

# Data services

How to keep the lifeblood flowing

WHITEPAPER

In this paper we examine why data is so imperative to firms' success, and how they can better manage data flows to compete in an increasingly fast-moving and regulatory-driven environment.

### Avoid a data blockage

Data may not be the answer to life, the universe and everything, but to financial services firms it is close. Accurate, timely and comprehensive data fuels investment managers' ability to make reasoned and appropriate trading decisions, enhance performance and effectively manage risks. Equally important, data is the lifeblood of proper compliance, a prerequisite for investment firms and their service providers to meet their regulatory obligations.

No wonder data management is high on the agenda of financial institutions. Yet many organizations' existing data processes and infrastructures are struggling to cope with today's exacting demands.

In this paper we examine why data is so imperative to firms' success, and how they can better manage those data flows to compete in an increasingly fast-moving and regulatory-driven environment.

### The data necessity

Powerful and often interconnected forces are driving institutions' needs for efficient, integrated data services. Some of the reasons are imperative and defensively driven. Others are more proactive, where the focus is on strengthening competitiveness and growth. But all have an important role to play in your firm's long-term health.

While each institution will wrestle with its own specific data demands and deficiencies, below are a number of challenges that are proving especially prevalent.

#### Regulation

Recent and upcoming regulatory initiatives—from AIFMD and Form PF to OTC derivatives reform, the latest UCITS, FATCA and accounting standards changes such as IFRS 9 & 13—are partly or wholly designed to enhance transparency and limit potential risks. Accurate and timely position, transaction and exposure information, robust asset and liability valuations, extensive and frequent report filings...complying with each of the rules demands fingertip access to a smorgasbord of reliable datasets. In certain cases the data must also be enriched to meet the specific, detailed filing requirements of each regulation—which often vary from country to country.

Incomplete or inaccurate data poses serious—potentially even existential—dangers. Compliance failures may lead to regulatory censure and fines, resulting in legal and reputational risks that can be hard to contain.

#### Asset verification

Enhanced regulatory stipulations and stringent investor demands are increasing the emphasis on industry participants' asset verification and protection processes across the investment and custody chain. But timely and reliable asset verification is complicated by increasing globalization, instrument complexity and diversity, trade venue fragmentation, and the involvement of multiple constituents and systems in the trade lifecycle. Efficient and accurate exchange and reconciliation of the data each party holds, therefore, is vital to ensure position and holdings information remain in sync.

Leveraging complete, up-to-date information enables investment managers to take advantage of trading opportunities, minimize risks, remain within trading thresholds and guard against style drift. Effective data reconciliation also helps the parties to fulfill their regulatory-mandated asset protection responsibilities and combat potential reputational damage.

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## Trade lifecycle changes

Markets' evolving trade lifecycle processes are further driving institutions' data needs. For example, regulatory fair treatment rules such as the UK's Treating Customers Fairly (TCF) initiative—with its focus on product suitability and performance outcomes—call for access to and assimilation of an array of client details and pre- and post-trade datasets to fulfill risk analysis and reporting responsibilities.

Changes to settlement cycles put a further onus on the rapid availability of robust trade-related data. In the US, the DTCC has recommended shortening the settlement cycle to T+2, and is looking at the possibility of T+1 in the future. Across the European Union, the move to T+2 settlement took place in January 2015, while similar or even shorter cycles are being introduced elsewhere. Truncating the time available for the pre-settlement phases means firms must be more efficient in how they conduct their trade communication and trade lifecycle processes, with particular focus on enabling same-day affirmation of trade details.

## Client reporting

No institution can hope to become or remain a serious force in the industry without the ability to produce frequent, accurate and detailed reports replete with information that clients actually want and need. The key to high quality client reporting is efficient data management—the ability to source the necessary data, reconcile it where appropriate, populate the reporting engine and distribute the polished article to clients in ever-tighter timeframes.

## Managing the data challenge

The cautionary phrase “Garbage In, Garbage Out” has become especially relevant in an era when data quality and its downstream outputs are under intense regulatory and investor scrutiny. Clean, normalized and timely data is essential. And that in turn demands comprehensive data inputs and process automation.

*A robust data capability is dependent on four key elements:*

### Extensive data collection

The information content each firm needs comes from a multitude of sources, including market and reference data from the leading industry providers, research data, counterparty data and custodian bank data. Broad data collection coverage is essential to avoid information gaps.

## Normalization

The various data inputs from both internal and external systems are frequently delivered in a range of formats (flat, CSV, fixed, XML, SWIFT), using different protocols, in files that may have to be decrypted before reading. To complicate matters, these data source file and content formats change continually. This data needs to be standardized into a “lingua franca” that downstream systems can understand if meaningful automation throughout the process chain is to occur.

## Enrichment

In many cases, data has to be enriched to be truly useful. For example, enrichment may be needed to standardize security identifiers and transaction types across multiple data sources for consistency.

## Distribution

At the end of the process, the enriched data needs to be efficiently disseminated, whether to populate regulatory filings, to counterparties or clients, to critical downstream systems and reporting engines, or via a social or mobile platform.

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## Automation imperative

Manual or semi-manual data processes add cost and the potential for human error, with the operational, regulatory and reputational risks that may result. Moreover, any manual involvement is inherently time-consuming.

The growing premium on accuracy and speed in all phases of the trade lifecycle and client relationship cannot be avoided. Therefore, the only way to keep pace and ensure the necessary level of operational control is to maximize automation of the data collection, normalization, enrichment and distribution functions wherever possible. Management by exception is the objective—high levels of automation to cope with the majority of data tasks, backed by clear workflows for those exceptions that still demand a degree of human intervention.

## Benefits of automated data services

Effective data management has become too important to leave to a proprietary mishmash of legacy systems, tactical patches and manual interventions. In contrast, using an integrated and highly-automated specialist data hub that can interoperate with your other technology solutions provides multiple ways to enhance your business.

### Regulatory compliance

Leveraging an automated platform can significantly reduce the cost, risk and effort involved in achieving regulatory compliance. By collating and cleansing all the necessary datasets within the platform, the solution minimizes the risk of errors stemming from inconsistent data and the manual re-entry of data across multiple applications. Portfolio and client data integrity is maintained, while providing a single source of easily retrievable data for regulatory reporting purposes. In addition, the high data quality will help your counterparties meet their regulatory requirements.

Crucially, an automated process also creates a transparent audit trail. Being able to track the movement of each piece of data in this way is increasingly important in satisfying regulators' expectations. Plus it can help resolve client disputes or potential lawsuits by providing an electronic thread back to the origin of any data-related errors.

### Risk management

Replacing a tangle of legacy systems, solution interfaces and manual processes with an integrated data infrastructure backed by a robust business continuity plan reduces operational risk, and potential regulatory, legal and reputational risks.

Reliable and timely data inputs are also crucial in feeding the evolving breed of risk analytics capabilities, which are increasingly central to firms' efforts to mitigate investment risks and enhance performance.

### Cost efficiency

Automating data collection and dissemination through a data hub means users no longer need to maintain a myriad of counterparty and data provider interface connections. Firms can spend less time collecting and compiling data, and more time putting it to effective use.

Aggregating data from multiple sources into a centralized platform also facilitates consolidated reporting. By eliminating the need to compile reports manually, firms can cut the associated labor costs and redirect staff to more productive tasks. And by freeing both front- and back-office staff from time spent on compliance issues to focus on their actual jobs, firms can significantly reduce the hidden cost of compliance, and increase their efficiency and profitability.

Figure 1: **Data risks and rewards**

<b>Bad Data Risks</b>	<b>Good Data Rewards</b>
Regulatory non-compliance	Compliance with regulatory requirements
Financial penalties	Reputation for sound management
Reputational damage	Cost efficiency
Operational risk	Minimize operational risk
Surplus headcount	Enhance ability to manage investment risks
Misallocation of non-compliance staff time and resources	Staff free to focus on value-added activities
Missed market opportunities	Identify and exploit market opportunities and take advantage of big data through better analytics to help you grow your business more profitably.

The right technology infrastructure provides greater flexibility and scalability too, ensuring firms are better equipped to tackle future industry developments. For example, the constantly shifting regulatory landscape demands technology that can adapt to changes as they occur. Scalability is important to handle growing transaction volumes, new asset classes and new portfolios without straining your resources or requiring additional headcount.

**Business growth**

Easy access to high value, reliable content from a broad range of sources allows firms to make better-informed decisions based on timely information, and to implement those decisions more efficiently.

Sophisticated data analytics in particular are becoming more prevalent, as industry participants seek to identify and exploit whatever competitive advantages they can. Only by feeding the analytics with high quality, easily accessible data can firms accurately identify their target clients, determine the best products to sell to them and ensure they service them the right way. Client service can be further enhanced by

having access to data that enables you to provide a complete, 360° view of clients and their holdings, including where assets are held by multiple custodians.

**Hosted solution advantages**

While locally-deployed data service solutions offer a multitude of compliance and efficiency benefits, these can be even further magnified through a hosted cloud environment.

Ease of maintenance is a case in point. For instance, whenever a market data provider, custodian or counterparty upgrades or otherwise changes one of their interfaces, each of the data users’ locally-installed solutions has to be updated. In a hosted environment, the service provider need only make the update to the hosted infrastructure once. So capability enhancements—such as upgraded interfaces, the addition of new data sources or improved reporting tools—can be rolled out to users and supported much faster, more efficiently, with less operational risk and minimal disruption.

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## Key service capabilities

Firms can enjoy valuable efficiencies and business advantages by leveraging a managed data services platform rather than locally installed or proprietary solutions. But to maximize its effectiveness, a data services solution needs the right mix of capabilities. Essential features to look for include:

- Extensive counterparty/data provider connectivity to ensure users have ready access to the comprehensive array of data flows they need to conduct their business.
- Open architecture to simplify the data provider connectivity process and make it easier to add new providers as required.
- Highly automated data management and workflow environment to minimize manual intervention and its associated risks and opportunity costs, and maximize processing efficiency, speed and scalability.
- Normalization and enrichment capabilities to facilitate automation and produce functional data outputs.

- Monitoring tools so users can check the status of their data, and identify and resolve any exceptions in an efficient manner.
- Skilled and knowledgeable team able to provide expert support to smooth the data extraction, normalization, enrichment and delivery processes.
- Excellent counterparty relationship management to ensure efficient and smooth data flows from providers.

## Conclusion

Industry participants' success is increasingly dependent on high quality data and efficient data governance. But many organizations' data capabilities are straining at the seams. Collating and processing the flood of data firms face, such that they can satisfy their evolving regulatory responsibilities, and extract the sorts of valuable business analytics and insights they need to compete and grow, requires a level of coverage and infrastructure sophistication that many cannot hope to sustain in-house.

As regulatory compliance, cost and competition pressures continue to grow, firms need a more effective approach. By leveraging a highly-automated data service solution, users benefit from an integrated hub that can connect myriad different counterparties, systems and workflows. The result is a cost-efficient, scalable and auditable process that produces the full and timely data outputs that regulators and clients demand, and that will help drive future business growth.