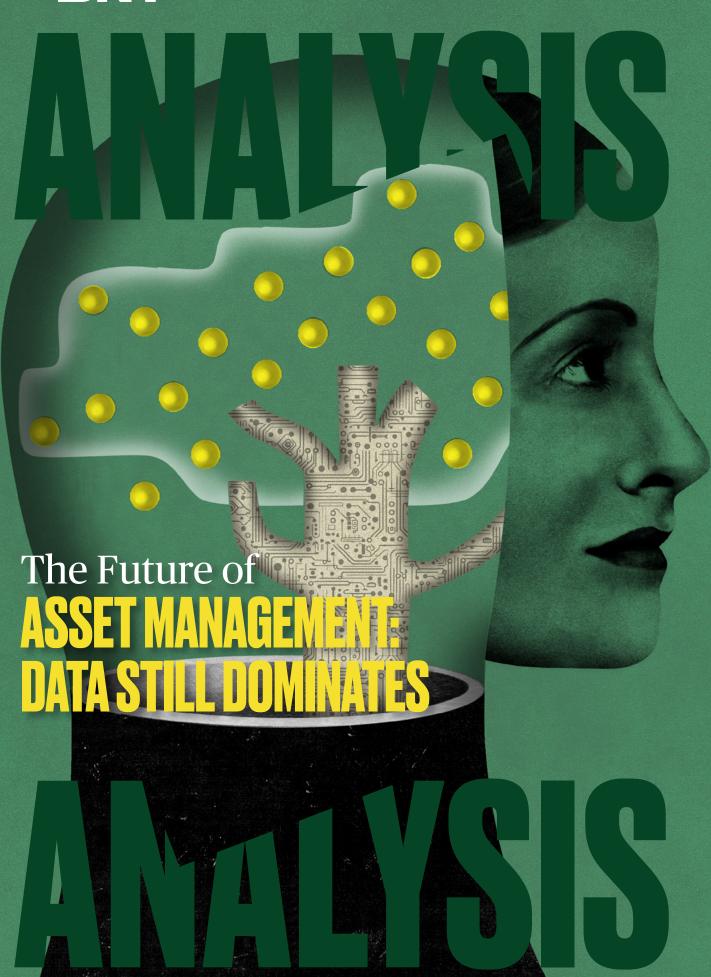
>BNY



FOREWORD



Julie Gerdeman Global Head of Data & Analytics

Since joining BNY in February 2024, I've prioritized spending time with our product and business teams, influencers like research firms and consultants, and of course - our clients. What continues to excite me is the incredible amount of opportunity data management and investment analytics can provide to ease operational pressures and drive long-term growth plans.

I'm consistently hearing that our asset manager and owner clients, alike, are looking to increase efficiencies and build new partnerships; all while striking a delicate balance between maintaining resiliency and driving innovation at scale.

The urgency to unlock the power of data has made digital transformation a business imperative. Organizations feel increasing pressure to make their data work harder and are eager to adopt solutions powered by cloud computing, artificial intelligence (AI), and machine learning (ML).

The common barrier I've heard is that there's a fear of the unknown and a concern that such a change would be overwhelming for the existing staff. And we get it - embracing emerging tech capable of managing and analyzing data at scale can be time and labor intensive. That's why asset managers and owners are looking outside their own walls for the support and capabilities they need, at a manageable cost: tapping fintech disruptors for their innovations and expertise, outsourcing data activities and reporting, and fostering deeper strategic alignment with existing service partners.

As part of the larger "Future of Asset Management" study, we examined the challenges and ambitions our clients experience in their efforts to put data into action.



METHODOLOGY

Mergermarket, in partnership with BNY Mellon, surveyed 106 asset managers and 94 asset owners from around the world to gain insights into key trends in the asset management industry.



50%

EUROPE, THE MIDDLE EAST & AFRICA (EMEA)

40%

ASIA-PACIFIC (APAC)

10%

Half of all respondents were based in North America, 40% in Europe, the Middle East & Africa (EMEA) and 10% in Asia-Pacific (APAC).



All responses are anonymous and results are presented in aggregate.



Pension funds/trustees
 Insurance companies
 Endowments/foundations

Sovereign wealth fundsCentral banks

Asset manager respondents represented organizations with varying levels of assets under management (AUM), from at least US\$1billion to upwards of US\$500 billion. These respondents included large-scale, diversified asset managers (44%), private equity (PE) firms (22%), infrastructure/real estate asset managers (16%), hedge funds (9%) and direct lenders (also 9%).

Among asset owners, respondents represented organizations with at least US\$10 billion AUM, to upwards of US\$500 billion. These respondents included pension funds/trustees (49%), insurance companies (30%), endowments/foundations (13%), sovereign wealth funds (5%) and central banks (3%).



Data and Technology

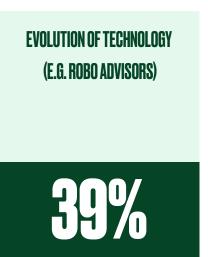
DATA STILL DOMINATES

Reliance on data and analytics was identified as the top trend in asset management over the next 3-5 years by both asset managers and asset owners. They feel the pressure to seize opportunities being created by big data and the technology that can be used to analyze it, including cloud computing, artificial intelligence (AI) and machine learning (ML).

What do you think will be the top trend in asset management over the next 3-5 years?







For some, this focus on data may involve internal changes, while others seek outside support. Integrating data sources and improving transparency was cited by asset managers as a top priority over the next 24 months. But increased complexity of both data and its application are challenges. When asked what hindered their ability to extract meaningful insights from their data, there was little consensus. Instead, it appears a range of barriers exist.



"Data-driven insights, swifter decision making and improved risk management potential are some of the benefits of using data and analytics across asset management functions. These benefits will increase the reliance of data and management."

DIRECTOR, PRIVATE EQUITY FUND, SPAIN

"It's essential to accelerate the analytics and data processing technologies. We cannot work with older technology because it makes us less competitive."

HEAD OF DATA MANAGEMENT & ENGINEERING, INSURANCE COMPANY, U.S.

New technologies – from machine learning to blockchain – may help, and were identified as another top trend in the survey. Greater and more expansive use of tech-related tools was high on the list of spending and development priorities for both asset managers and owners. Greater emphasis on digital tools was also linked to areas respondents are considering for outsourcing opportunities.

Finding in-house solutions is not off the table, though respondent groups differed in their approaches. Asset managers are looking to hire more specialist staff and increase spending on digital plans. Alternatively, asset owners are exploring partnerships – from cocreating new products to increasing reliance on their existing financial service providers.

Both groups are eyeing advancements in artificial intelligence as a potential solution for a variety of needs. For example, when asked what capability or technology they plan to develop over the next three years, 45% of respondents said AI and predictive analytics (20% and 25%, respectively). In fact, 67% of asset managers surveyed said they were already using ML/AI to drive change in their business.

At the same time, these trends pose a disruptive threat to asset managers wedded to older operating models as scalable and robust solutions are expensive, complex, require new technology and demand cultural change to implement.



"Since there are multiple data sources, we have to ensure that data management is conducted securely and also favorably for different departments."

CHIEF INFORMATION SECURITY OFFICER, MULTI-ASSET FUND, U.S.

Adapting the Front Office with Data Management, AI and Integration

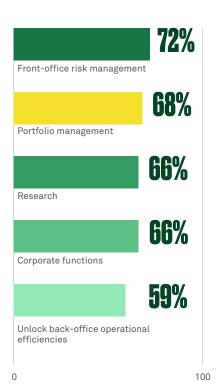
For the front office, asset managers are looking to harness technology across the gamut of functions: including the full suite of analytics to portfolio management teams, providing insights around performance and risk attribution, deepening research and analyzing trends.

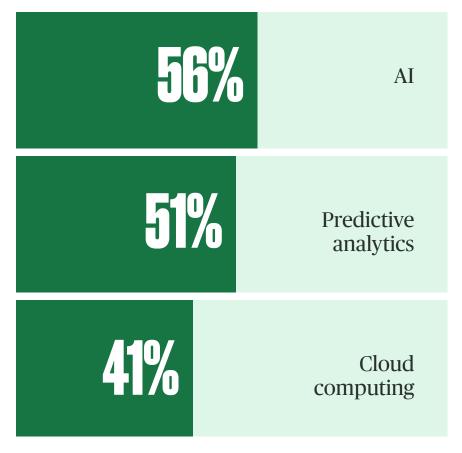
Most asset manager and asset owner respondents intend to employ AI and predictive analytics over the next three years, in addition to technologies such as cloud computing that can support the increased computing power necessary for adequate data storage and processing.

The main challenge with the application of advanced analytics, however, is an ability to integrate data from an increasingly rich set of sources in a way that will adapt to the front office.

In which parts of your organization are you looking to expand the deployment of data analytics and insights and digital capabilities/technologies?

Percentage of asset managers and asset owners planning to further develop capabilities in AI (56%), predictive analytics (51%) and cloud computing (41%) over the next three years.



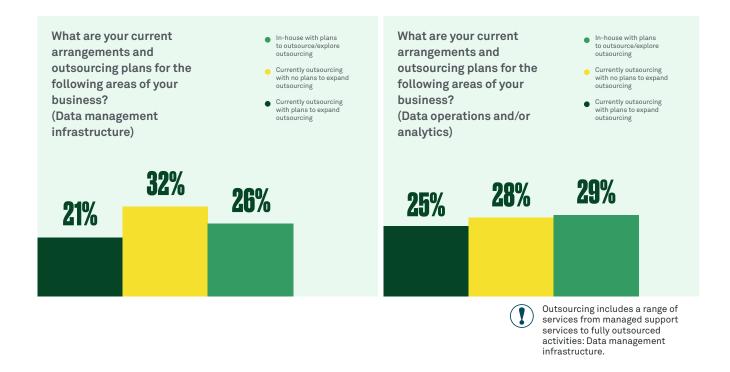




How do you anticipate your priorities shifting over the next 1-2 years?

Asset managers and asset owners recognize they cannot continue making incremental improvements confined to silos in their organizations. The volume, velocity and complexity of harnessing data is difficult to manage at scale, from the delivery of actionable insights to ensuring data flows cleanly and seamlessly through the back, middle and front office. Accordingly, 37% of asset managers identified integration of data sources and increasing visibility end-to-end as a top three priority over the next 1-2 years.

A more holistic approach to analyzing, using and integrating data with new technology that spans the entire business is necessary and many firms are turning to service providers for full support. Similar proportions of respondents have plans to outsource or explore the outsourcing of data management infrastructure (26%) and data operations and/or analytics (29%). However, more than half of respondents (53%) already outsource both functions to some extent.



Implementation and Integration Challenges for Scalable Technology

The barriers facing asset managers and owners as they work to effectively manage their data are vast.

 Some 80% of asset owners agreed their biggest barrier to effective data management was the ability to obtain real-time, high-quality data that is reliable, complete and fresh.



Barriers to managing data ranked first



21%

Technology limitations to hold and extract data



19%

Unstructured data sources



13%

Incorporating external data



12%

Obtaining real-time, high-quality data



12%

Reliability, completeness and freshness of data and sources



12%

Difficulty aggregating across fragmented infrastructure to create single, centralized source



Getting consensus from internal stakeholders

5%

Lack of skilled staff

Alternatively, there was little consensus in asset manager responses.
 Though 37% of managers said integrating data sources and increasing visibility would likely be a top three priority over the next few years.
 When asked to single out their top priority, data ranked first – alongside introducing operating model changes. Overall, the challenges in data management appear to be scattered across the range of options, from technology limitations to incorporation of external data.

Similarly, managers do not face a single barrier in extracting meaningful insights from data. Perhaps the most uniform culprit was thought to be data complexity, with 24% of those surveyed choosing it as the top barrier, closely followed by 23% selecting the inability to capture certain types of data or the lack of proper analytical tools.

The growing number of data sources and wider range of data types under analysis can complicate the generation of meaningful insights. Both asset managers and asset owners cite the complexity of data and the difficulties of working with unstructured data as major obstacles.

Companies based in North America seem the most interested in data management. When asked about strategic imperatives, 20% of North American respondents said creating a data management and governance model to support growth. This compares to 10% of those based in the EMEA regions and 0% of Asia Pacific survey participants.

Yet all three regions placed providing a better client experience and more transparency to stakeholders as a top three consideration over the coming year. Here, 40% of respondents in Asia Pacific placed a higher importance on transparency versus 32% in North America and 31% in EMEA.

0 10

Which are major barriers to extracting meaningful insights from your data?

18%

Complexity

30%

Unstructured



"We do have skilled staff for managing current processes. But when it comes to advanced technologies, there is a skill shortage. The current teams will not be able to manage newer responsibilities."

CHIEF DATA OFFICER, HEDGE FUND, UNITED KINGDOM

"When we consider integration challenges with legacy IT systems, we aren't referring to very old systems. There have been regular upgrades also, but technology is becoming obsolete too soon."

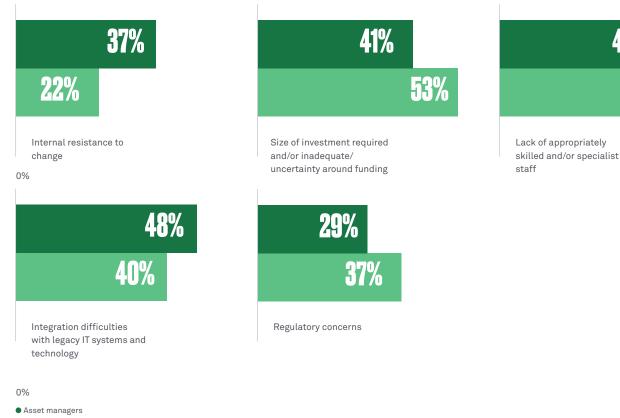
CHIEF INFORMATION TECHNOLOGY
OFFICER, SOVEREIGN WEALTH FUND, U.S.

Asset owners

Some 24% of asset owners believe that a data management platform would help them consistently extract insights from data, rather than merely manage it. A platform is one model for data management, but any solution requires digital and operational changes that present several challenges. Beyond the financial cost, these include integration difficulties with existing and legacy systems, where "half-lives" are getting shorter as the pace of innovation accelerates:

In addition to integration difficulties with legacy IT systems and technology, firms need the right people to pursue their digital ambitions: 53% of asset managers and 28% of asset owners view recruiting or retaining skilled and specialist staff as a top priority for accelerating digital transformation.

Which factors will pose the biggest challenges to implementation?





"These innovators have introduced efficient solutions for problem areas such as proxy voting and class actions and are streamlining communications between the triumvirate of the broker, custodian and investment manager."

PARTNER, ASSET MANAGER, U.S.

"As startups introduce new ideas each time, they are raising the benchmark for traditional firms. They are creating more competition in markets and gaining a higher market share."

HEAD OF TECHNOLOGY, INSURANCE COMPANY, GERMANY

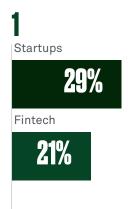
Key Disruptors: Startups and Fintechs

An overwhelming majority of both asset managers and asset owners (95%) ranked startups or fintechs as one of the top three disruptors in the sector.

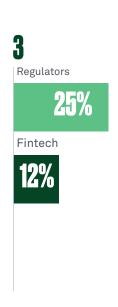
To keep pace with these innovative solutions, service providers have concluded "if you can't beat them, join them" — leading to the formation of alliances with fintechs or the onboarding of their solutions in-house.

This approach is not reserved for service providers – 39% of asset managers reported plans to pursue third-party partnership(s) with a fintech to accelerate digital innovation, with 22% planning to acquire a fintech to achieve the same goal. Alternatively, 61% of asset owners' primary strategy for accelerating digital innovation is to cocreate new products or services with clients.

Which do you see as the biggest disruptors in the industry? (In rank order)









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