. Setting up MDM and EDM this way ensures improvement of data governance and data quality, he says.

These data governance professionals all say progress has been made in the field, but it's apparent that with more attention paid to data governance and more data governance work being done, the issue of figuring out MDM and EDM plans is taking center stage.

Yours sincerely,

Michael Shashoua

Editor, Inside Reference Data

Michael Shashona

Email: michael.shashoua@incisivemedia.com

Tel: +1 646 490 3969





waterstechnology

Complete access for your entire organisation to **Waters Technology**

Our information solutions provide everyone in your organisation with access to the best information resource on the financial market technology industry.

WatersTechnology delivers:

- Breaking news and in-depth analysis on the financial market technology industry
- · Detailed features on your market and the deals and people who shape it
- Video features and technical papers
- · A fully-searchable archive of content from WatersTechnology and from all of the other marketleading titles incorporated under the site (Buy-Side Technology, Sell-Side Technology, Inside Market Data, Inside Reference Data and Waters)
- · Full compatibility with any mobile device







To find out more about the benefits an information solutions package would bring, email solutions@waterstechnology.com or call +44 (0) 20 7484 9933 / +1 646 736 1850



Contents

FEATURES

8 Virtual Roundtable

Inside Reference Data asks leading data management professionals how techniques such as EDM and MDM can help make sense of our increasingly complex information

14 Q&A

Front office involvement in data governance begins with value for customers, says Paul Childerhose, Scotiabank's director of data governance – exposure and capital analysis

NEWS

- 6 Data Governance Plans Get Cross-Functional Emphasis
- 6 Data Governance and Quality Concerns Rise, Survey Finds
- 7 Datactics Integrates Data Quality Manager With Governance Solutions
- 7 News Download



Incisive Media 28–29 Haymarket, London SW1Y 4RX





© 2015 Incisive Risk Information (IP) Ltd. Unauthorized photocopying or facsimile distribution of this copyrighted newsletter is prohibited. All rights reserved. ISSN: 1750-8517

News Review

Data Governance Plans Get Cross-Functional Emphasis

As firms look to put together data governance plans—a task many are just starting to carry out—handling cross-functional pieces is emerging as an important part of constructing any governance plan.

"You need to understand all the other components being put into position, in a strategy for how you will manage data across the organization," said Cal Rosen, vice president of enterprise data governance and data quality at TD Bank in Toronto, during the Toronto Financial Information Summit.

The lifecycle of data starts at origination, continues with gathering and goes on to storage, according to April Harbottle, a consultant who previously was a data governance implementation lead at Canadian Western Bank. "This ends up moving out into information—it is a cross-functional effort to gather data and turn it into information," she said.

Data governance planning should be a business function, not a technology or vendor function, according to Paul Childerhose, director, data governance—exposure and capital analysis, at Scotiabank. Rather than "ticking boxes" of technology and solutions providers, or vendors, start by "planning the journey," he said.

Michael Shashoua

Data Governance and Quality Concerns Rise, Survey Finds

Data quality is a top priority for the buy side and is rapidly gaining in importance, a new survey has found. In May, Rimes Technologies released its third annual survey of market participants such as major asset managers, pension funds, banks, hedge funds and insurance companies.

Sixty-seven percent of respondents—twenty-four percent more than in 2014—cited data quality improvement as the primary data management priority for this year.

"This confirmed what we have been hearing in forums we held last year, and in industry research we've been reading: that firms realize data quality isn't necessarily the same thing for the end-users as it is for the operations teams working under more centralized models of data governance," says Giles Arbuthnott, Benchmark Data Service manager at Rimes. "End-users are demanding better quality data that is fit for purpose."

Joanna Wright

News Download

Datactics Integrates Data Quality Manager With Governance Solutions

Software provider Datactics has launched a browser-based application called Data Quality Manager (DQM) for matching and integrating entity, instrument and regulatory data.

DQM automates the transfer of critical data in the business life cycle and allows easier access to the data-processing engines of Datactics' FlowDesigner application.

"The design goal for DQM was to allow us to integrate easily with clients' existing master data management and data governance solutions," explains Steve Cowler, Datactics' London-based CTO.

Clients can choose to set data-quality thresholds, so records falling below defined levels of accuracy are presented for manual validation via the DQM Master Record Manager. They can then review and update individual records, as well as viewing and confirming the business rules that have been applied to data.

According to Datactics CEO Stuart Harvey, DQM allows capital markets firms to profile and scrub data as it enters the organization, rather than undertaking this data management task retrospectively.

Joanna Wright

Asset Control Launches Risk Data Management Service

Data management software provider Asset Control has launched AC Risk Data Manager, which provides data governance for risk managers on both the buy and sell sides, and handles current and historical risk data.

"To date, the complexity of risk data has meant each specific piece of data has sat separately in spreadsheets or in individual trading or risk platforms," says Richard Petti, CEO of Asset Control. The new software synchronizes risk data generation using common underlying master data.

Morgan Stanley Plans Data Governance Improvements

Morgan Stanley is evaluating providers of data governance systems and close to a deal to use a data quality tool, according to an executive at the firm

Morgan Stanley is working on improvements in data governance and data quality, says Mark Reitman, executive director of enterprise data analysis and information lifecycle management at the firm. "We have a lot of systems and a lot of data to break down," he says.

Virtual Roundtable

Data Governance: towards a single version of the truth

Inside Reference Data asks leading data management professionals how techniques such as EDM and MDM can help make sense of our increasingly complex information

How is data governance catching on as a data management method, or not —and why?

Brian Buzzelli, head of data governance, Acadian Asset Management: The financial industry has been managing everincreasingly complex classes of data from the time of the initial rise of markets and trading. We initially employed technology to establish the architecture and infrastructure, and our data management practices evolved from database management for applications within a function to enterprise data management (EDM) and comprehensive data management across global information architectures.

The data management discipline further evolved with master data management (MDM) techniques, where we focus on 'mastering' classes of data—at times with more centrally controlled organizational structures—to promote

the benefits of operational and cost efficiency as a corporate 'data utility.'

As we continue to evolve the data management discipline, we recognize the need for a data governance framework that works in partnership with data management. Data governance has recently evolved to more formally provide the policies and standards, data quality measurements and metrics, clarity on roles and responsibilities, and changes to how we think about data, so we understand and maximize the value of our information assets.

We evolved to be a 'pure information' industry and few touch the physical assets these days. We look to operational and data governance excellence in other industries such as pharmaceuticals, technology, and aerospace; our industry's data governance discipline is far less mature. Data governance is not just catching on,

but rather it's part of our industry's natural evolution to a more structured, engineered, standardized and quantified approach to governing data management.

Olivier Kenji Mathurin, product marketing manager at AIM Software: Much progress has happened in the past couple years with the emergence of the chief data officer (CDO) role. Where data governance was often perceived as optional, regulators and data vendors' requirements are putting the spotlight on it. It's not just reporting the data anymore, it's also about the compliance of the process to get the data.

But to work, data governance requires two elements: management commitment and recognizing data management as a business priority. This is where most firms still struggle. Firms that have gone through an EDM program often have an advantage because these programs are cross-functional and often lay the foundation for data governance: definition and implementation of data policies, data models and glossaries, ownership and stewardship functions, standards, processes and tools.

Paul McInnis, data management product manager, Eagle Investment Systems: Data governance is a crucial part of a successful data management framework. In fact, it is valued as a strategic asset





Olivier Kenji Mathurin, Head of Product Marketing & Research, AIM Software +43 1 512 4652 info@aimsoftware.com

and is almost universally recognized by investment management firms, although formal adoption of data governance strategies is only now starting to gain momentum. There are a number of drivers behind this growing interest, with organizations looking to gain material competitive advantages and relying on these efforts to achieve operational efficiencies.

However, there is a gap between intention and execution when it comes to data governance, with many firms struggling to get these initiatives off the ground. A recent survey we conducted with WatersTechnology highlighted three main obstacles: lack of senior management involvement; lack of resources; and not knowing where to start on drafting a policy. Drivers for broader adoption of data governance policies by investment management firms include the need to efficiently and consistently handle the increasing volume and pace of informa-

Virtual Roundtable





Paul McInnis, data management product manager, Eagle Investment Systems +1 781 943 2526

tion. Firms that have ignored the need to establish such policies have experienced operational inefficiencies, client losses and data security breaches.

eagleinvsys.com

What are the strengths/weaknesses of MDM and EDM for supporting data governance?

Buzzelli: EDM focused on managing data across the enterprise with greater functional standardization in operational data processing. MDM complements EDM as a technology architecture strategy, an organizational efficiency enabler and as a 'center of excellence' data management technique. MDM informs our strategy and drives toward 'single version of the truth' data structures to link the enterprise to critical data stores (e.g., clients, accounts and holdings); it shapes organizational structures, supporting greater centralization of common data processing activities for efficiency gains and reduced cost; and

it promotes deep data class expertise by organizing data practitioners around the full shape, life cycle and workflow of a class of data (e.g., entity, security master, pricing, books, risk, transactions, etc.)

Both MDM and EDM can benefit from, and work in conjunction with, data governance. Practitioners need to evolve and mature their data management discipline and develop data governance in our industry similar to that of others.

Mathurin: Both EDM and MDM have been strong in supporting data stewardship functions by automating the recognition of irregularities and exceptions and by providing a central issue resolution workflow. They offer workflow support, control, and traceability to processes previously reliant on spreadsheets and manual-intensive activities.

Where EDM had weaknesses was in the transparency of the data policies executed. It was often hard to understand which version of the data policy was applicable on a given date or hour, because they were often translated from documents into technical rules programmed into the database and other technical layers of the EDM system. Understanding if a tolerance was changed in a quality control often involved gathering multiple technical log files.

Asset-servicing firms using a model of working with external data owners, are

pioneers in EDM. AIM has worked with a fund administrator that calculates net asset values for 2,400 funds by setting a pricing policy for each asset class of the fund. This policy defines how prices are sourced, selected and controlled for NAV calculation. The administrator embeds these data policies in service-level agreements with clients. Changes clients request must be applied and tracked. To respond to external auditors asking about prices selected on certain days, the firm needed a more flexible, controlled and transparent way to manage changes in data policy.

Modern EDM must treat data policies as first-class citizens. Business data owners must maintain a policy in their system without re-programming. The data policies can be modified in a single place, with approval workflows, version controlled, and with audit capabilities. The audit trail must point to the exact version of the policy in place at any given time.

McInnis: MDM and EDM help support data governance initiatives by ensuring consistency of data across the organization. MDM aggregates multiple sources of data in a central location to ensure there is a consistent view across the enterprise, while EDM enables the firm to have one version of the truth across the enterprise.

Having access across an enterprise to a single view of a dataset as well as the resulting "single version of the truth" is a logical component to the broader objective of aligning the business through a data governance strategy.

That said, both MDM and EDM have their limitations as far as their support for data governance is concerned. For example, potential challenges with MDM are the assignment of ownership of the mastered data, who provides guidance on how decisions are made on data usage, and how conflicts are remediated. EDM ensures consistency and reduces the risk of conflict, but it does not necessarily resolve the question over whether processes should be governed centrally or a more federal structure is optimal for an organization.

How should IBOR (investment book of record) serve as a data governance tool or support mechanism?

Buzzelli: Using IBOR to give immediate and 'real-time' accurate positions has been historically challenging for reasons including data, technology and timing. The velocity of global capital movement demands we understand position, exposure, risk and obligation. This velocity, along with increasing regulatory demands, will drive more evolution of data management, data governance, global data infrastructure and application-processing technologies.

Mathurin: IBOR helps consolidate a firm's

Virtual Roundtable



Brian Buzzelli, Acadian Asset Management

positions in one central place, acting as a "Positions Master." As such, an IBOR also ensures the execution of data policies—data quality rules per asset type, issue resolution workflows, roles, and ownership. A number of IBOR initiatives started

as a data management initiative, as these systems specialized in acquiring, controlling, and publishing investment data of all kinds—including cash and asset positions and/or corporate actions.

McInnis: IBOR is not a new concept—it's something we've been helping clients with for well over a decade. That said, it has grown in popularity as the regulatory environment and management practices increasingly demand risk and exposure reporting at an enterprise level.

An IBOR gives organizations one view of their investment data and enables them to benefit from a single source of truth regarding their investment activity. This can be used by compliance, risk, and performance and attribution systems across the organization to improve controls and decision-making. As a result, an IBOR can be regarded as a by-product of data governance as it controls how data—in this case,

investment data—is consumed by the organization.

Can data governance be effectively centralized or does it require a more dispersed, flexible approach?

Buzzelli: The management and culture of every firm is unique; thus, the centralized or distributed structure should align accordingly. However, data governance is best positioned for success with a balanced approach where governance authority, firm level policy, governance programs, standards and measurement, leadership and guidance are centralized. The balance of data governance is within each business function and includes definition and adoption of function-level data usage policies, specific business function service-level expectations and authority over data stewardship and data ownership. Regardless of organizational structure, data governance should be a development, adoption shared promotion responsibility across the firm.

Mathurin: The issue relates more often to roles and processes rather than tools. Centralized systems provide a single place to ensure the compliant execution of the data policies. They also provide a single place for transparency, access, and connectivity to multiple sources.

Regarding the organization itself, structure must follow strategy: the process

and the organization can be decentralized to allow ownership and stewardship functions to run at the level where it makes most sense. We have seen various configurations from a central approach to a federated approach—where local subsidiaries own and manage local fields such as tax, while common fields are managed by headquarter. These approaches are fully compatible with a central system.

McInnis: Data governance policies need to be flexible, period. However, whether policies are centralized or federated depends on the structure and size of the organization, and they can vary, depending on the data in question.

A large organization may choose to centrally manage certain datasets that are commoditized and utilized across the enterprise, such as security reference data or pricing data. Yet, that same organization may choose to let other more esoteric datasets be governed locally.

For example, if a quant group calculates data solely for its own usage and there are no dependencies on that data elsewhere, it makes sense for that group to set its own controls and guidelines for that particular dataset. If at some stage, that dataset does need to be consumed outside of the group, instituting a global governance policy may then make sense.

As is the case in this example, data governance policies have to be flexible and agile to react to, and reflect, both organizational and industry changes. We firmly believe that data governance is organic and ever-evolving, rather than a set of rules carved in stone. Accordingly, success in data governance requires ongoing oversight and systematic reviews to measure the completeness, accuracy, consistency and timeliness of the data.

How would you compare MDM, EDM, IBOR and centralized data governance as operational approaches?

Mathurin: All of these approaches are fully complementary, with EDM, IBOR and MDM focusing on the data stewardship functions on different data focus angles, and the centralized data governance supplementing and orchestrating these initiatives.

McInnis: These approaches all follow the concept of manufacturing centrally and distributing globally. Firms need a unanimous centralized view of their commoditized datasets, as well as how they are consumed and utilized across the enterprise. Specifically for investment management organizations, there should be no disagreement when it comes to the likes of security reference, trade, position or pricing data across the organization to ensure consistency and clarity of data, and the decision making that results from its use. Each approach supports that core aim.

Measurement As Blueprint

Front office involvement in data governance begins with value for customers, says Paul Childerhose, Scotiabank's director of data governance — exposure and capital analysis



Paul Childerhose

How do you go about making data governance a front-office function?

The primary function of the front office is to build relationships with prospective new customers, and to nurture and grow relationships with existing customers. To effectively get the business engaged in data governance, begin by framing every conversation with the front office in the context of creating value for the customer. If your mandate is data governance, talk to the front office to help them see that accurate and reliable customer analytics for sales and marketing depend on timely, accurate and complete data.

What are the differences between master and enterprise data management? Are these differences semantics or substantive?

The differences are substantive. Master data management is the most challenging component of enterprise data management. It is the blueprint for how data should be organized and classified. If the data is organized and classified according to the master data manage-

ment strategy, then the performance of other key components of enterprise data management, like data governance and data quality, will be greatly improved.

Are data governance plans producing progress in terms of achieving more effective data management?

A partial answer will be found in the selfassessments against 'compliance' with BCBS239, which the global systemically important banks (G-Sibs) will complete as of December 31 and the Canadian domestic systemically important banks (D-Sibs) one year later. Firms that are employing industry developed tools, such as the DMMM and/or the DCAM, to assess their compliance against BCBS239 will be well-positioned to objectively answer the self-assessment stocking-taking questionnaire for the regulators. Secondly, to have more effective data management, your data governance plan needs to always focus on value creation for the customer. If your customer base grows in size and profitability, credit your data governance and data management.



THE INSIDE REFERENCE DATA APP GREAT NEW FEATURES

DOWNLOAD OUR LATEST UPDATE TODAY TO:

- **Get the full picture on the move** text and images now automatically adjust to fit all screen sizes perfectly
- Access the app on your desktop our new Web app allows you to view it on your computer as well as your smartphone and tablet









