CIBC MELLON BNY MELLON CIBC

Canadian Asset Owners and Global Sovereigns on a Parallel Digital Journey

BY
DARCIE JAMES MAXWELL
Lead Architect
Client Data Solutions

BY MIKE GARNEAU
Vice President
Relationship Management

BY NICK PETRUCCELLI
Executive Director
Business Development

In its report on The Evolution of the Canadian Pension Model, the World Bank noted that Canadian public pension plan organizations are among the world's most admired and successful, which can largely be attributed to collaboration across various critical stake-holder groups in labour, business, government and finance.[1] Strong, independent governance over these plans has led to increased accountability and transparency, with separate boards, to provide improved oversight on behalf of plan members.

Canadian plans have evolved as arms-length, jointly-trusteed, independent organizations able to invest prudently across long time horizons, manage their associated invest-ment risk appetites and achieve strong governance over their sophisticated investment and operational activities – this has in turn positioned them well to deliver upon their pension promises over the long term.[2]

According to research undertaken by our global enterprise, many of the world's sovereign wealth funds are pushing the envelope in pursuing innovative and sophisti-cated investment strategies, and just as many can be considered first-movers in leveraging technology and data to streamline and enhance their operation. Canadian asset owners are no different.[4]

Advances by those on the cutting edge are often matched by the gaps that remain for others, whose middle-office infrastructure and data management capabilities remain inadequate for today's investment landscape. Those who have gaps between data and operations are working to understand how to catch up, and how to incorporate the lessons learned by those who have initiated this transformation. When competing with peers and with the world's leading asset managers for investment opportunities, rather than merely keeping pace, some are looking to leapfrog the rest of the asset owner universe, as the competitive advantages of data and analytics become more apparent.

Beyond gravitating toward more sophisticated asset classes, Canadian asset owners and global sovereign wealth funds alike are also pursuing direct investments in private equity, venture capital and other real assets, competing directly with fund managers in sourcing deals. Indeed, the number of direct transactions by sovereign wealth funds has increased by roughly 25 per cent since 2015.[3]

According to a recently released study by PwC, Canadian pension funds have a higher exposure to alternatives than other large global pension funds.[2]

Accommodating the data requirements to invest in and manage illiquid securities is just one driver of sovereign wealth funds' more holistic transformation initiatives. Many leading sovereign investors are also focused on how these capabilities – further enhanced through cloud computing and advances in machine learning technologies – can support their fledgling data science programs.

While the use of technology frequently led to delays and backlogs in data 20 to 30 years ago, today pension plan sponsors are embracing technology as a tool to help them move forward. There are many benefits to adopting technology, such as cost efficiencies, a reduction in errors and improved client satisfaction. Comparatively, not adapting the right technology has the potential to lead to higher costs, more confusion and compromised data.[1]

This is creating material advantages for those able to ingest, manipulate and model unstructured data to inform investment decisions across their more comprehensive holdings.

Still, across the larger sovereign universe, there's been a bifurcation as to where funds reside on their data journeys. Many would certainly qualify as early adopters, but nearly as many have taken a conservative approach in building out their middle-office capabilities.

Some, for instance, haven't had to invest in their middle-office. This is not to say that the interest is not there. Many continue to build out their larger investment operations to pursue alpha-generating segments, characterized by more complex data needs. This isn't immediately evident to the wider market, as a time lag typically exists between hiring the required investment staff to manage these allocations and putting the infrastructure in place to accommodate the new strategies, but perceptions and awareness around what is possible through technology are definitely changing.

Sovereign wealth funds that have been slow adapters to digital transformation are now taking the steps to embrace this technology and the benefits that it provides.

Looking to the Cloud

Among the more conservative institutions, some have been slower to transition their technology and data management infrastructure to the cloud. This can make it more difficult to leverage capabilities enabled by cloud computing – namely machine learning and artificial intelligence.

Moreover, the cloud can offer on-demand, elastic infrastructure and resiliency through recovery-oriented, fault-tolerant computing. As it relates to security, through facilitating AI, the cloud has become a gating mechanism before institutions can implement some of the most promising solutions to protect against would-be risks. Not to be overlooked, best practices today also dictate that the cloud can better address disaster-recovery scenarios than traditional on-premises options.

In the spirit of efficiency, and having one all-inclusive view of relevant data, it's also important for sovereigns to access these investments on one platform. As a result, most sovereign wealth fund clients we speak to will say it's not a question of "why" or "why not" to migrate to the cloud, but rather "when" and "how," as operations teams consider private, public, and hybrid cloud options.

The World Bank notes in their report that "scale also enables organizations to make meaningful investments in technology, helping improve both pension administration and investment operations, that smaller organizations would not be able to make."[1]

Concerns around cybersecurity certainly factor into the decision to embrace cloud technologies. These considerations remain at the forefront and appropriate efforts and risk mitigants have been established to ease the transition to this technology, allowing asset owners to migrate to the cloud with confidence.

Standardization and Simplification

With the rise of the cloud, the focus on data quality is becoming more pronounced. Poor quality data comes at a great expense, often attributable to manual intervention to solve data issues, broken business processes and misguided decisions due to poor or inaccurate data. Given the volume and velocity of data today, it is incumbent upon the data function to simplify these processes as much as possible.

As it relates to data management, generally, these trends have seen CIO appetites shift from customization to standardization to streamline information flows, ease upgrade requirements and enable plug-and-play technologies. The goal is to improve data quality, but standardization also counteracts the threat of obsolescence.

Consider the evolution of how institutions manage golden copy securities master data. Twenty years ago, the most sophisticated middle offices pushed for a single source of data that represented the official record of an investment organization. Over time – as the industry has grown, as asset managers pursued global expansion, and as the pace of investment activity accelerated – different versions of the truth again multiplied. Beyond just portfolio management use cases, investment books of record (IBOR) have since been co-opted for risk reporting, collateral management, performance measurement and other functions. The growing utilization of this data has also driven new demands for intra-day IBORs, "shadow" IBORs, and international IBORs (across various time zones).

It begs the question of whether a single version of the truth really exists given how global organizations utilize and report on their data today. Or should we consider that we need to embed quality and governance into our process to ensure that data is available where it is required and is fit for purpose?

In fact, rather than trying to achieve a single "universal" one, the latest data and analytics solutions now allow organizations to focus on how to integrate data across standard and non-standard sources and apply quality algorithms or machine learning to achieve a data strategy. The options to leverage that data in the business process becomes limitless.

Tech's New Role in Shaping Investment Strategy

Investment in reporting, digital and data capabilities can enable growth, efficiency, oversight and risk reduction, and strategic support is available for legacy system replacement.

Many plan sponsors still rely on legacy systems, and manually manipulating Excel files to manage their data. This is one of the main challenges for asset owners, and one of the leading factors when they consider migrating their technology and data solutions to cloud-based systems.

In the past, investments in data management were usually premised on streamlining operations to create new efficiencies and lower costs. Today though, many different investment institutions all recognize a material competitive advantage for those able to manage and leverage their data more effectively. Emerging technologies, from AI to machine learning, create powerful new capabilities that allow asset owners to recognize and act on trends in the data that wouldn't otherwise be evident. Data science and proficiency in managing big data also allow sovereign wealth funds to create a systematic and continuous approach to audits, through discerning emerging risks in real time and establishing independent automated controls.

The good news for those only now embarking on their digital journey is that those who came before them have effectively created a blueprint around digital transformation, an archetype that can be borrowed and built upon to create an effective and flexible foundation. The bad news, however, is that the longer asset owners wait to embark on this journey, the more they will be disadvantaged to those further along the curve, whose capabilities are already improving. The difference between technology's slower adopters and those on the cutting edge will become more pronounced as investment strategies gravitate toward ever more complexity and as new innovations widen the gap between those who can bring these capabilities to bear and those who can't.

Questions Asset Owners should be considering:

- How will my asset allocation, asset management and investment operations strategies evolve in over the short, middle and long term?
- What is the capacity of my internal technology team to incorporate, build and govern technology platforms?
- How much will you build in-house and how much should be outsourced to a provider?
- What can I learn from others' digital strategies?
- Will my current operating model and technology meet the future investment strategy of my organization?
- How does my in-house and provider talent pool align to the needs of my asset management, technology and operations activities? Do I have the talent pipeline in place to meet future needs?

To discuss these and other challenges, contact any of the authors or your CIBC Mellon relationship manager.

---

[1]Source: The Evolution of the Canadian Pension Model: Practical Lessons for Building World-class Pension Organizations. World Bank Group. 2017.

[2]Source: In Plan Sight New Opportunities For Multinational Corporations To Improve Retirement Plan Oversight" BNY Mellon 2020.

[3]Source: Sovereign Wealth Fund Institute (SWFI).

[4]Sovereigns Embark on a Digital Journey. BNY Mellon. 2020.

CIBC MELLON

A BNY MELLON AND CIBC JOINT VENTURE COMPANY℠

www.cibcmellon.com

BNY MELLON

www.bnymellon.com

CIBC

www.cibc.com

000 - FG01 - 08 - 20