



CAPITAL MARKETS TRANSFORMATION

Pathways to Deriving Value from Your Data



WHITE PAPER



Data, once viewed primarily within the purview of IT, has taken a prominent place in the financial services organization. High-quality, usable data has become for the financial enterprise a key driver behind improved business operations, optimal decision-making, business innovation and risk management.

Establishing a path to data quality

Today's leading financial services companies differentiate themselves by applying data management best practices across their operations; i.e., ENTERPRISE DATA MANAGEMENT (EDM). This proactive approach allows firms to leverage data to meet their clients' needs with enriched products and service offerings, as well as to optimize operations and mitigate risk.

Three pillars to ensure effective EDM:

- Data sourcing: Having data accessible and shared across the enterprise.
- 2 Return on investment in data (ROID): Making sure your entire organization understands the value of data.
- Data quality: Ensuring that the data is complete, accurate, clean and consistent.

As you read through the white paper, stop at each of the three assessments to see how your firm measures up in these areas.



ENTERPRISE DATA MANAGEMENT (EDM)

An organization's ability to define and integrate data across the enterprise with accuracy and consistency. EDM includes how data is used across the organization, both between different business units and externally. The data management process is a well-defined practice to ensure data definition, data content and data quality are all maintained throughout the organization. The whole EDM concept is to have a single set of data governance rules as a foundation that the organization operates under. This will ensure that the same data standards are used across all divisions of the organization, which in turn provides higher confidence in the data content and data quality.

Achieving optimal EDM requires solid DATA GOVERNANCE best practices as a foundation. While there is no universally agreed-upon standard for data governance in the financial services industry, it is critical that firms establish their own quality standards and have a well-defined data governance approach that establishes how data is managed and ensures compliance.



DATA GOVERNANCE

It is a policy of an organization that defines how enterprise data will be managed. Key concepts are the management of data rules, access, source, content and use of data, as well as the business owner of these responsibilities.

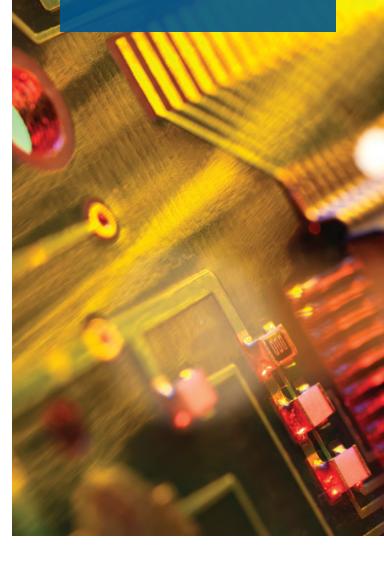
Having centralized EDM eliminates data redundancy and inconsistencies by defining a single set of data governance rules (e.g., which system(s) is the book of record for a particular set/subset of data for the organization), which are adhered to by all divisions within an organization.

To position themselves for success, financial firms must place data and data management at the center of their value chain, regard it as a resource, and use data governance to make the data consistent and valuable organization-wide.

Many C-suite executives previously viewed data as a cost center associated with IT. Today, forward-thinking companies see data as an essential business resource that is used in every internal and external business decision.

HOW DOES YOUR FIRM MEASURE UP? Assess your data sourcing.

- Do your business groups spend more time looking for data than analyzing it?
- Do multiple business groups pay for the same pricing/reference data within the enterprise?
- Do you optimize vendor data access/ management to reduce data costs?





Examples of Enterprise Data

- Data purchased from vendors.
- Data that is product output.
- Data that is stored on behalf of your customers/clients.

Determine the business value of data

The operations of financial services firms create a vast treasure trove of data. Having a consistent enterprise-wide data management approach will allow these firms to analyze, mine and evaluate their data to find patterns and trends that lead to actionable business intelligence.

As data is processed and transformed, valuable inputs and outputs can be leveraged to identify key trends and business intelligence. This can lead to enhanced products, more comprehensive services, and, ultimately, market differentiation—making data a prime raw material for the innovation process. Data operations will then be viewed as a valuable resource rather than an expense.

Having high-quality, consistent, complete, accurate and timely data will also allow better and faster decisions across an organization, and allow agility and responsiveness to business opportunities.

EXAMPLE: Using Data to Benefit Trading Performance

Companies focused on maintaining high-quality, trustworthy data can place and execute trades more precisely and with more certainty (e.g., avoiding costly trade breaks). Having high-quality data also lends itself to better risk assessment.

EXAMPLE: Quantifying and qualifying complex business trends

Data can help a company understand the types of transactions that occur at any given time, which customers engage in those transactions and whether the transactions are one-offs or reoccurring. If data shows the transactions are seasonal across the industry, then companies can more effectively position themselves for that specific situation.

For many executives, understanding the value of highquality data requires a mindset shift. Instead of viewing data solely as a cost, data should be viewed as a resource. If companies can comprehend what data is available and how to manage, use or enhance it meaningfully, they can potentially grow their business, improve operations and proactively manage their risks.

As a result, the role of the chief data officer (CDO) has gained prominence. Now a key member of the C-suite, today's CDO is involved in decisions about data governance practices, leveraging data for business intelligence, and how to mitigate potential risks.

HOW DOES YOUR FIRM MEASURE UP?

Assess your return on investment in data (ROID).

- Is your data treated as an enterprise resource?
- Is your data owned by the business and not seen as an IT issue/ responsibility?
- Does your business feel empowered and confident with the data available?
- Are you satisfied with the performance of your data vendor and sources?



Mitigate risks associated with data

While data can be viewed as a resource, it also can present plenty of risk to an organization—including regulatory compliance and legal issues—if not managed properly. Thus, it is essential that institutions properly govern data to ensure its accuracy and completeness. Policies and procedures must be instituted to govern data management. Being prepared to demonstrate to regulators, internal auditors and external auditors how your company follows those procedures is crucial. It is equally important to demonstrate processes that guard against data breaches.



INTERNAL DATA

Data that is sourced from internal operations. That does not mean that it is owned explicitly by the enterprise. Internal data can include things like analytical results or processed client data. Some internal data may be published, and some may be restricted to be only used by the enterprise.

Data is no longer only an IT responsibility. The entire business needs to take responsibility for it. Leadership must choose which types and sources of data should support the organization's business goals and how data management will accrete to the business side of the ledger. A key element of this exercise will be to design and implement a system that can process the data efficiently, and identify any data anomalies for business operations to review. IT—especially senior IT leadership—can partner with the business to position the organization for additional growth and opportunities by data-mining all of the information that has been collected



Evaluate and re-evaluate your data

Business development and growth rely heavily on data, data trends and behavioral patterns. The data sources are now under more scrutiny than ever before. For our purposes, we will focus on two types of data: a firm's internal proprietary data and its external vendor data. These two types of data can be viewed in three ways: as a cost, as a liability (if poorly maintained) or as a resource (if repurposed productively). There are some overlaps in terms of how these types of data ultimately impact and drive the business forward.

Internal data: Firms typically generate a vast amount of internal data from their daily business operations. These proprietary data sets can be extremely beneficial to an organization if used properly. Examples include data generated along the customer lifecycle. Such data can potentially be repurposed or repackaged to generate additional opportunities for existing products and services, or to create new products and services.

When evaluating internally generated data, consider its source, custody and validation. Many business units use internal data—harvested and maintained in a variety of ways—for critical analysis and decision-making; however, the origin, chain of custody and update frequency for that data is not always clear. By formalizing procedures for internal data handling and management, institutions can create more awareness of data availability and its uses and sources, thereby increasing its value and acceptance.

External data: Externally sourced data always comes with a cost, but these types of data sets should be viewed as a resource in the grander scheme of enterprise data management. The data itself is a cost, but it provides intrinsic value to the business and positions the organization for greater success with proper data management. Reference and pricing data is most valuable when it is sourced and maintained at the highest quality level possible. This helps the rest of the enterprise run more efficiently by avoiding pricing errors, while mitigating trading and operational risk.

Just as important as data evaluation is data re-evaluation, a process that should ideally include:

- Regularly scheduled evaluations of active vendors and their data
- Reappraisal of vendors and data value proposition
- Evaluating data usage, data coverage and data cost across vendors
- Re-sourcing data via alternative potential sourcing

Evaluate vendor data

Because so many financial services products and services are constructed with external data, companies must carefully consider their vendors and sourcing. Many companies look to the largest and most well-known vendor in a particular space, ignoring other options and potentially setting themselves up for problems. Size and overt reputation should not be the only considerations when identifying potential vendors. Consider the business requirements first before looking into data vendors based on asset class, data content, data coverage and pricing.

External data generally requires more analysis and due diligence to ensure the organization is sourcing the most appropriate data for its needs. In today's ever-changing market, the solution that worked last month or last year, or even yesterday, may not work today.

Multi-sourcing data helps ensure higher quality and accuracy. However, using multiple sources is typically more expensive than a single source. Rather than making a blanket decision about the number of sources, consider the specific business use case. Make decisions using fully qualified business cases that quantify the business value from the number and types of sources.

Establish data governance practices

Data governance or rules are at the center of solid data management and belong to the business and operational side of a financial services organization. The business side must identify and define business rules based on its analysis of and expertise in data sets. Business users understand the business, the data and the implications of having bad data. Their main objective is to define a standard set of rules that are applied to the data, and to manage the data for consistency, accuracy and completeness.

Once the business side creates the rules, the IT side implements those rules and ensures they are applied consistently across regions and business lines. When the business and IT sides work together—and the process and procedures are effectively communicated—the enterprise will have greater trust in the data and will fully incorporate data into its business validation process.



Create robust data operations

The adoption of automation and straight-through processing makes real-time data a reality in many organizations. As the data is streamlined and made available in real time, it can become increasingly expensive for the organization to maintain and manage.

DATA OPERATIONS adheres to the defined data governance policies to ensure the enterprise data is managed with consistency and high quality. Examples of acquiring external vendor data, or "cleansing," i.e. validating that the data meets specific data validation checks, has the minimum required business fields populated, etc.

Data integrity, quality and governance are key aspects in data management. While the cost of data management can be high, a lack of data integrity and governance practices carries a potential for even greater cost (financial and reputational) and risks. Financial services firms may have a legal and fiduciary responsibility to their customers, shareholders and themselves to manage data to the highest standard possible.

Assess the data quality of your enterprise

The most direct route to operational efficiency and enriched products and services includes taking ownership of data at an executive and enterprise level. Understanding the data roles, evaluating the data consumed and maintaining the highest standards of data integrity, quality and governance sound simple, but they are not.

If firms establish effective enterprise data management, data becomes the firm's most valuable asset and the catalyst for business transformation.

HOW DOES YOUR FIRM MEASURE UP?

Assess your data quality.

- Do you have well-defined data governance, including dedicated roles with seasoned resources, policies, procedures and monitoring?
- Do your clients complain about erroneous reference data in reports?
- Is your business concerned about financial and reputational impact resulting from inaccurate reference data?
- Are your portfolio managers frustrated by conflicting positions reports?
- Are your business intelligence (BI) tools rendered ineffective due to incomplete or inconsistent data?
- Are you proactive in checking data tolerances and applying data cleansing before the data is consumed by business applications?
- Do you have a consolidated view on pricing, reference, transactions, derived and other data stores?

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