

What Solution Fits Your Business Model?

Optimizing your Stance on the Performance Services Continuum



JULY 2020



BY DARCIE JAMES MAXWELL

Lead Architect, Client Data Solutions

As Lead Architect, Client Data Solutions, Darcie works with institutional and wealth investors to assess and analyze their business strategy, business requirements, current state environment and technology choices, bringing forward alternatives that are designed to meet their business needs. She works across our Canadian and global organization to translate a client strategy into operational reality. She is also a member of the CIBC Mellon leadership team.

The global investment industry continues to grapple with waves of disruption, including the rapid shift to remote working amongst the pandemic accelerating strategic and business challenges that have been growing for years. Today, critical considerations in the investment landscape include volatility in global markets, uncertainty caused by unprecedented technological disruption, the complexity of more stringent regulatory requirements and ambiguities in data. Together, these forces create a perfect storm demanding that investors and their service providers rethink, re-engineer, and transform.

These changing realities have accelerated the data landscape. The industry continues to emphasize the need for access to meaningful data to drive business models forward. Institutional investors are likewise evolving their data management strategies, their philosophies on how they approach insourcing, outsourcing or managing data, and their strategies on how they access, engage with and share both data and insights.

For many clients, optimizing their use of data means having the right software, tools, and platform for data management. Many players are increasingly targeting an open architecture approach that enables an array of specialized solutions from various vendors, paired with sophisticated managed services to help keep providers focusing their team, effort and capital on the areas where they can derive the greatest value. Key factors driving legacy

platforms toward their end of life and causing many to outgrow their reliance on Excel spreadsheets include data access, cybersecurity, and the rising costs of rolling out new iterations of data solutions. These challenges are causing many to rethink their multi-year roadmaps to focus financial and human capital on the highest value areas.

OPEN ARCHITECTURE IS DEFINING THE FUTURE STATE OPERATING MODEL

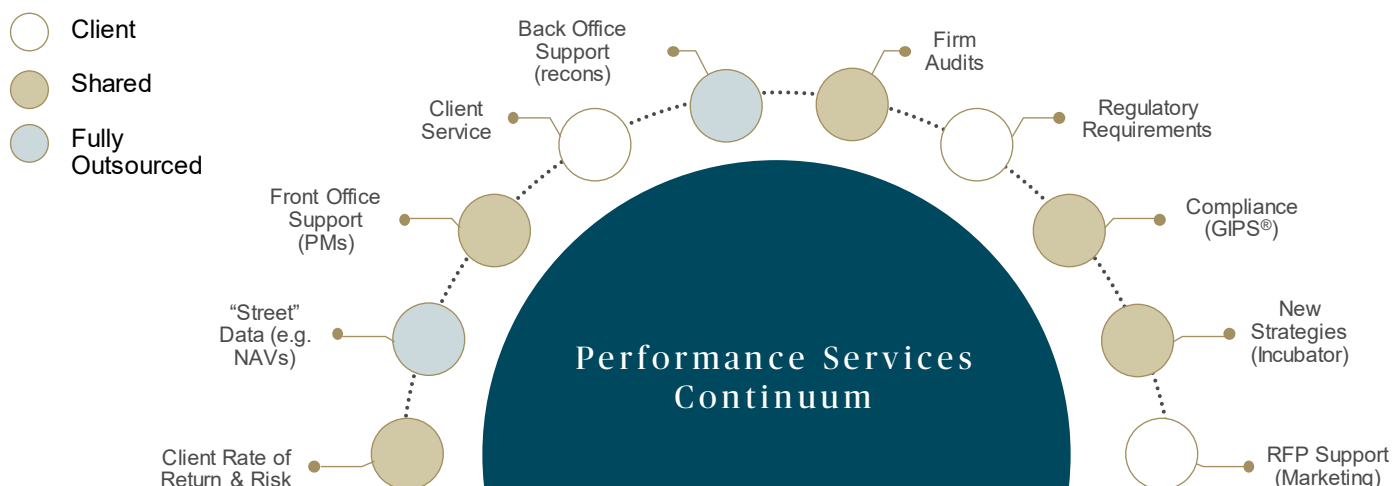
It's intriguing to look back and recall the resources required to break down something like an incorrect rate of return, where the root cause of an issue was often due to the upstream inputs or data sources. Something as simple as figuring out whether someone forgot to apply the month-end price override on their transaction entry could result in hours of work. Remarkably, analysts still find themselves in these challenges today and it speaks to the inefficiencies caused by manual interventions.

One of the biggest industry developments facing investment industry professionals across the front, middle and back office in Canada is the ongoing transition away from legacy systems. For long-tenured professionals who have been utilizing the same systems their entire career this can appear overwhelming. While change and transition can mean a learning curve when moving away from familiar platforms, technology upgrades also present opportunities to improve processes, adopt more efficient operational workflows (for example, eliminate processes running in batch) and even reconsider outdated systems and structures that have replicated inefficiencies from past processes or requirements.

When users can capture data discrepancies earlier in the process, not only does it save time and resources, but it allows the analysts to focus exclusively on the errors. Looking beyond the efficiencies, the benefit of exception-based processing is that it allows organizations to significantly reduce their operational risk.

The near-term impact of unwinding a legacy platform is that organizations still dependent on the system will have to gain a better understanding of what manual or custom solutions they have developed over the years, and what suboptimal outsourcing models are currently moving these inefficiencies along the value chain. The long-term impact, though, is that these organizations will become more efficient, less exposed to operational risk, and better prepared for a landscape in which their data strategy can facilitate growth.

DIFFERENT CLIENTS REQUIRE DIFFERENT SOLUTIONS



While institutional investors often have parallel or overlapping needs, challenges and goals, each client has their own nuances. To this end, for many Canadian institutional investors, technology might be better considered as a continuum of solutions and expertise rather than a monolithic choice imposed by a vendor. An open architecture provides institutional investors with the flexibility to choose best-in-class systems for their investment activities and capture insights from a wide variety of data sources. Examples of key goals include deeper intraday insights and more real-time transparency around trade activities and NAV construction, helping Chief Investment Officers, Chief Data Officers and Chief Risk Officers to achieve a single source of trusted information and insight. Indeed, even if an "off the shelf" solution is a strong fit for many, it is important to assess the various elements, needs, opportunities and challenges.

Moving to a fully outsourced model whereby the teams and technology are operated by a provider allows clients to leverage a standardized service that can be integrated into their existing operations. For many clients, this is an ideal choice as it reduces the need to hire resources or invest in technology and provides a predictable cost structure.

However, some clients may want to be able to provide their internal stakeholders with highly customized analytics or have the ability to integrate their own data with the information from their asset service partner. In this scenario, a technology-only model where a provider delivers the platform while the manager provides the process expertise is the preferred operating model.

Today, critical considerations in the investment landscape include volatility in global markets, uncertainty caused by unprecedented technological disruption, the complexity of more stringent regulatory requirements and ambiguities in data.

With changing data demands, we also see some considering an evolving hybrid model as institutional and wealth investors evolve their operations over a long-term plan. They want to be able to integrate a wider range of data sets, focus resources on complex analysis but also be prepared to allocate operations functions to their asset servicing providers based on their investment operations models. This has provided many clients with the best of both world's minimizing in-house operational activities while continuing to leverage technology to better meet their information delivery strategic objectives. An open architecture model can even pave the way for a gradual transition over time as an investment firm, pension plan or insurance company continues to evolve its operational model.

EVOLVING INVESTMENT PRIORITIES REQUIRE EXPERTISE AND ROBUST CAPABILITIES

Along with experiencing fundamental changes in the industry, we continue to see clients investing to drive data management and data intelligence as a key competitive advantage. Clients are striving to address their data needs despite significant margin pressure. The external challenges presented provide us with real opportunities to manage the quality of data and make it accessible to a broadened set of stakeholders.

As data needs continue to change, our clients are talking to us about addressing three main themes: the simplification of data processes, accessing advanced skillsets on demand, and managing growth.

As clients look to simplify data and data processes, the aim is often to make data more accessible and reliable even as volumes grow and data gets more complex. The stakes continue to grow and the data challenges are gaining focus for many firms given the increasing number of internal and external stakeholders depending on data – boards, investment management teams, compliance teams, regulators and more – clients are looking to their providers to create a data management process that simply gathers the loose data spread across locations, systems, and teams, and makes it readily available for when they need it.

As data science in investment management grows as a field, specialist expertise is increasing in demand and cost. Some of this expertise is only needed for key challenges or points in time. We are seeing clients working with specialist consultants as well as looking to our global enterprise for skillsets that they don't intend to hire or grow in-house. As clients come forward, they want the ability to enlist our help to use software more efficiently, answer their questions around data, develop queries and perhaps most of all to allow them to focus on achieving their target state for information and the datasets as quickly as possible.

The third theme is around helping our clients manage growth. Clients are asking us to help them scale for new business, new asset types, analysis, new volumes and frequency and demand from many more stakeholders requiring information to do their work. From a client perspective, everything is being executed with a leaner staff and at a faster and deeper level, so clients are looking to leverage reliable partners in this endeavor. Given the breadth, perspective and scale of asset servicing providers in helping clients shape their operations, the growing data and analytics practice within our business is a logical evolution for longstanding relationships built in some cases over decades of trust.

CLIENT-CENTRIC DATA, FLEXIBLE ANALYTICS AND INNOVATIVE CONTENT SOLUTIONS

As the shift to agile platforms accelerates, the work our global enterprise has put into building technology to support our clients' performance and capability needs will ensure they can redeploy their capital. A few other considerations and themes we see include:

Transparency and Oversight

Clients require deep expertise and a comprehensive solution set that offers transparency across an array of data sources and requirements. A few examples include traditional and alternative asset classes, solutions to track manager fees and capabilities to monitor and manage Environmental Social Governance ("ESG") factors and more. A provider that can offer transparency across asset classes at the total portfolio level is key to managing the investment process.

Risk Management

Asset owners and asset managers alike face complex risk pressures such as complying with new regulations, managing transparency concerns and mitigating investment risks across diverse asset classes. They need the support of robust analytical tools on the front lines of risk management.

Performance Analysis

Performance measurement and attribution, alongside risk-return analysis are considered to be important features when it comes to modeling, analyzing and monitoring investments. Clients are seeking robust market intelligence capabilities that help them understand asset allocation and performance trends.

With changing data demands, we also see some considering an evolving hybrid model as institutional and wealth investors evolve their operations over a long-term plan.

Data & Analytics Solutions

The Data and Analytics Solutions available to our clients in Canada and globally are built around enabling flexibility and choice agility in a developing data landscape. We offer client-centric data, technology and content solutions that cover a spectrum of investment management solutions from traditional software installation through comprehensive middle office services, providing independence to move in either direction along a continuum as our client's business evolves.

Rising Needs

Operational Efficiency and Expense Management



Regulatory and Compliance Requirements



Transparency and Oversight into the Investments Process



Optimizing Investment Performance and Managing Risk



Opportunities

Move to Alternatives to Generate Alpha



Asset Owners Becoming Asset Managers (In-House Teams, Industry Consolidation)



Data Management, Digitization and Technology Advances

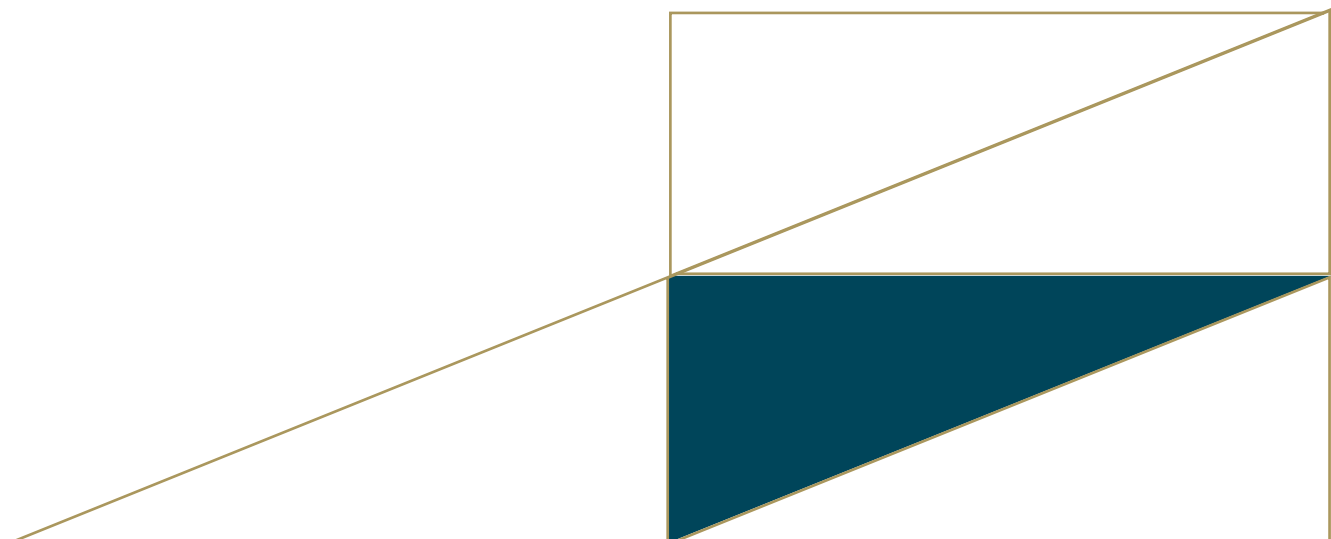


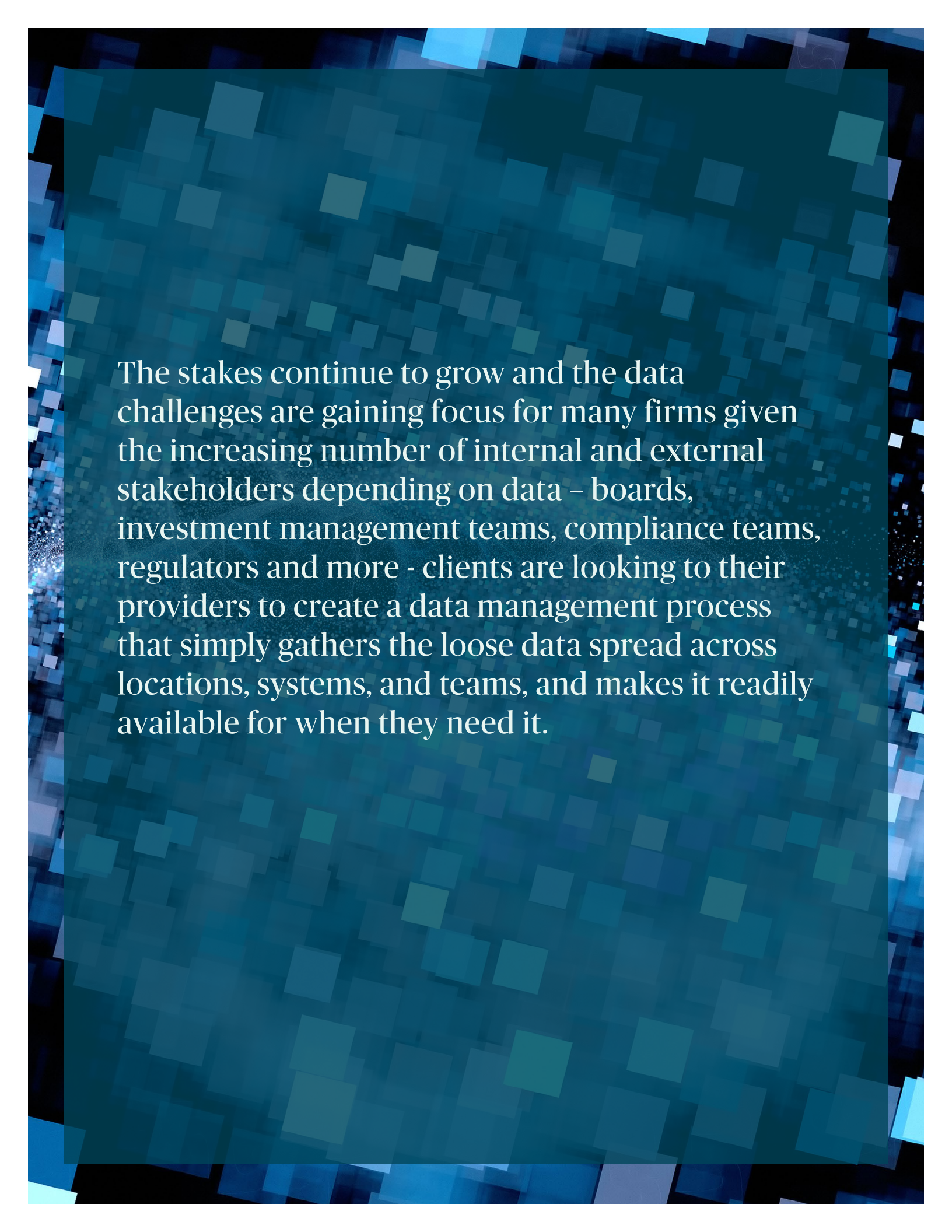
Consideration of Non-Financial Factors (e.g. ESG)



Whether your organization aligns better with a managed services model, an outsourced model, or somewhere in between, we encourage you to review the attributes of each model below and think about how you can customize and leverage the performance continuum to fit your organization's needs:

Attributes Aligned with Hosting	Attributes Aligned with Co-sourcing	Attributes Aligned with Outsourcing
<input type="checkbox"/> I am comfortable handing my own reporting requirements	<input type="checkbox"/> I want to have the ability to integrate my own data with the information from my asset service partner	<input type="checkbox"/> I want to be able to provide my internal stakeholders with standard analytics
<input type="checkbox"/> My organization has robust IT capabilities and can handle accounting, data management and performance	<input type="checkbox"/> I want to consolidate my data onto a centralized platform and have my provider track and leverage it	<input type="checkbox"/> I want a provider to handle the technology and the operational overhead
<input type="checkbox"/> I want my provider to equip me with tools for utilizing data in the front, middle, and back office	<input type="checkbox"/> I want the operational responsibility split between my organization and my provider	<input type="checkbox"/> I want my provider to manage my data on my behalf





The stakes continue to grow and the data challenges are gaining focus for many firms given the increasing number of internal and external stakeholders depending on data – boards, investment management teams, compliance teams, regulators and more - clients are looking to their providers to create a data management process that simply gathers the loose data spread across locations, systems, and teams, and makes it readily available for when they need it.

As data needs continue to change, our clients are talking to us about addressing three main themes: simplification of data processes, accessing advanced skillsets on demand, and managing growth.

For more information

To learn more about some of the performance, accounting and data solutions available through our global enterprise, contact your relationship manager.



ABOUT BNY MELLON

BNY Mellon is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries. As of March 31, 2020, BNY Mellon had \$35.2 trillion in assets under custody and/or administration, and \$1.8 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments. Additional information is available on www.bnymellon.com. Follow us on Twitter @BNYMellon or visit our newsroom at www.bnymellon.com/newsroom for the latest company news.

BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may be used as a generic term to reference the corporation as a whole and/or its various subsidiaries generally. Products and services may be provided under various brand names in various countries by duly authorized and regulated subsidiaries, affiliates, and joint ventures of The Bank of New York Mellon Corporation. Not all products and services are offered in all countries.

BNY Mellon will not be responsible for updating any information contained within this material and opinions and information contained herein are subject to change without notice.

BNY Mellon assumes no direct or consequential liability for any errors in or reliance upon this material. This material may not be reproduced or disseminated in any form without the express prior written permission of BNY Mellon.

CIBC MELLON

➤ A BNY MELLON AND CIBC JOINT VENTURE COMPANYSM

000 - KL33 - 07 - 20

ABOUT CIBC MELLON

CIBC Mellon is dedicated to helping Canadian institutional investors and international institutional investors into Canada service their financial assets throughout the investment lifecycle. Founded in 1996, CIBC Mellon is 50-50 jointly owned by The Bank of New York Mellon (BNY Mellon) and Canadian Imperial Bank of Commerce (CIBC). CIBC Mellon delivers informed investment services for investment funds, pension plans, insurance companies, banks, foundations, endowments, corporations, and global financial institutions whose clients invest in Canada. As at June 30, 2020, CIBC Mellon had more than C\$2 trillion in assets under custody and/or administration. CIBC Mellon is part of the BNY Mellon network, which as at March 31, 2020 had US\$35.2 trillion in assets under custody and/or administration. www.cibcmellon.com

©2020 CIBC Mellon. CIBC Mellon is a licensed user of the CIBC trade-mark and certain BNY Mellon trade-marks, is the corporate brand of CIBC Mellon Global Securities Services Company and CIBC Mellon Trust Company, and may be used as a generic term to refer to either or both companies. This article is provided for general information purposes only and CIBC Mellon Global Securities Services Company, CIBC Mellon Trust Company, Canadian Imperial Bank of Commerce, The Bank of New York Mellon Corporation and their affiliates make no representations or warranties as to its accuracy or completeness, nor do any of them take any responsibility for third parties to which reference may be made. The content should not be regarded as legal, tax, accounting, investment, financial or other professional advice nor is it intended for such use.