TAKING CONTROL:
Transforming Operational Models

CHAPTER 2

CIBC MELLON

"Canada's asset owners are simultaneously dealing with familiar and novel challenges, including longer life expectancies in the aging population, rapidly rising interest rates, and evolving regulatory requirements. For some, these pressures are further magnified amid uneven global economic prospects, rapidly shifting markets and a host of new investment opportunities driven by both disruption and technology. Across the many available choices, Canadian asset owners continue to take their obligations seriously, to work to continuously refine their investment, technology and operations models, and to work relentlessly to deliver the right outcomes for their underlying plan members and stakeholders.

We thank the many clients, industry stakeholders and enterprise leaders who contributed their expertise, insights and experiences to this report – and we look forward to further discussion."

Alistair Almeida
Segment Lead
Asset Owners

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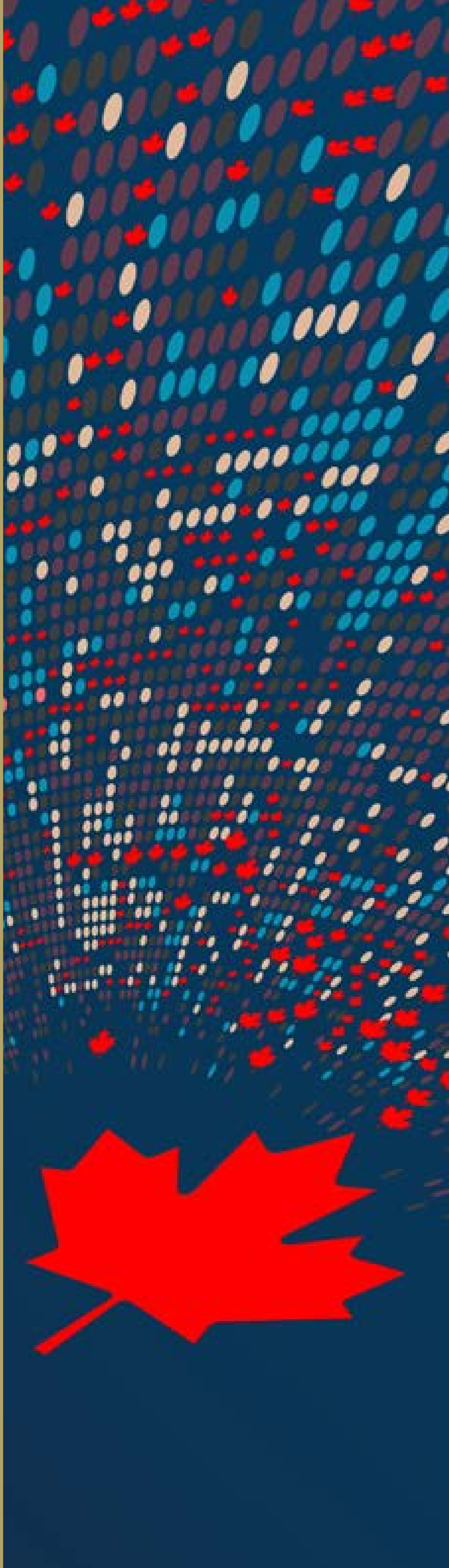
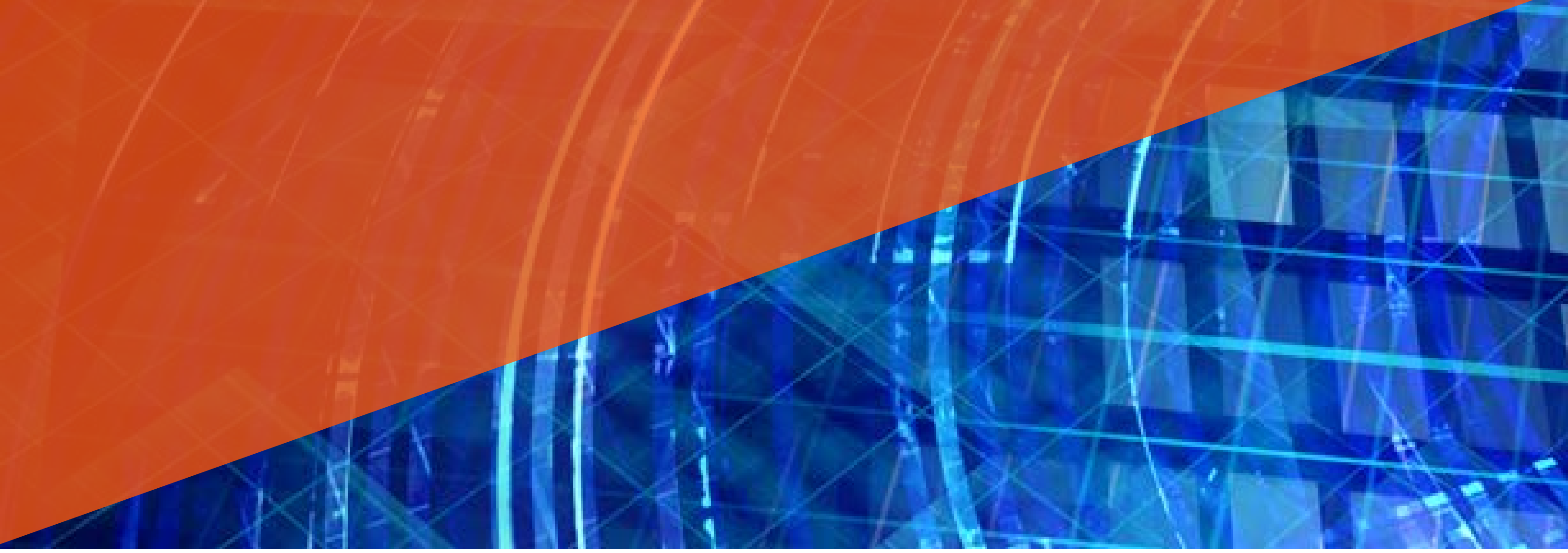




Foreword

Canadian asset owners face an array of daunting challenges and remarkable opportunities amid today's evolving market and business landscape. Rising expectations, longstanding challenges and still-emerging unknowns continue to increase the demands on asset owners, even as innovative solutions and new strategies have the potential to better equip asset owners to rise to meet the current moment as well as better address the long term future outcomes for which they are ultimately accountable.

Like many organizations, Canadian asset owners are being stretched between the need to address pressing challenges of today while also making critical choices about where to invest for the future. Asset owners must navigate — or in some cases spearhead — a path through the ongoing disruption that includes both macro factors (the pandemic, macroeconomic volatility, geopolitical volatility) as well as industry factors (rising regulatory complexity, shifting stakeholder demands and a difficult talent environment). As they do so, they also face critical strategic and operational choices with long term implications. Roles, objectives, investment strategies and operating models are all changing, asset owners are now reimagining their roadmaps. Innovation has redefined its role in this space insofar as it demands the support of cutting-edge technology.

Questions that once were looming on the horizon are now at the forefront of the minds of Canadian asset owners:

- How should they balance in-house and outsourced asset management?
- What do modern and future asset allocations look like, and how should asset owners plan to sustain, oversee and manage these choices?
- How do they meet rising Environmental, Social and Governance (ESG) imperatives, which are simultaneously urgent and ambiguous?
- Where and how should they invest in innovative technology solutions?
- What is the right talent strategy today, and what types of talent will organizations need to recruit, retain and motivate in the future?

To find out how the industry is approaching these many issues, we surveyed 50 of Canada's leading asset owners. Our research explores the wide ranging concerns that are top of mind for Canadian asset owners, how they plan to rise to these challenges, meet demands and expectations from stakeholders, and accelerate on the path forward.

Canadian pension plans, funds and their managers continue to be seen as industry leaders within Canadian financial services markets and across the globe. The "Canadian model" of jointly trusteed, shared risk, strongly-governed modern defined benefit plans continues to find rising awareness on the global pension stage.

The themes that hold true to Canada's financial landscape — innovation, stability and resilience — all carry weight for Canada's asset owners as similar motifs can be uncovered not only across our primary research but across a parallel array of client conversations, reviews of market documentation and comparisons with global market trends. In many aspects, Canadian asset owners are ahead of global peers, and the insights found here offer relevant applications and critical strategic questions worth investigation by other institutional investors and pension industry stakeholders who are likewise concerned about navigating today's challenging investment landscape even as they look to secure the pension promise for pension plan members over decades ahead.

In this multi-part report, we present the findings of our research; there is much to unpack. The research also revisits themes and findings from our previous research. "In Search of New Value" (**www.cibcmellon.com/isonv**), in particular extending the core theme that "no one size fits all": asset owners are building, exploring and deploying a diversity of approaches based on their unique strategic goals.

In our first chapter, we addressed how respondents currently distribute their allocations and expect those distributions to evolve in the near term. We discussed how the pandemic has changed their thinking, such as in allocating more towards safe fixed-income instruments and alternatives.

In the second chapter, we present insights, opportunities and challenges with which Canadian asset owners are grappling as they seek to position their organizations for the future. In particular, we explore the split between asset owners who are advancing their in-house teams and capabilities, and those who look to strategically outsource key functions to achieve scale and capture opportunity.

Looking ahead, we will share additional insights including:

Chapter 3: The New Consolidators
Chapter 4: Future Trends

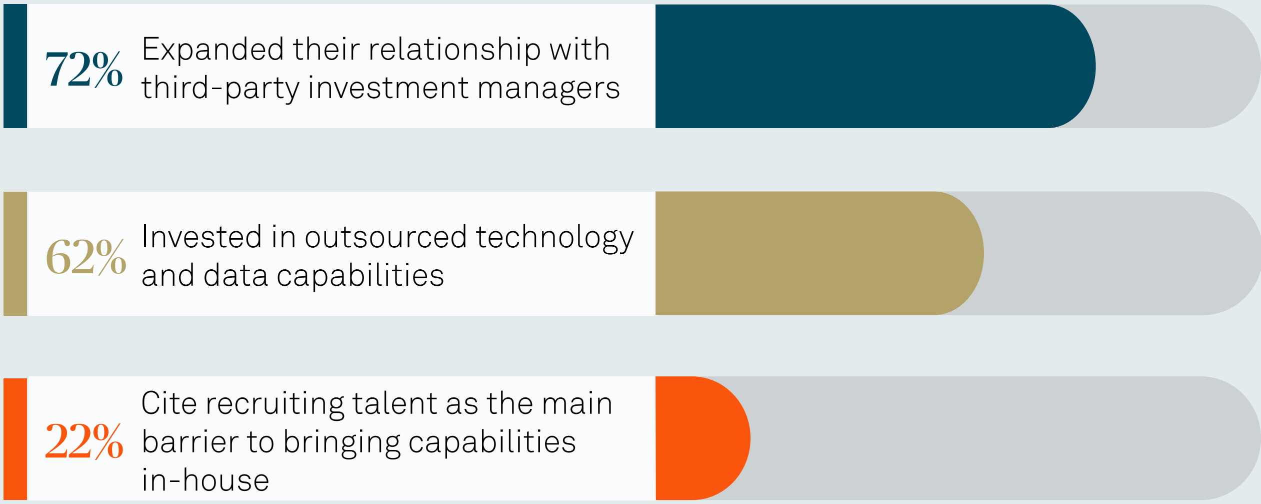
The CIBC Mellon team will continue to collect insights through client and industry conversations with asset owners and their industry peers. To learn more, to request an individual consultation for your organization, or to share comments with our research stakeholders, please reach out to your CIBC Mellon relationship management contact or email **alistair.almeida@cibcmellon.com**

CHAPTER 2

Embracing Operational Transformation:

ASSET OWNERS CONTINUE TO FOCUS ON CORE COMPETENCIES, WHILE SELECTIVELY BUILDING IN-HOUSE CAPABILITIES.

Asset owners are strategically evolving their operating models to mitigate risk, drive efficiencies and position themselves and their teams for long-term success.



With their day-to-day operations inevitably disrupted by the Covid-19 pandemic, Canadian asset owners sought flexibility and agility through their use of external service providers. Almost three-quarters of respondents (72%) expanded their relationship with third-party investment managers, while nearly two-thirds (62%) invested in outsourced technology and data capabilities.

Many organizations have spent time reflecting on and implementing risk-related changes to data governance, data transformation, and how these themes relate to their operating models. The pressure to digitize and automate will continue to accumulate as institutional investors rethink their operating models. Across the front, middle and back office, market volatility and rapidly changing conditions have increased the sense of urgency and highlighted the inefficiencies most firms experience in the data supply chain, including an increasing gap in data infrastructure. Specifically, clients are seeking transparency around account activities in order to support governance and risk management reporting — something they are now being asked to provide to their stakeholders.

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

Some pension funds that operate via a robust external manager program have cited achieving strong results by outsourcing rather than building in-house. This model provides the flexibility to seek out best-of-breed managers across Canada and around the world. Some have noted that it is also easier to replace underperforming external managers than in-house teams.

Nevertheless, the argument to leverage in-house resources still remains strong. This theme has been at the forefront of institutional investors across the board — there are universally recognized benefits where asset owners have the scale to bring investments in-house, increasing their control over these activities as well as reducing costs. When this notion was first presented in our 2021 research paper, "In Search of New Value," respondents were leaning toward moving their asset management teams in-house. After moving through a tumultuous investment environment, close to half (42%) of asset owners responded to the pandemic by trying to build up their in-house teams. Many appear to have invested in both their own capabilities and third-party support, rather than choosing one over the other.

Sharing the load made sense during a period of such unprecedented disruption and uncertainty. "The transfer of operational risk is effective because it allows our core teams to focus on important tasks. The external manager has the necessary talent and resources to manage operational and other risks," says the Chief Investment Officer of a Multi-Employer Pension Entity.

“Technology and innovation are creating both new demands and new opportunities, as well as creating an arms race among institutional investors. To address these headwinds, Canadian asset owners are adapting their roles, objectives, investment strategies and operating models.”

Darcie James Maxwell
Head of Canadian Operations
Data and Platforms Solutions

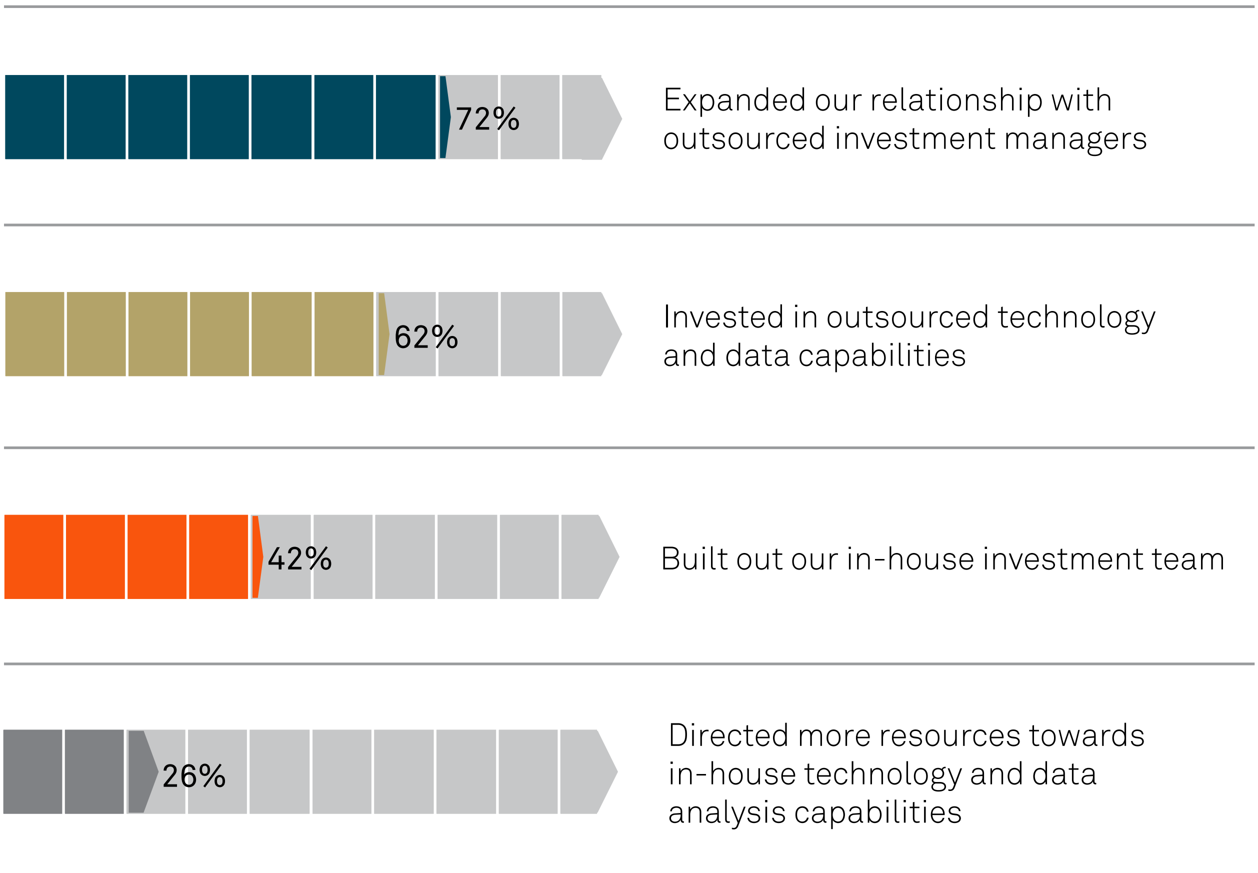
“The transfer of operational risk is effective because it allows our core teams to focus on important tasks. The external manager has the necessary talent and resources to manage operational and other risks.”

Chief Investment Officer, Multi-Employer Pension Scheme

“The use of new asset classes will become more familiar to Canadian pension funds. Their main objective would be to diversify their allocations as much as possible. Diversification will be more prevalent in Canada than the rest of the world.”

Head of Investments, Endowment/foundation

How has your organization evolved its investment approach in response to the pandemic?



> In-house management is essential to get a better overview of allocations. With an in-house team, we have more control over allocation decisions. Overall, we can ensure decisions and strategies align with our longer-term investment objectives."

Managing Director
Government Entity

Following this focus on increased external capability during the pandemic, respondents are currently splitting their portfolio management almost equally between in-house managers (51% of assets) and outsourced management arrangements (49% of assets). However, this is expected to change over the next two years, with some asset owners expressing a preference for bringing at least some of their fund management activities back in-house. In 12-24 months, this split is expected to shift to 53% and 47% respectively in favour of an in-house approach.

This reflects, at least in part, asset owners' desire to take back control of the decision-making process. "It is essential to get a better overview of allocations. With an in-house team, we have more control over allocation decisions. Overall, we can ensure decisions and strategies align with our longer-term investment objectives," says one Managing Director at a Government Entity.

Approaches vary meaningfully, with no single answer as to the right mix of internal versus external portfolio management. Typically, institutions externalize to gain experience while they internalize to reduce costs or build permanent, local capabilities.

> "Shifts to internal or external portfolio management have downstream implications for asset owners' operating models. Strategy changes will require corresponding adjustments to operating models, processes, providers and technology – with a foundation of data that enables future scale and flexibility."

Darlene Claes-McKinnon
Executive Director
Relationship Management and
Co-Head of CIBC Mellon's Asset
Owner segment

Approximately what percentage of your total portfolio is managed in-house versus managed by an external manager?

The primary driver for preferring an in-house approach is the view that this makes it more straightforward to align strategies with the asset owner's investment objectives — 22% of respondents cite this as the primary advantage of in-house arrangements. The potential to achieve better governance, cited by 20%, is also valuable. With pension plan sponsors and managers coming under increased scrutiny from regulators, plan members, employers, counterparties and other stakeholder groups, the fact that an in-house team can potentially enhance governance may become even more crucial. Complexity rises further for multi-employer plans operating on behalf of a larger set of underlying organizational public and private sector stakeholders.

"There is more transparency. We have internal teams monitoring our asset management activities and then reporting information in a clear-cut format," says the CEO of a government entity.

However, the case for in-house management does not rest only on these organizational advantages. Many asset owners also point to the potential to maximise long-term returns and to manage costs. These benefits are not necessarily the primary motivations for maintaining or augmenting in-house teams, but they are cited by 38% and 36% of respondents.

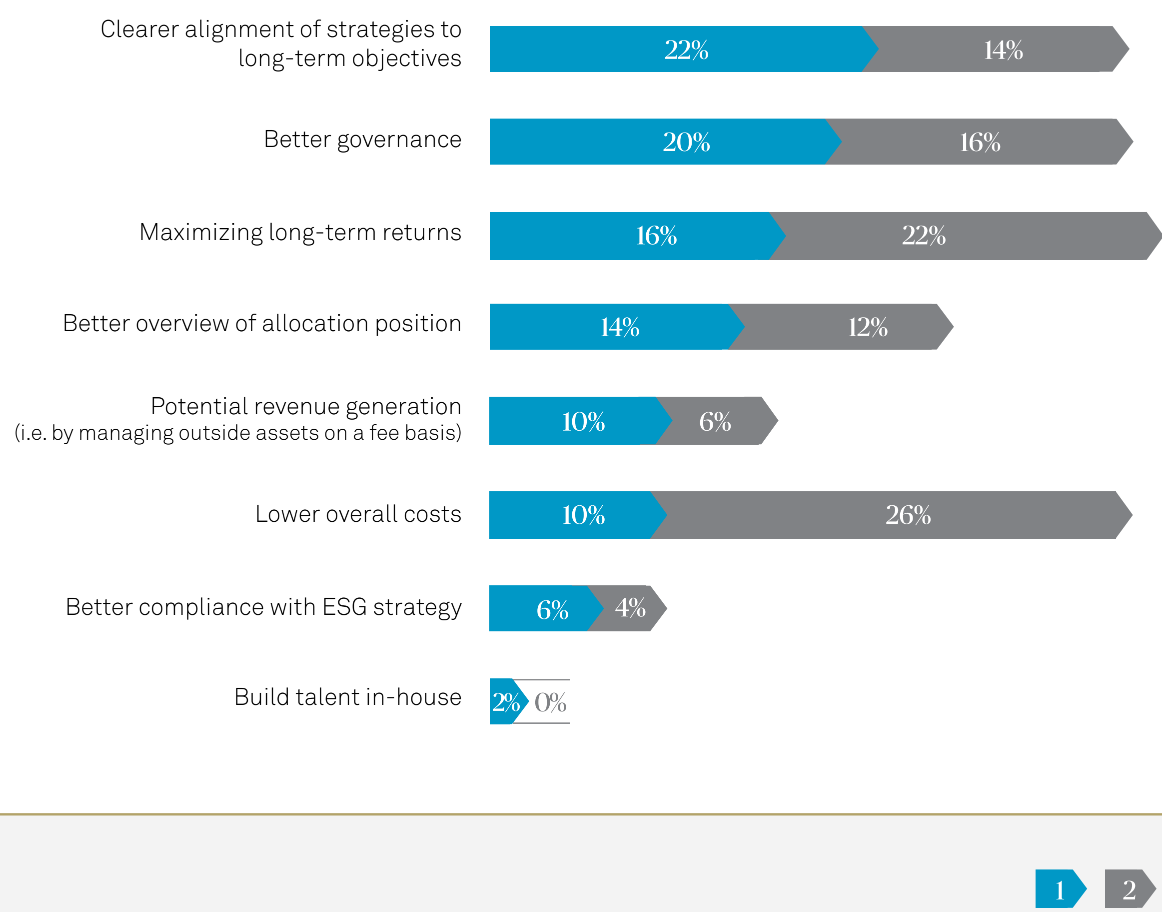
Another benefit of in-house management worth highlighting is the transparency around ESG related-investments. While only 10% of respondents said ESG-related issues were a driver behind in-house approaches, respondents had apparent positions. According to the Chief Investment Officer of a government entity, "Compliance proves itself to be a difficult feat when dealing with an external team on our ESG strategy. It takes a long time for external managers to identify with our organization's primary objectives in this regard."

As organizations consider their investment allocations, investment management, performance/compliance monitoring and operational efforts in the years ahead, the opportunity to align their purpose with what they do and how they do it will likely continue to rise — as will pressure from data that increasingly correlates value and values around the incorporation of ESG factors.

"Compliance proves itself to be a difficult feat when dealing with an external team on our ESG strategy. It takes a long time for external managers to identify with our organization's primary objectives in this regard."

Chief Investment Officer
Government Entity

What are the top benefits of in-house asset management? (Select top two and rank 1-2, where 1 = most beneficial)



"There is more transparency. We have internal teams monitoring our asset management activities and then reporting information in a clear-cut format."

Chief Executive Officer
Government Entity

Despite the potential advantages, moving towards a greater role for in-house managers may not be straightforward. Asset owners recognize that they don't always have the capacity in terms of either people or systems to deal with everything for which they are accountable. 22% of asset owners say the biggest challenge to taking an increasingly in-house approach is recruiting talent, and a further 16% point to lack of scale.

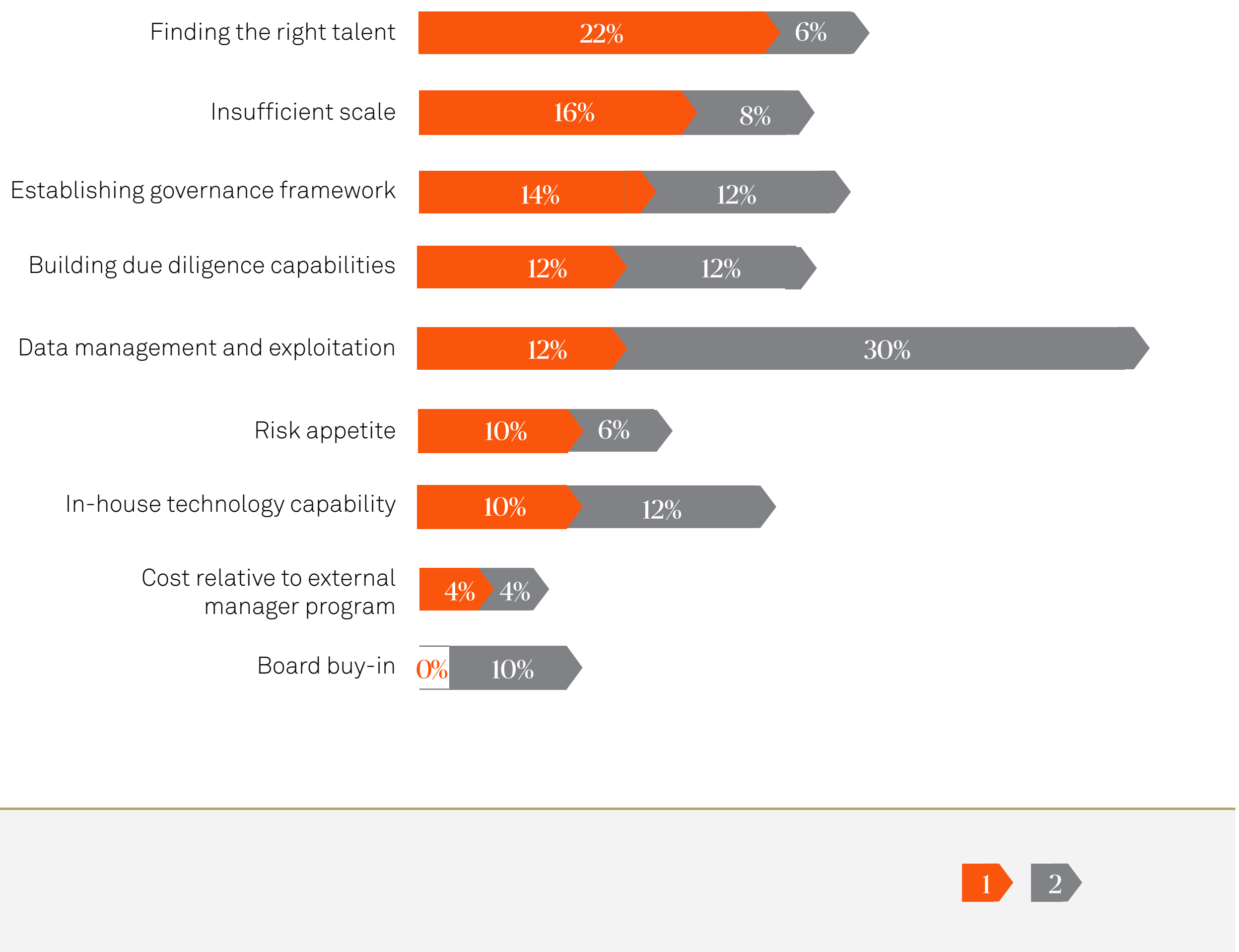
Indeed, staff shortages could curtail asset owners' ambitions — they may reach a point where it is simply not possible to expand in-house capacity further, at least with the speed required; in which case, outsourcing will become a necessity. The rapid rise in turnover and the challenges associated with the talent market both within the Canadian investment industry as well as across industries globally further underscored the critical challenges associated with recruiting, retaining and motivating high level performers. Across the industry, clients reported departures by an array of highly experienced talent — the choice to in-source a given function comes with it the necessity to staff that function with necessary talent. Within CIBC Mellon, we have heard from many clients that the ability to transfer talent risk to a service provider with greater scale, a deeper or broader talent pool and better access to highly specialized expertise, has been a key driver of the choice to outsource functions.

Another barrier for asset owners who are pursuing in-house approaches is the rapid pace at which technology is evolving. Many worry that they are unable to keep up; 42% of respondents cite data management and exploitation as one of their anxieties, the most frequently cited challenge overall.

> "For those who choose to rely on service providers to manage services, technologies and operations – as well as the associated talent required to do so – outsourcing offers opportunities to take advantage of the investments their providers have made in digital technologies, talent and innovation. It results in a common platform and an ecosystem where they collaborate closely with a handful of vendors and providers."

Alistair Almeida
Segment Lead
Asset Owners

What do you see as the main challenges to in-house management? (Select top two and rank 1-2, where 1 = most challenging)



Maintaining in-house technology capabilities and in-house expertise have proven to be a challenge. Addressing skill gaps amid the great reset is difficult at a time when the economic situation is in flux and most companies are looking to adapt. Increasing technology capabilities presents new challenges and opportunities because of the significant downtime that is involved. Given these hurdles, external asset managers are likely to continue to play a crucial role for Canadian asset owners — and potentially even more so as their assets under management (AUM) increase and in-house capabilities struggle to keep pace with increases in both challenge and opportunity.

The Case for External Managers

For many institutional investors, technology and operational considerations may be better considered as a continuum of solutions and expertise rather than a single choice imposed by a vendor. Across the board, Canadian asset owners have a diverse array of goals. Some teams are seeking out deeper intraday insights and more real-time transparency around investment outcomes, helping Chief Investment Officers, Chief Data Officers and Chief Risk Officers to achieve a single source of trusted information and insight. 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.

A fully outsourced model where the teams and technology are operated by a provider allows clients to leverage a standardized service that can be integrated into their existing operations. This grants several benefits, including scale and access to proven solutions, which affords confidence and defensibility in the face of rising external pressure. For many, 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 may want to be able to provide their internal stakeholders with customized analytics or have the ability to integrate their own data with the information from their 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.

If there is one area of consistency it is the importance of preserving choice. Institutional investors are making strategic choices now that will have impacts to their investment operations well over the planning horizon, years or decades. A flexible architecture allows future-proofing, in other words flexibility to choose, adapt or integrate data across investment activities and capture insights from a wide variety of sources, including data and sources that have not yet been identified.

Transformation Starter Pack

Operational transformation requires a balance between standardization and careful consideration around customization. Successful transitions make the argument for incrementalism; they do not happen overnight.

The road to transformation: guiding principles for consideration as institutional investors pursue scale, resiliency and opportunity.

- Define your open architecture principals first and foremost. Data flows must be considered system to system, with automated connectivity rather than manual processes that can introduce delays or errors.

- Leverage your standard processes. Customizations should be put in front of an architecture review board to ensure compliance and regulatory principles are met.

- Define the funding model to allocate for flexibility. Changes, such as new product launches, can impact target state requirements.

- Identify and assess the critical data needs and licensing impacts that support your investment process.

- Align your data sets to specific services. Doing so will confirm that your asset servicing provider can support most of your critical data needs.

- Ensure interim solutions have a target state transition plan to avoid permanent workarounds that don't meet your overall objectives.

- When making technology assessments, your target architecture framework should clearly identify processes and tools slated for retirements. To minimize in-house technology, leverage your service provider's toolkit.

Risk management is cited as a key consideration for working with an external asset manager. Managing risk across a range of portfolio strategies requires sophistication. "The complexity of strategies cannot be contemplated in a simple manner," says the CEO of a Multi-Employer Pension Fund.

"The risk management principles adopted by external managers outweigh the potential of in-house asset management teams," says a Managing Director, Canadian Endowment.

In our research, 28% of respondents described better risk management as the most influential motivating factor for using external asset managers. A further 18% said it was the second most influential factor. Moreover, 32% of asset owners point to the related opportunity to transfer operational risk as a potential benefit of external managers.

Talent is indeed a key challenge and a focus area for many plans. Against a backdrop of recruitment challenges and skills shortages, 18% of respondents say the proven talent of external managers is the key driver for using them, and a further 26% cite it as the key secondary consideration. As outlined in chapter one of our research, Canadian asset owners are pursing investment strategies founded on portfolios with diverse assets, including significant holdings of alternative assets. Securing sufficient expertise in such a broad range of areas is naturally difficult.

With the current competition for talent, increasing turnover, and a recognition among managers that the very highest performers and specialists can in turn drive enormous outperformance, the challenges around skill gaps are likely to increase further.

"The external manager has the necessary talent and resources," concludes the Chief Investment Officer of a Multi-Employer Pension Fund. Those resources also include technology capabilities, another area where respondents have concerns about the in-house approach. "External managers use advanced technology, and this is frequently updated" says the Managing Director of a Foundation.

In our research:

28% of respondents described better risk management as the most influential motivating factor for using external asset managers.

18% said it was the second most influential factor.

32% of asset owners point to the related opportunity to transfer operational risk as a potential benefit of external managers.

"By transferring the operational risks to external asset managers, we can simplify many of our responsibilities. These external managers have the talent to handle most types of risks. Their teams are well aware of our expectations of them."

Head of Investment, Endowment / Foundation

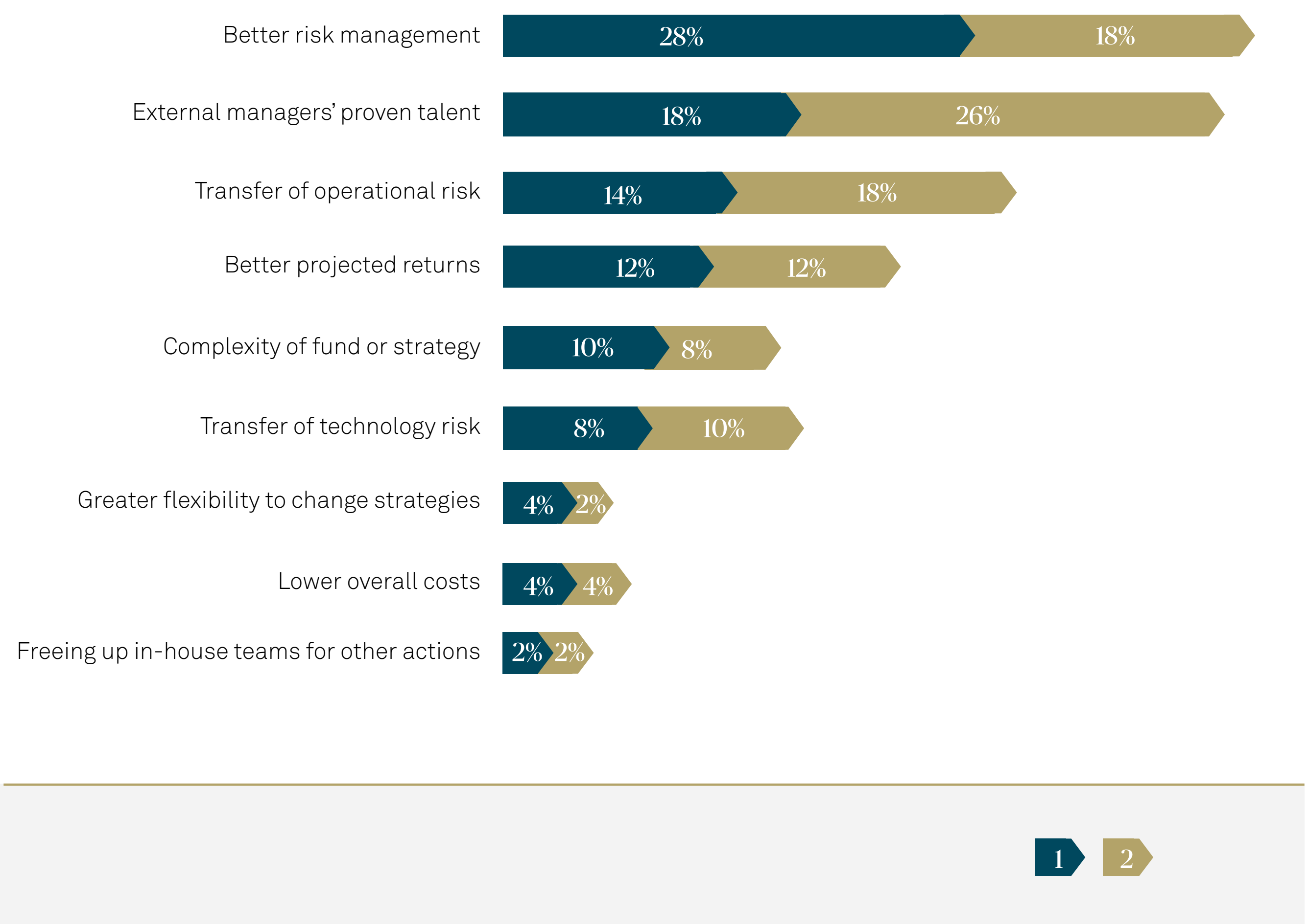
“The complexity of strategies cannot be contemplated in a simple manner.”

Chief Executive Officer, Multi-Employer Pension Fund

“The risk management principles adopted by external managers outweigh the potential of in-house asset management teams.”

Managing Director, Canadian endowment

What are the key drivers for using external asset managers / outsourcing over in-house management? (Select top two and rank 1-2, where 1 = most influential)



Some asset owners have indicated that shifting to in-house could drive improved returns and lead to lower costs.

“For maximizing long-term returns, having an in-house asset management team is advantageous because they specifically work on achieving these returns goals and do not deviate,” says the Head of Investments, Endowment.

“The lower costs of managing an in-house teams is definitely an advantage. We know how they work and what procedures are followed, and any productivity or talent challenges are always highlighted,” says the Managing Director of a Corporate Pension Plan.

> “For maximizing long-term returns, having an in-house asset management team is advantageous because they specifically work on achieving these returns goals and do not deviate.”
>
> Chief Executive Officer
> Government Entity

"The lower costs of managing in-house teams is definitely an advantage. We know how they work and what procedures are followed, and any productivity or talent challenges are highlighted."

Managing Director, Corporate Pension Plan

As for performance, diversity of outcomes remains in focus. In our client conversations related to these findings, while some participants were drawn to the very significant cost savings, others noted with caution that nearly a quarter of those who brought investment management in-house saw outcomes fail to improve, including for a few who saw costs rise while performance declined.

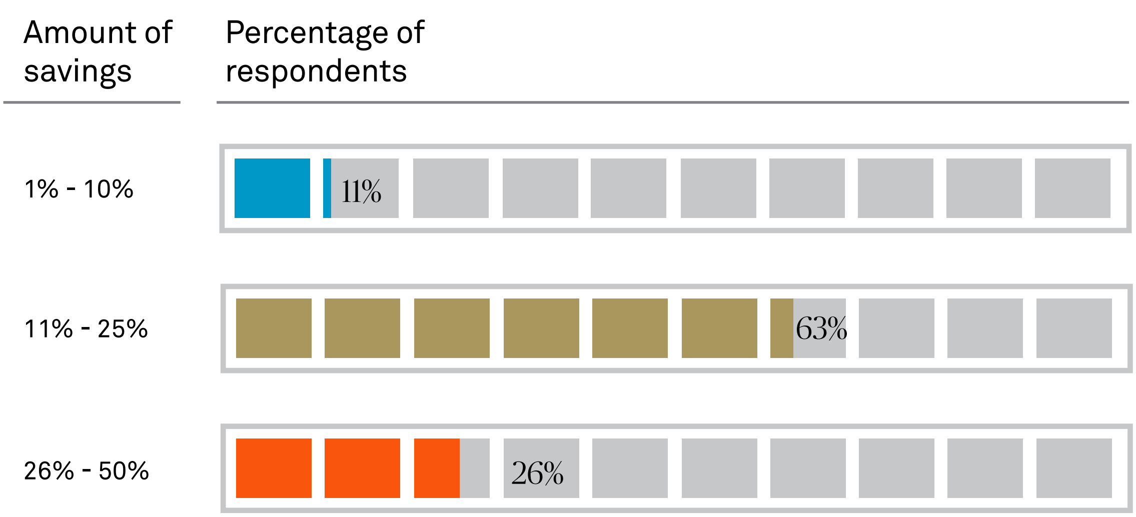
In keeping with the recognition of the role of outsourced managers, some asset owners suggest they are prepared to pay more with a change of approach if the returns justify it. One executive observes: "Fees are up, but results are up too — we had to get the board comfortable, but the results speak for themselves." For now, however, that remains a minority view.

> "One crucial investment-management decision – which assets to manage in-house and which to manage externally – has out-sized implications for operating model design. The promise of new technologies, the value of better data management and the need for resiliency and cybersecurity also give institutions further reasons to reimagine how their front, middle and back offices operate."

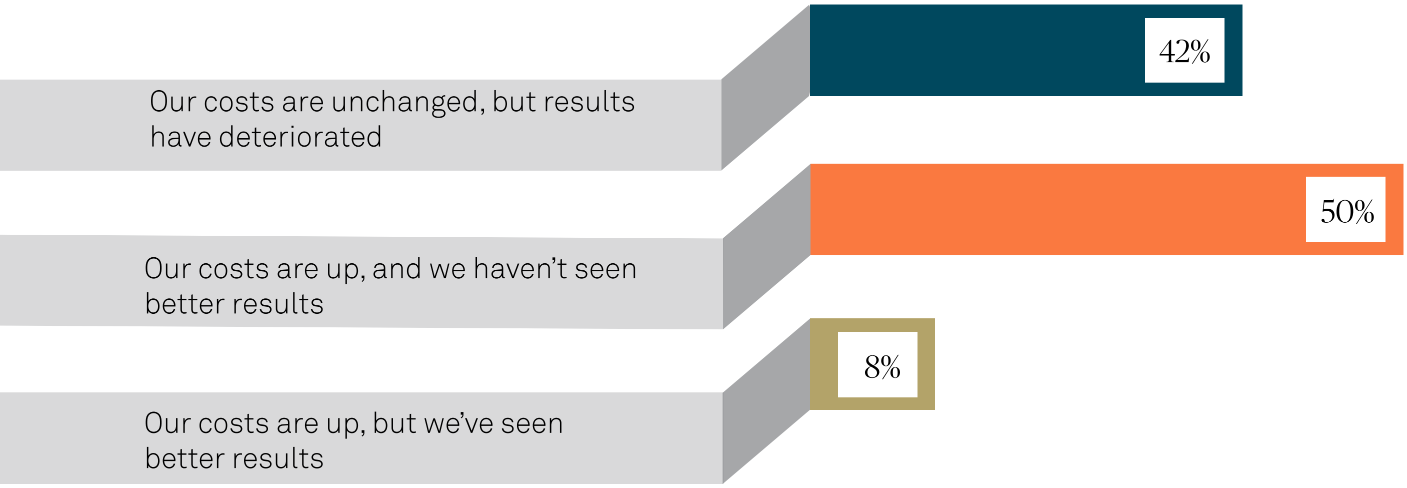
Darcie James Maxwell
Head of Canadian Operations
Data and Platforms Solutions

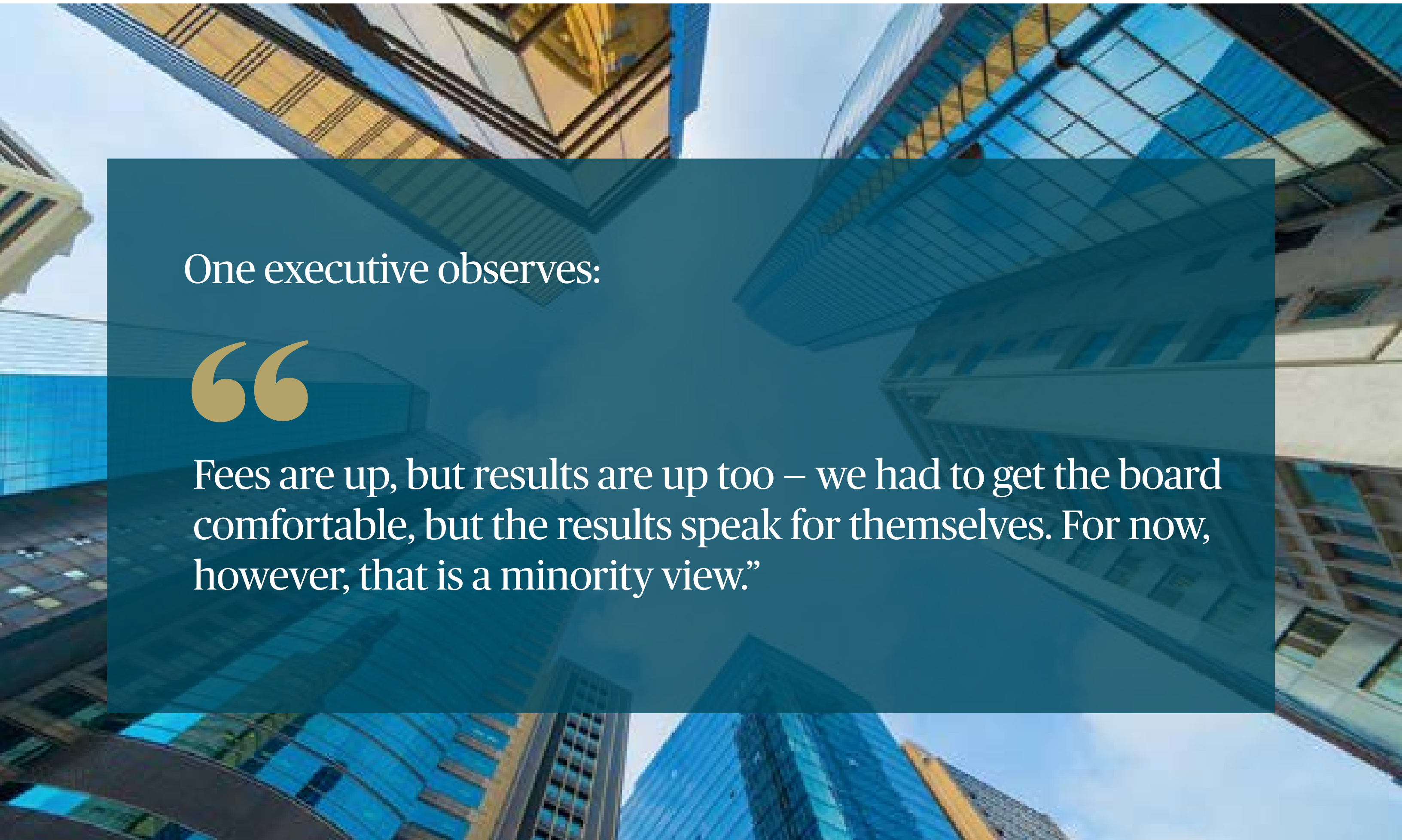
Have you saved on costs since taking asset management in-house? (Select one)

If 'Yes', what, approximately, has been the average percentage saving compared with outsourcing asset management? (Select one)



For those who did not achieve savings, how have your results fared? (Select one)





One executive observes:

> "Fees are up, but results are up too – we had to get the board comfortable, but the results speak for themselves. For now, however, that is a minority view."

Questions worth asking...

Foundational vs. strategic transformation, investing in the right talent and technology, evaluating the risk landscape and more.

We recognize that asset owners face an array of opportunities and challenges, and that each organization's choices must be driven according to its own specific situation, circumstances and resources. We encourage our asset owner clients and their stakeholders to consider our research findings in their specific contexts, and we continue to welcome your feedback.

1. **How do you expect your service provider to support your digital and data capabilities?**
   - Has this evolved over the years or stayed relatively consistent?

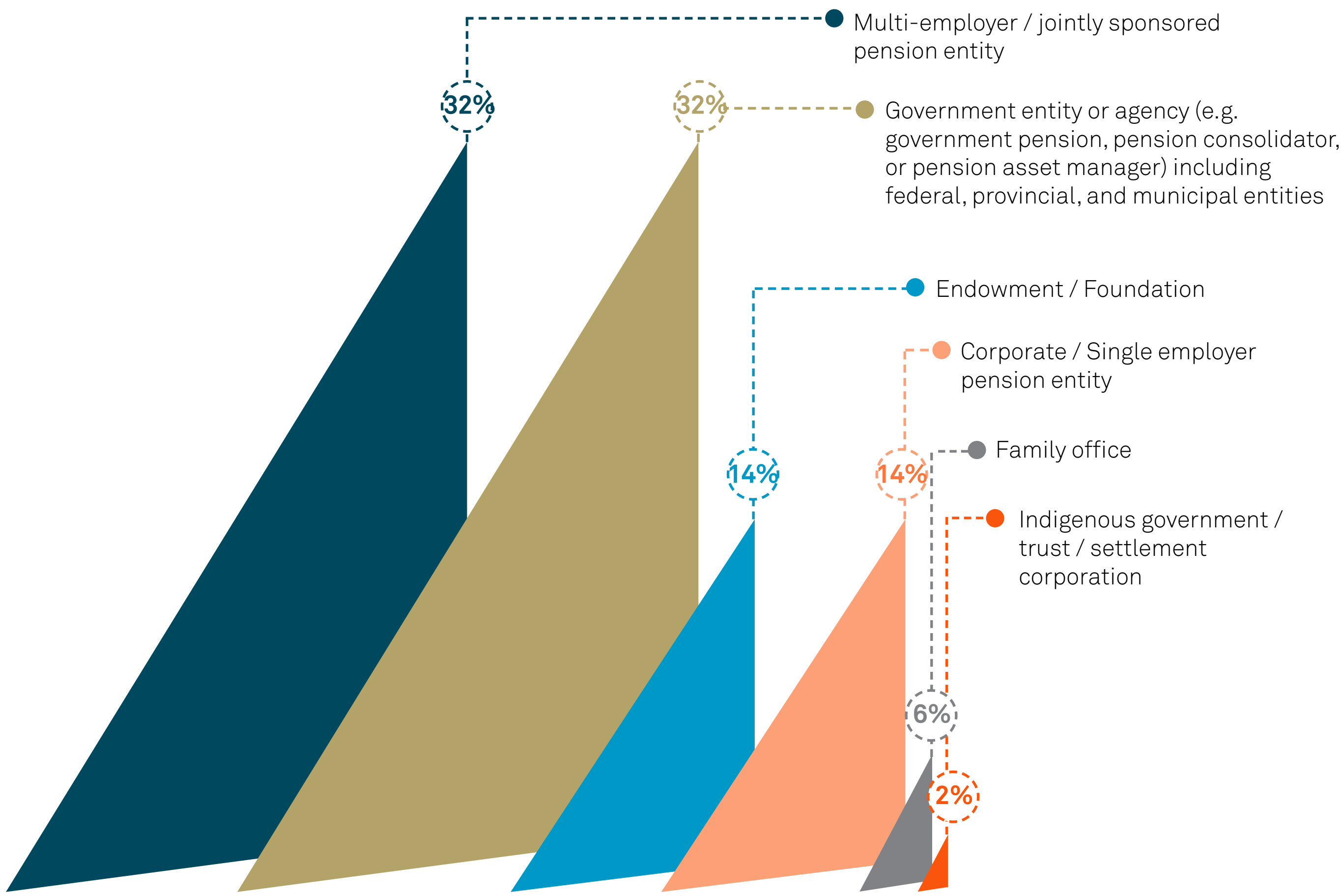
2. **The ability to implement new and transformative technologies has enabled creation of new business.**
   - How are you adapting to these business models? What does this look like for your organization?

3. **How do your firm's key priorities inform how you choose between foundational transformation, or strategically transforming components of your business model?**

4. **How does having the right talent to manage and maximize the impact of technology effect your operations?**

5. **How do you see the role of ESG factors in your investment or risk management processes?**

Which of the following best describes your organization's primary structure? (Select one)



Methodology & Respondent Profile

In Q1 2022, CIBC Mellon's research provider interviewed senior executives from 50 asset owners headquartered in Canada to assess key market and management trends. Of the asset owners surveyed, 19 have AUM of between C$700m-C$5bn; 16 have AUM between C$5bn-C$20bn; and 15 have AUM over CAD$20bn.

Just under a third of respondents (30%) say that their main operations and leadership are in Toronto. Almost two-thirds of respondents work for a multi-employer or jointly sponsored pension entity (32%) or a government entity or agency (also 32%).

To register for advance copies of forthcoming research or to learn more about some of the performance, accounting and data solutions available through our global enterprise, contact your relationship manager or email **alistair.almeida@cibcmellon.com**

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